



The impact, utility and efficiency of screening and consultation processes within the Offender Personality

Disorder Pathway

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Abstract

The Offender Personality Disorder Pathway (OPDP) is a jointly commissioned programme of psychological interventions and services delivered into His Majesty's Prison and Probation Service (HMPPS) by National Health Service (NHS) staff. There are two target groups for OPDP intervention services - high risk of harm violent and sexual offenders who present with complex personality difficulties likely to indicate the presence of personality disorder; and the prison and probation staff who are responsible for these individuals. This thesis was commissioned by the OPDP central programme to evaluate key frontline elements of the OPDP delivery - a review of the evidence of core OPDP delivery; the methods by which individuals are identified as eligible for OPDP intervention (with an initial focus on women); and the impact and process of psychological consultation with probation staff. A systematic review of the published literature on the impact of core OPDP community delivery on the four outcomes underpinning the programme was conducted in order to inform the evidence of effectiveness for this element of the programme. OPDP identification was evaluated through a multi-stage and multi-method quantitative analysis of all female offenders and used predictive modelling to devise a revised method of identification. Finally, consultation processes were explored at a single region level using a two-stage data gathering process and employing content analysis to explore the key functions of consultations. Findings from all three studies are discussed in relation to the ongoing development of this programme and avenues for further exploration.

Declarations

This work has not previous	usly been accepted ir	n substance for	any degree a	nd is not be	ing
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This thesis is the result of my own investigations, except where otherwise stated. Other sources are acknowledged by footnotes giving explicit references. A bibliography is appended.
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Table of Contents

ummary (Abstract)	i
Declarations	i
able of Contents	i
cknowledgements	١
Dissemination activity	١
ist of Tables	i
ist of Figures	>
Glossary of Terms	>
ist of Appendices	>
hapter 1 - General Introduction	1
1.1 Background Synopsis	1
1.2 Responding to personality disorder in the CJS	1
1.3 The probation context	2
1.4 Thesis Rationale	
1.5 Thesis Structure and Content	
1.6 Order of Studies	ç
1.7 A note on language	1
Chapter 2 - A Systematic Review of the Published Evidence of Impact for Core Community	
PPD Pathway Delivery	1
2.1 Abstract	1
2.2 Introduction	1
2.2.1 Rationale	1
2.2.2 Objectives	1
2.3 Methods	1
2.3.1 Eligibility Criteria	1
2.3.2 Information Sources	1
2.3.3 Search strategy	2
2.3.4 Selection process	1
2.3.5 Data collection process	2
2.3.6 Data items	_
2.3.7 Study risk of bias assessment	_
2.3.8 Effect measures	
2.3.9 Synthesis methods	-
2.3.10 Certainty assessment	2
2.4 Findings	2
2.4.1 Study selection	2
2.4.2 Study characteristics	2
2.4.3 Workforce outcomes	2
2.4.4 Wellbeing	
2.4.5 Risk and reconviction	2
2.4.6 Relationships	3
2.4.7 Summary findings	3
2.4.8 Certainty of evidence (Limitations)	
2.5 Discussion	3
EIJ DIJUNJJIUH	

2.5.1 Gaps	33
2.5.2 Future research	35
2.5.3 Limitations of review process	35
2.5.4 Implications for practice and policy	36
Chapter 3 - Evaluating the Utility and Application of the Women's OPDP Screening Tool and its	
Potential for Revision	37
3.1 Abstract	37
3.2 Introduction	38
3.2.1 Background synopsis	38
3.2.2 Eligibility – Sources of information for OPD Pathway risk criteria	39
3.2.3 Suitability – the OPD Pathway personality disorder screen	42
3.2.4 Women on the OPD Pathway	43
3.3 The present study	47
3.4 Study 3.1 - Eligibility criteria: risk metrics	57
3.4.1 Introduction	57
3.4.2 Aims	57
3.4.3 Methodology	57
3.4.4 Findings	58
3.4.5 Interim Summary	64
3.5 Study 3.2 - Suitability criteria: Addressing complex psychological needs	65
3.5.1 Introduction	65
3.5.2 Aims	66
3.5.3 Study 3.2a - Understanding the current OPDP screening tool	67
3.5.3.1 Methodology	67
3.5.3.2 Findings	68
3.5.3.3 Interim summary	80
3.5.4 Study 3.2b - Identifying alternative items	81
3.5.4.1 Methodology	81
3.5.4.2 Findings	82
3.5.4.3 Interim summary	85
3.5.5 Study 3.2c - Analysing and refining alternative items	87
3.5.5.1 Methodology	87
3.5.5.2 Findings	89
3.5.5.3 Interim summary	102
3.6 Overall chapter findings	103
3.7 Discussion	107
Chapter 4 - Understanding the Functions of OPD Pathway Psychological Consultations	112
4.1 Abstract	112
4.2 Introduction	113
4.2.1 Establishing the need for psychological input	113
4.2.2 Studies addressing the impact of OPD consultation	117
4.2.3 Summary of findings to date	127
4.2.4 The consultation process in Wales	127
4.2.5 The present study	129
4.3 Aims	129
4.4 Methodology	120

4.5 Findings	135
4.5.1 Context themes	138
4.5.2 Active components themes	141
4.5.3 Related outcomes themes	151
4.5.4 Summary of consultation model	153
4.6 Discussion	154
Chapter 5 – Overall Discussion and Conclusions	161
5.1 Thesis aims and their achievement	161
5.2 Summary of key findings	162
5.2.1 Systematic review	162
5.2.2 Women's screening tool revision	164
5.2.3 Consultation functions	167
5.3 Theoretical integration of findings	169
5.4 A note on gender	170
5.5 Strengths and limitations	171
5.6 Ethical considerations	172
5.7 Policy and practice implications	174
5.8 Future studies	175
5.9 Reflexivity considerations	176
5.10 Concluding statement	179
References	180
Appendices	192

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Dissemination activity

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- Goals, Actions and Outcomes: Psychological Consultation in the OPD Pathway. Poster presented at the British and Irish Group for the Study of Personality Disorder (BIGSPD) annual conference, Durham, April 2019.
- Functions of OPD consultations qualitative study report. Internal report shared with local and national OPD networks, June 2019.
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- Women's screening analyses Report to Task & Finish Group (February 2020).
- Women's screening analyses Report to Task & Finish Group (March 2020).
- Women's screening analyses Report to Task & Finish Group (April 2020).
- Women's screening analyses Report to Task & Finish Group (May 2020).
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- WOPD Criteria PILOT explanatory doc v1-5 for pilot. Explanatory document for regions trialling the proposed new tool, September 2020.
- Piloting a revised set of entry criteria for the Women's OPD Pathway. Presentation given to Wales and London OPD Pathway community teams outlining the structure and process of the feasibility study, September 2020.
- W-OPD criteria revision walkthrough. Presentation delivered to OPD Pathway programme team, February 2021.
- A revised set of women's entry criteria for the OPD Pathway. Consultation paper disseminated to the national OPD Pathway network, MoJ colleagues and NHS colleagues, March 2021.

- Redefining the Women's Offender Personality Disorder Pathway (OPDP) Screening Process.

 Poster presented at the British Psychological Society's (BPS) Division of Forensic

 Psychology (DFP) annual conference, Online, November 2021.
- Revision of the Women's Offender Personality Disorder Pathway Screening tool.

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List of Tables

Table 2.1	Search terms utilised for systematic review
Table 2.2	Overview of studies included in systematic review including quality appraisal rating
Table 3.1	OPDP Screening status with routes into the OPDP caseload
Table 3.2	OPD screening outcome for NPS and CRC as compared to current OPD caseload status
Table 3.3	Caseload totals with associated proportions of OPD caseload
Table 3.4	Ethnic group frequencies in NPS, with associated proportions of OPD caseload
Table 3.5	Frequencies of offence types by organisation, with associated OPD screening rates
Table 3.6	Frequency of sentence types by organisation, with associated OPD screening rates
Table 3.7	Proportion of national and OPD caseloads across geographic regions
Table 3.8	Frequency and percentage of women currently on the OPD Pathway with and without flags for OASys sections recorded as linked to risks
Table 3.9	Frequency and percentage of women currently on the OPD Pathway with and without flags for criminogenic needs associated with relevant OASys section
Table 3.10	Number of women likely to screen in to the Pathway through Option 1 criteria
Table 3.11	Number of women likely to screen in to the Pathway through Option 2 criteria
Table 3.12	Cross-tabulation of risk metrics by PD screening criteria with percentage screening in
Table 3.13	Eligibility criteria combinations cross-tabulated against suitability criteria, separated by organisation
Table 3.14	PD screen score and indicator combinations for the 2,522 women screening in through MAPPA/RoSH
Table 3.15	Contingency tables with ORs for screening outcome as a function of individual PD item
Table 3.16	Output from binary logistic regression model of region on OPD screening status
Table 3.17	Output from binary logistic regression model of ethnicity on OPD screening status

Table 3.18	Output from binary logistic regression model of sentence type on OPD screening status
Table 3.19	Output from binary logistic regression model of offence type on OPD screening status
Table 3.20	Model fit statistics for OPD outcome intercept-only compared with random effects models modelled on NPS data
Table 3.21	Output from mixed effects regression model of 10 PD items on OPD screening status
Table 3.22	Output from mixed effects regression model of additional indicator items on OPD screening status
Table 3.23	Output from mixed effects regression model of combined 10 items and additional indicators on OPD screening status
Table 3.24	Model fit statistics for OPD outcome intercept-only compared with random effects models modelled on combined NPS-CRC dataset
Table 3.25	Item statistics for binary-formatted OASys items
Table 3.26	Output from Model 1 - mixed effects regression model of first two alternative PD items
Table 3.27	Output from Model 6 - mixed effects regression model of first seven alternative PD items
Table 3.28	Correlation of Fixed Effects from Model 11
Table 3.29	Output from Model 36 – mixed effects regression model of twenty best fitting items
Table 3.30	Full set of items indicated as most predictive of women screening in to the Pathway
Table 3.31	Crossover of screening outcomes comparing 16, 18 and 20 item screens with thresholds of 8 or 10
Table 3.32	Screening outcomes for 16-item approach compared against current OPD database
Table 3.33	Cross-tabulation of total scores on 16-item PD scale and risk criteria with cumulative % screening in at each score threshold
Table 3.34	Revised screening criteria compared against current OPD caseload status
Table 4.1	Model of OPDP consultation processes and functions

List of Figures

Figure 2.1	Flow diagram of article search and selection process
Figure 3.1	Evolution of Women's OPD criteria, 2011-2021
Figure 3.2	Colour-coded flow chart indicating crossover between risk criteria, total counts of each
	condition, and combined Option 2 screening outcome
Figure 3.3	Percentages of item scores for screened in vs screened out NPS women
Figure 3.4	Rankings of importance for factors to consider when determining Women's OPDP
	inclusion.
Figure 3.5	Responses to "how well do you think the current screening tool performs?"
Figure 3.6	Responses to "what sections of the screen do you tend to rely on more when
	screening women?"
Figure 3.7	Receiver Operating Characteristics (ROC) curve produced between current OPD
	caseload and revised screening criteria outcome.
Figure 3.8	Revised W-OPDP screening tool implemented across England and Wales in June 2021.
Figure 4.1	Word cloud in the shape of Wales depicting the most frequent words used in response
	to questions around goals and needs in OPDP consultations
Figure 4.2	Theme "Offender Difficulties" with constituent sub-themes
Figure 4.3	Theme "Practicalities" with constituent sub-themes
Figure 4.4	Theme "Specialist Input" with constituent sub-themes
Figure 4.5	Theme "Understanding and helping the offender" with constituent sub-themes
Figure 4.6	Theme "Working Better" with constituent sub-themes
Figure 4.7	Theme "OM-Offender Interaction" with constituent sub-themes

Glossary of Terms

AP Approved Premises (probation hostel)

Core OM Core Offender Management (also referred to as core community delivery)

CJS Criminal Justice System

CRC Community Rehabilitation Companies

DoH Department of Health

DSPD Dangerous and Severe Personality Disorder

HMPPS His Majesty's Prison and Probation Service

IIRMS Intensive Intervention and Risk Management Service

IPP Indeterminate Public Protection

MAPPA Multi-Agency Public Protection Arrangements (discussed in chapter 3)

MMAT Mixed Methods Appraisal Tool

MoJ Ministry of Justice

NHSE National Health Service England

NPS National Probation Service

OASys Offender Assessment System

OM Offender Manager (also referred to as Probation Officer or Probation staff)

OMiC Offender Management in Custody

OMU Offender Management Unit

OPDP Offender Personality Disorder Pathway (also referred to as OPD Pathway and 'the

Pathway')

PD Personality Disorder

RoSH Risk of Serious Harm

RSR Risk of Serious Reoffending

List of Appendices

Contents of systematic review extraction chart Appendix A Appendix B MMAT criteria All items provided by MoJ Data Sciences Hub for OPD screen revision Appendix C Appendix D OASys items comprising proxy indicators Appendix E What is segmentation Appendix F Criminogenic needs calculation Appendix G R output detailing Random Effects modelling Appendix H Women's OPD screening survey Appendix I Survey output - Q2 suggested alternative factors to consider Appendix J Alternative OASys items suggested for consideration in revised W-OPD screening tool Appendix K Model building process with notes Additional analyses to inform threshold setting on revised W-OPD screening tool Appendix L Appendix M Consultation monitoring form Appendix N Thematic codebook

Chapter 1 – General Introduction

1.1 Background synopsis

Prevalence rates of mental health difficulties in individuals convicted of criminal offences have been reported as significantly higher than for the general population (Fazel & Danesh, 2002; Sirdifield, 2012) and higher again for violent and sexual offenders (Brooker, Sirdifield, & Marples, 2022). Of growing political and clinical concern over the last three decades has been the disproportionately high rate of personality disorder (PD) in high risk of harm offenders, with Singleton suggesting that between 64% and 78% of prisoners may meet personality disorder diagnostic criteria (Singleton, Meltzer & Gatward, 1998). The difficulties posed for treatment and management of high risk individuals presenting with personality disorder have been well-documented (Bradley, 2009), and efforts to meet the needs of these individuals have evolved gradually. This has included the development of the Dangerous and Severe Personality Disorder programme and, more recently, the Offender Personality Disorder Pathway.

1.2 Responding to personality disorder within the Criminal Justice System

Development of DSPD - The concerns around the need for direct action to address clinical and risk management needs related to PD were exacerbated by the occurrence of a number of potentially preventable serious further offences by convicted individuals (Maden, 2007). This led to the development of the Dangerous and Severe Personality Disorder (DSPD) initiative, which was introduced to the UK criminal justice process in 1999 (Department of Health, 2000). The introduction of Indeterminate Public Protection (IPP) sentences in 2005 was also seen as a means of preventing serious further offending by individuals deemed by the parole board as unsafe to release into the community (Home Office, 2022). The DSPD programme sought to manage the societal difficulties seen to be created by high risk individuals with personality disorder characteristics, by allowing for the detention and intensive psychological treatment of these individuals on an indeterminate basis. The process of identifying individuals for DSPD treatment required considerable resource, requiring clinical teams to assess for diagnosed personality disorders, Psychopathy Checklist – Revised (PCL-R; Hare, 1991) scores, and to draw up a formulation of the level of risk of serious reoffending within five years as a factor of the presenting personality difficulties. The key component here was the link between PD and likelihood of reoffending, with those likely to reoffend regardless of personality disturbance seen as not meeting DSPD criteria (Kirkpatrick et al., 2010). After 10 years and over £200,000,000 of investment, the DSPD initiative was shown to have been an expensive experiment with overly ambitious aims. A study by Tyrer found that in spite of costing £3,500 more than nonDSPD prisoners over a six-month period, these individuals exhibited greater aggression and reduced quality of life (Tyrer, Barrett, Byford, Cooper,... et al., 2007). Howells also noted difficulties in evidencing effectiveness of the programme given low levels of engagement in the therapeutic process, particularly by those higher in anti-social presentation (Howells, Krishnan, & Day, 2007). Although important developments in the treatment of various elements of personality disorder were achieved in custodial settings (Tyrer, Duggan, Cooper, Crawford,... et al., 2010), this initiative contained little community provision for offender populations serving the community portion of their licences. Indeed, one of the major shortcomings of this programme was its inability to manage risks of harm in the community, where the most societal damage could be done. This was demonstrated by Craissati and Sindall who noted that 46% of serious further offences were committed by individuals in the community who had met DSPD criteria (Craissati & Sindall, 2009). Additionally, the process of indeterminately incarcerating those of a dangerous and potentially personality disordered nature has not been shown to improve serious violent and sexual crime statistics, likely due to the very small number of individuals who went through the programme as compared to the number of individuals committing these offence types. The evidential failures, ethically questionable, and politically controversial nature of this programme led to the announcement of decommissioning the DSPD programme in 2011.

An alternative approach to DSPD - Noting the poor performance of the DSPD initiative, Joseph and Benefield outlined a revised strategy to tackle the management of dangerous, high risk of harm offenders presenting with personality difficulties (Joseph & Benefield, 2010). These authors identified several key learning points from the DSPD initiative that could be translated and transferred to an integrated criminal justice and health service approach to offender management. Several features made up this strategy, the core of which was for offender management to be a psychologically informed process throughout the offender journey, both in prison and on probation. Access to appropriate specialist psychological services was indicated, as was the early identification and case formulation of individuals presenting with personality difficulties. The importance of focussing on relationships and the social context when considering treatment options for these individuals was also emphasised (Joseph & Benefield, 2010). This strategy was further developed into the Offender Personality Disorder Pathway (OPDP), a joint Department of Health (DoH) and Ministry of Justice (MoJ) programme aimed at providing psychological input to the management of potentially personality disordered individuals in custody and in the community (DoH & MoJ, 2011). Through targeting services at staff responsible for the management of the population in question, as well as providing direct psychological input where needed, a considerably larger coverage could be

achieved, albeit at a lesser intensity to what was offered by DSPD. Taking a pathway approach also sought to maintain oversight of the individual, maintaining community to community provision in order to prevent relapses in progress due to gaps in service access.

OPDP overview – The Offender Personality Disorder Pathway programme was piloted in a number of London boroughs beginning in 2010, with psychological consultation, case formulation and personality disorder awareness training being delivered by National Health Service (NHS) psychological staff to probation officers and staff in high secure prisons (Minoudis, Shaw, Bannerman & Craissati, 2011; Minoudis, Shaw & Craissati, 2012). The identification of individuals suitable for OPDP involvement still emphasised the requirement for a link between probable PD and likelihood of serious reoffending but required much less psychological resource than DSPD processes (Joseph & Benefield, 2012). Utilising items embedded in a routine assessment system, along with additional "clinical" items, allowed for more efficient screening of a larger number of individuals (discussed in detail in Chapter 3). This moved the emphasis from diagnosis to features indicating a likelihood of personality disorder. Noting early indications of positive impact from a number of piloted community services (Minoudis et al., 2012; Clark & Chuan, 2016; see Chapter 2), the OPD Pathway programme was rolled out for national implementation across England and Wales at the end of 2012.

The overarching intended outcomes of the OPD Pathway are reduced reoffending, improved psychological health and wellbeing, improved workforce development, and increased cost effectiveness (His Majesty's Prison and Probation Service; HMPPS & NHS-England, 2018). Services operated by the OPD Pathway include a range of prison treatment interventions, many with embedded outreach services; prison-based environments services; interventions in Medium Secure Units; community-based interventions such as Mentalisation Based Therapy (MBT) groups and Intensive Intervention and Risk Management Services (IIRMS); probation-based environments services; and core offender management (Core OM). To ensure parity of service delivery, the OPDP programme is operated by a central headquarters team consisting of senior leadership, leads for thematic areas of delivery, a small research unit, and regional pairs of NHS and HMPPS co-commissioners. Regional co-commissioners oversee the delivery of services within prison and probation settings, with different quantities and varieties of service commissioned in each region on the basis of suitability and needs. Intrinsic to all OPDP regions is the core OM service, which consists of case identification, case consultation, case formulation, workforce development, and, where necessary, limited joint casework (with psychological staff working directly with the offender and the

Offender Manager for several session). Core OM is known as an indirect OPDP service as delivery is to the HMPPS member of staff, rather than to the individual prisoner or probationer. Through this method of delivery, a greater number of individuals could be reached, with learning intended to be transferrable to an OM's wider caseload. Core OM delivery largely takes place in the community as this element of the programme involves working with the HMPPS member of staff who has management of the individual. Those serving prison sentences are managed by the Offender Management Unit (OMU) within the prison until they come within one year of release from prison, at which point¹ management moves to a community based probation officer (typically known as an Offender Manager; OM).

1.3 The probation context

Probation - As the studies within this thesis focus on elements of community Core OM, this section provides a contextual overview of probation work. Probation officers, or Offender Managers (OM), have responsibility for supervising and managing offenders in the community (either serving a community sentence or on licence in the community) and for managing those soon to be released from prison. While all individuals convicted of an offence in England and Wales are assigned an OM, the duration, frequency, and nature of supervision is determined by the sentence type, the nature of their offence(s) and, crucially, the levels of perceived risk and need demonstrated by each service user and by nationally directed standards (MoJ, 2015). Higher risk individuals, and those convicted of offences of a serious violent or sexual nature, require a greater degree of involvement, both in terms of in-person supervision contact and ancillary paperwork (National Multi-Agency Public Protection Arrangements (MAPPA) Team, 2019). Monitoring may consist of direct supervision with one's OM at a probation office and/or at the individual's home; attendance at specified programmes (e.g., anger management), and / or involvement in group work or third sector activities, all of which are recorded by the OM on relevant probation systems.

Foundations of probation practice - Probation supervision was originally rooted in the professional field of social work, however in the late 1990's a specified diploma course for probation training was introduced as a means of focusing the profession more on enforcing court directives and managing risks above other goals such as social development (Raynor & Vanstone, 2007). Coupled with increasing workloads due to an expanding caseload, this reprioritisation led to a number of operational difficulties for probation staff. Reduced resources and minimised time afforded to

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¹ Note that release from prison does not imply end of sentence as the current laws state all sentenced prisoners must serve a portion of their sentence on licence in the community (Offender Rehabilitation Act, 2003; 2014).

building the supervision relationship meant that staff were less focussed on getting to know the individual with more attention given to completing organisational tasks associated with monitoring and enforcement (Turner, 2010). Reduced time also deprived staff of opportunities to discuss presenting difficulties with colleagues in a reflective manner (Robinson, Priede, Farrall, Shapland, & McNeill, 2014) in spite of this being noted as a beneficial process. In a similar vein, work by Ward and Maruna indicated that time constraints and increased workloads led to risk management being prioritised over rehabilitation (Ward & Maruna, 2007). This move away from probation practice of a person-centred nature to that of a correctional nature may have been ill-advised from a workforce standpoint. Disadvantaged by the absence of social work theory and policy that helped probation staff work in human-focussed ways meant that, over time, opportunities to develop the interpersonal skills needed to work with people in difficult circumstances were lacking (Robinson et al., 2014). In the context of individuals presenting with complex mental health needs, this difficulty was further complicated. In the absence of time or appropriate training, staff may lack the ability to identify where an emotionally volatile presentation should be taken as an indication of potential risk of reoffending or of a need for emotional support and understanding (Sirdifield, 2012).

Probation service delivery – The workload and practice difficulties facing probation staff and their ways of working as a result of these training and organisational developments have been discussed in greater detail elsewhere (Robinson, et al., 2014; Smith, Heyes, Fox, & Jordan, 2018), however wider systemic changes have further compounded these difficulties (McNeill, 2013). The last ten years have been a particularly tumultuous time for probation service delivery in England and Wales, involving a lot of uncertainty around organisational structure. Briefly, until early 2014, there were 35 self-governing Probation Trusts responsible for delivering the service of community offender management with staff managing a range of low risk to very high risk individuals. The implementation of the controversial Transforming Rehabilitation initiative in 2014 saw the introduction of 21 privately run Community Rehabilitation Companies (CRC) taking ownership of offender management for all low risk men and women, all medium risk men and some medium risk women. Separately, the publicly-run National Probation Service (NPS) operated across seven regions and was responsible for all high and very high risk men and women, and some medium risk of harm women (MoJ 2013a; 2013b). The probation workforce was split across these sectors, and while the caseload split was planned to be 64% to CRC and 36% to NPS, actual ratios achieved were 59:41, resulting in larger, and more demanding, caseloads for NPS staff. Many staff chose to leave their probation careers as a result of this organisational split and associated workplace stresses. Acknowledging the many failings of this initiative, the MoJ discontinued the contracts for CRCs 14

months early and began the process of reunification of probation in late 2019 (National Audit Office; NAO, 2019), with the fully public sector-run Probation Service established by mid-2021. Most recently, drives to strengthen the cohesiveness and integration of all offender management services across probation and prison settings have led to the streamlining of provision within the One HMPPS initiative (Webster, 2022) however it is as yet unclear how this development will impact the nature and function of probation work and those delivering this service.

Competence to work with PD - It is evident from the above that the under-resourced and overburdened staff working within probation services are likely to be lacking in the skills required to successfully engage with and manage individuals presenting with personality difficulties, and studies have supported this claim (Shaw, Minoudis, Hamilton, & Craissati, 2012). This is likely to be a particular challenge for those assimilated in from the CRCs where psychological training was unlikely due to the lower risk nature of the client group and where supervision often took the form of phone-based contact (NAO, 2019). While the challenges facing staff are clearly manifold, the OPDP core OM service was implemented to help those working with the most complex and highest risk individuals to develop a psychological understanding of offender difficulties. Training in theoretical concepts around PD and in lived-experience perspectives was the first level of workforce development made available to all staff. As the first step in the OPD Pathway, screening of individuals was intended to identify those who may benefit from involvement. The simplification of OPDP case identification relying on embedded systems meant that OMs could be tasked with this process. Outcomes from screening can range from a once-off consultation with a psychologist to referrals for intensive interventions in custody or the community (as applicable to the location of the individual).

1.4 Thesis Rationale

The OPD Pathway has been in operation for ten years and yet the evidence on effectiveness to date has been patchy and limited. The present thesis was a centrally commissioned project targeted at addressing the key elements of frontline core OPDP work in the community. Chapter 2 explored the literature to date on the implementation and application of the OPD Pathway strategy within core community delivery – capturing workforce training, case identification, consultation and formulation. This not only provided an insight into how regional interpretations of the strategy have been applied, but also highlighted gaps in the evidence for effectiveness of this element of the programme in relation to the overarching pathway objectives. These studies addressing core OM delivery have largely been small-scale regional evaluations, many lacking in methodological rigour and demonstrating some obscurity in terms of the specific elements of the programme being

evaluated. Through identifying gaps and weaknesses in the evidence to date, this study may help inform the allocation of centrally commissioned evaluation resources and also provide directions for (and guidance around) further research.

The development of case identification processes emerged from the legacy of DSPD and was largely based on descriptors of this niche cohort, with some additional flexibility added to accommodate less "severe" but equally complex individuals (see Chapter 3). Thus there has been a pressing need to ensure that the methods for identifying individuals for involvement in the OPDP have been appropriate. While the OPDP caseload is predominantly male, the process of revising the case identification protocol began with the female cohort. This was necessitated firstly by the stated intention for a gender-responsive approach to OPD Pathway delivery, from identification right through to treatment provision (Joseph & Benefield, 2012). Additionally, the wider organisational development of probation service reunification rendered ineffective the format of risk classifications utilised for screening women (as detailed in Chapter 3).

Finally, it has been as yet unclear how OPDP consultations have been applied within probation work, with the few studies to date addressing perceived impacts on practice or experiences of the process in conjunction with other elements of delivery. As demonstrated in Chapter 2, studies addressing this topic have tended to be small in scale and of average quality, both in terms of methodological rigour but also in terms of the information garnered about how and if this aspect of OPD delivery achieves its intended outcomes. To acquire a deeper insight into the functions of consultations specifically, the second empirical study commissioned was a large-scale qualitative evaluation directly addressing consultation functionality. This study sought to inform the future development and refinement of this service at a local level while also informing the national perspective on key factors contributing to the effectiveness of consultation processes (see Chapter 4).

1.5 Thesis structure and content

This thesis is presented in five chapters, with Chapter 2 proving a review of evidence to date for Core OM delivery while Chapters 3 and 4 report a suite of empirical studies addressing screening (Chapter 3) and consultation (Chapter 4). Chapter 1 presents a contextual background for the service under review, the OPD Pathway. While the OPDP operates across the breath of HMPPS, the focus of this body of work lies with the front line processes carried out in the community (probation) setting. Chapter 2 addresses the published evidence to date in relation to core OM delivery. A systematic review of these studies is presented in relation to the overarching OPDP outcomes of workforce

development, wellbeing (including a specific focus on relational improvement), and reducing reoffending (including risk metrics). This review seeks to understand where research attention has been focussed at a local level, both in relation to elements of the programme studied and specific outcomes addressed. Outcomes are discussed in relation to staff accessing training and consultation processes and in relation to the individuals indirectly receiving OPD pathway intervention through this approach. It is noted that the variances in the nature, content and rigour of the studies reviewed limited the strength of conclusions drawn but highlighted several gaps in relation to areas for focussed further attention.

Chapter 3 presents a series of successive studies, which sought to evaluate and revise the methods of screening women into the OPD Pathway. The chapter begins with a description of screening processes to date alongside an explanation of the policy-based reasoning behind revising this process for women. This is followed by a detailed account of the female HMPPS caseload as compared to the cohort of women on the OPDP caseload at the time of analysis, thus providing a contextual understanding of the task at hand. The chapter is then presented in two parts – the first relating to risk criteria (study 3.1) and the second relating to personality disorder indicators (studies 3.2a-3.2c). Study 3.1 addresses the details of risk criteria proposed for identifying women who may be eligible for OPDP involvement. Owing to the policy-imposed limitations on options open to appraisal, this study largely consists of descriptive analyses. The second study, 3.2, sought to explore the personality facets of the case identification tool used to date. This study comprises three stages and uses mixed methods. Study 3.2a evaluates the utility of the established PD screening items to predict women's inclusion in the OPDP caseload. Logistic regression analysis was the primary method of evaluation undertaken. Study 3.2b sought to identify a large item pool of alternative items for use in identifying women suitable for OPDP intervention. This process involved exploring established nomenclature on PD, surveying a range of experts in the field of female offenders and personality disorder, and consulting OPD Pathway strategic goals to inform appropriate item inclusion. Finally, study 3.2c took the findings from 3.2b and applied logistic regression modelling in order to produce a revised set of items that would usefully predict women's suitability for OPDP involvement. The resultant findings of Study 3.1 and 3.2 are then discussed in terms of their policy and practice utility.

Chapter 4 seeks to understand how psychological consultations are utilised by Offender Managers.

Data for this large-scale qualitative study were collected using an embedded audit tool that consultants brought to consultation meetings. Completed in three stages, one of the unique features

of this evaluation was its direct focus on the impact of consultations themselves, as opposed to the combination of core OM processes (training, consultation and formulation) explored in other studies. A model of consultation delivery is presented in terms of the contextual setting within which consultations are delivered, the active components of delivery, and associated additional outcomes.

Finally, Chapter 5 presents an overall discussion of the findings from Chapters 2 to 4. This chapter discusses the policy-based nature of the work carried out, the requirement for sophisticated and responsive research methods to be used, and the applicability of real world research methods to the large-scale evaluation of a national programme of intervention. A reflexive section in this chapter considers my role as an embedded researcher within the programme and the barriers and facilitators arising from this position. The overall strengths and weaknesses of the studies undertaken are also discussed as are suggestions for future studies.

1.6 Order of studies

The first piece of research carried out as part of this thesis was that detailed in Chapter 4 — evaluating the function of OPD consultation processes in Wales — which was run during 2017-2018. This work was carried out while the researcher was employed as a Research Officer positioned within the Wales OPD core community delivery in the probation service. While the content of Chapter 3 was the intended first study, complications and delays in data access necessitated proceeding with the consultation study. The exploration of the utility of the OPD screening tool was carried out during 2019-2020, partly while the researcher was still employed in the Wales OPD core community team and partly after promotion to the OPD central team. While an additional empirical study was planned to link consultation and screening findings, workplace developments disrupted this plan. The systematic review presented in Chapter 2 was thus written in 2022 as a contextual piece to aid the reader in understanding the nature of the programme under evaluation and to provide a clearer basis for the empirical studies carried out. These chapters have been presented in the described order as a means of guiding the reader through the journey of OPD delivery.

While the bulk of the data gathering and analysis for the two empirical studies was carried out over the period of 2017-2020, workplace necessities required a two-year break in studies. Consequently, the literature cited throughout this document has been updated where possible, however elements of OPDP delivery and the wider running of the Criminal Justice System (CJS) have evolved in the intervening period. It is important to note that consultation data were gathered during a period of relative stability, with NPS being well-established as a distinct organisation during the data-gathering

and analysis stages. Disturbances such as Covid-19 and the reabsorption of CRC staff and caseload were distant unknowns during the data gathering and analysis period. It is possible that themes generated today would portray a different suite of difficulties with which OMs contend, however the learning from the role of OPDP consultations in OM practice remains highly relevant.

1.7 A note on language

While it is acknowledged that terms such as offender can be seen as pejorative and even obsolete in the present day, this term is used throughout this thesis. It cannot be ignored that the name of the service within which these studies were conducted (the *Offender* Personality Disorder Pathway) specifically utilises this term. Additionally, the concepts of *offender* management, *offender* behaviour programmes, and the *offender* assessment system, to name a few, have not been upgraded and to attempt to describe these well-established concepts in more socially acceptable vernacular is outside of the remit of this thesis. However, as the OPDP is a programme jointly operated by HMPPS and NHS(England), terms relevant to either or both agencies (e.g., offenders, service users, and where relevant, residents) are used interchangeably to refer to individuals convicted of committing criminal offences. Furthermore, terminology changes frequently within the Criminal Justice System, with probation staff interchangeably referred to as probation officers, offender managers, or probation practitioners.

Chapter 2 – A Systematic Review of the Published Evidence of Impact for Core Community OPD Pathway Delivery

2.1 Abstract

Background: This systematic review sought to identify key areas of impact of the Offender Personality Disorder Pathway (OPDP) core community delivery in relation to both probation staff and the individuals under their supervision.

Methods: To be included in this review, papers had to demonstrate impact (positive, neutral or negative) of the OPD Pathway core community delivery on the specific OPD-related outcomes of workforce development, wellbeing, risk and reconviction, or relationships. Papers addressing impact of OPDP interventions beyond core community delivery or which addressed unrelated outcomes were excluded from the review. The electronic database Scopus was searched on the 26th January 2022 and titles were screened for inclusion by two reviewers. Quality of evidence produced was assessed by the Mixed Methods Appraisal Tool (MMAT). Due to the heterogenous nature of studies included in the final review, only narrative knowledge synthesis was possible and this was organised according to area of outcome explored and participant group.

Results: Twenty papers were included in the final review, including ten utilising quantitative methods, two using mixed methods, and eight employing qualitative methods (including three case studies). Workforce outcomes were the most frequently explored, with largely positive impacts noted in relation to staff self-reported confidence and competence. Impacts in relation to risk and reconviction were limited both in relation to the number of studies addressing this outcome and to the implications that could be drawn from those that did explore related outcomes. Positive relational outcomes were reported as a result of OPD core delivery, with consultation and formulation processes leading to better staff-offender relationships.

Discussion: The overall quality of evidence produced in the included studies was of a low to medium standard. Small sample sizes, high attrition rates, bespoke measures, and occasionally questionable analyses were some of the limitations of these studies. However, taking quality into account, findings were generally indicative of positive impacts of OPDP core community delivery, although regional differences in delivery model made generalisability of individual findings difficult.

2.2 Introduction

2.2.1 Rationale

This systematic review presents an overview of findings from research, published up to December 2021, that addressed the impact of the core community delivery of OPD Pathway services. While there is a vast body of literature on various aspects of OPD Pathway service delivery, including processes involved and implementation of new service specifications, this review focussed purely on studies exploring impact on the specified OPD outcomes of workforce development, psychological wellbeing, and reduced risk and reoffending, and the intermediate outcome of relational improvement (HMPPS & NHSE, 2018). As core community delivery is an indirect service, workforce development is the particular focus of this element of the Pathway. The approach taken is two-fold: to imbue staff with a bio-psycho-social understanding of the interplay between personality development and serious offending and to equip them with effective relational approaches to managing risks and related behaviours. Psychological support is provided to probation staff to help develop relational ways of working that are more trauma-informed than standard probation practice (Haigh & Benefield, 2019; Skett & Lewis, 2019). It has been noted that individuals convicted of serious offences have experienced a disproportionate number of adverse childhood experiences (Fox, Perez, Cass, Baglivio, & Epps, 2015) which have been shown to be linked to violent recidivism (Craig & Zettler, 2021). Some of the core areas of OPD training centre around attachment theories of personality development (Bowlby, 1982), whereby insecure attachments in one's childhood have been evidenced as directly linked to violent or sexually violent behaviour (Ogilvie, Newman, Todd & Peck, 2014). Providing probation staff with insights into the role of early maladaptive schemas (Young, Klosko, & Weishaar, 2003) in the proliferation of violent offending and the associated techniques to effectively address these and other factors (Livesley, 2012) is key to the OPD approach to workforce development. Adoption of a psychological perspective on developmental and lifestyle factors may also inform how staff address the often mistrustful or anti-social presentations of their caseload in supervision sessions. Haigh and Benefield stated that taking a holistic perspective on the person was essential to the improvement of relational activity which in turn was central to effective service provision and positive outcomes (Haigh & Benefield, 2019).

The ultimate goal in providing psychological consultation and training to probation staff is to encourage a more holistic understanding of offending behaviour and complex needs in order to help probation staff manage risks through more dynamic and psychologically informed relational approaches (Haigh & Benefield, 2019; Skett & Lewis, 2019). A critical function of this approach is the development of relational ways of working, whereby it is intended that probation staff and service

users will engage better in the supervision process, leading to greater transparency and a generally improved working relationship. It has been estimated that up to 80% of individuals recalled to prison while on licence in the community are reimprisoned for technical breaches such as disengagement from supervision rather than further offending (Antonio & Crossett, 2017) thus improvements in the officer-offender relationship have been identified as key areas for development. In the process of taking a more relational approach to probation supervision, psychological learning can be shared with service users in order to help them build strategies to cope better with potential triggers and lifestyle factors that contribute to reoffending risks. Taking a collaborative approach to risk management is intended to lead to improvements in elements of wellbeing for both parties, with a more relational supervision environment offering a safe space for individuals to discuss their difficulties. Establishing a mutually trusting and confident relationship has been evidenced as more important than any one given approach in bringing about change in attitudes and behaviour (Council of Europe, 2017). Applying these trauma-informed and bio-psychosocial insights to probation practice is thus thought to improve Offender Managers' confidence and competence to manage highly complex, high-risk individuals.

Regional differences in the particulars of OPDP core community delivery have evolved to meet local demands within available local resources, however, several key components underpin all regional interpretations. These include providing probation officers managing individuals who meet OPD Pathway criteria with 1) the tools to identify appropriate individuals 2) training in the complexities of personality disorder from a collaboration of psychological and lived experience perspectives (known as the Knowledge and Understanding Framework), 3) psychological consultation and formulation to inform individual case management, 4) relevant group work (e.g., additional training, group reflective practice sessions), and 5) where deemed necessary, OPD staff jointly working directly with an individual screened into the OPD Pathway and their probation officer (HMPPS/NHSE, 2020). Intended workforce outcomes from the implementation of this programme were improved confidence and competence in one's supervision practices, through the interim outcome of improved relational working to assist dynamic risk management. The rationale for this review was to draw together the learning from across the various regional delivery models in order to attempt to synthesise a clear picture of the evidence of impact that these key components have had on specified programme objectives. The structure and presentation of this review was guided by the Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) statement (Page, McKenzie, Bossuyt, Boutron..., et al., 2021).

2.2.2 Objectives

Core community delivery seeks to achieve positive outcomes for two groups of individuals – highly complex people convicted of violent or sexual offences who demonstrate a significant risk of harm; and the probation staff managing these individuals. With this in mind, the objectives of this review were to identify key areas of impact in relation to both probation staff and the individuals under their supervision. The specific review questions were:

What demonstrable impact has the OPD Pathway core community delivery had on the

- 1. professional practice approaches of probation staff working with individuals screened in to the OPD Pathway?
- 2. estimated risk of harm and reoffending or recall rates for those screened into and accessing OPDP core community services?
- 3. psychological wellbeing and relationships of those screened into and accessing OPDP core community services and of the staff managing these individuals?

An additional objective of this review was to identify gaps in the published literature on the evidence for effectiveness of OPDP core community delivery in achieving key outcomes.

2.3 Methods

2.3.1 Eligibility Criteria

The overarching criterion for inclusion in this review was that papers must demonstrate impact (positive, neutral or negative) of the OPD Pathway core community delivery on an OPD-related outcome. Only English language studies were included.

Several studies explored the impact of the combination of all components of delivery in tandem, while others attempted to isolate component parts for evaluation. Most frequently isolated components were those of consultation and formulation, however several studies claiming to focus on these components also made reference to other components, such as training or group-based supervision. Additionally, as a written formulation is commonly an expected product of a psychological consultation, many studies treated these concepts as interconnected elements of the service. As a result of these anticipated overlaps in component parts of core community delivery, findings from this review were synthesised according to groupings of outcomes rather than to the elements of intervention in order to avoid obvious contamination effects.

Exclusion criteria related to the setting within which studies were carried out and the participants involved. Specifically, any evaluations of OPDP impact within custodial settings or MSU's were

excluded, as were studies addressing community-based interventions delivered as separately funded OPDP add-on services to the core specification (e.g., Intensive Intervention and Risk Management Services (IIRMS); Mentalisation Based Therapy (MBT), Approved Premises PIPEs, etc.). Any studies that explored impacts on outcomes not directly associated with the overarching OPDP principles, such as satisfaction with service delivery or access to additional services, were not included in this review. Finally, articles reporting purely anecdotal evidence of impact were excluded from this review as inadequately representative of true impact.

2.3.2 Information Sources

The electronic databases Scopus and EBSCO, which index journals in the Science, Technical and Medical fields, including full coverage of MEDLINE, EMBASE and Compendex, were searched using the search terms detailed in Table 2.1. These resources were last searched 26th January 2022 with the specified publication period of 01.01.2012 to 31.12.2021. Key stakeholders in the OPD Pathway (i.e., central leads, regional commissioners, and thematic leads) were also contacted for any suggested additional records known about that may not have been captured by the search terms employed.

2.3.3 Search strategy

In order to accurately capture content relevant to workforce outcomes and to offender outcomes, two sets of search terms were run, as detailed in Table 2.1. Owing to the OPD Pathway being in existence since 2010, searches were limited to articles published since 2010. Affiliation country was limited to UK as the OPDP exists only in the UK. Finally, an English language filter was applied as translation facilities were not available, however, this was unlikely to be required given the regional specificity of the programme. Once duplicate records were removed there were 170 titles to be reviewed. Four additional titles were suggested by key stakeholders consulted and one of these (Jolliffe, Cattell, Raza, & Minoudis, 2017a) was deemed relevant to the search criteria.

Table 2.1Search terms utilised for systematic review

Search	Search terms	N records
Offender outcomes	((TITLE-ABS-KEY ("Offender personality disorder" OR opd) AND TITLE-ABS-KEY (offender* OR criminal* OR probation OR "service user" OR "resident*")) OR (TITLE-ABS-KEY (formulat* OR "case consultation") AND TITLE-ABS-KEY (offender* OR criminal* OR probation OR "service user" OR "resident*") AND TITLE-ABS-KEY ("personality disorder" OR psychopathy)) AND PUBYEAR > 2010) AND (LIMIT-TO (AFFILCOUNTRY, "United	95
	Kingdom")) AND (LIMIT-TO (LANGUAGE, "English"))	
Workforce outcomes	(TITLE-ABS-KEY (workforce OR staff OR officer OR "offender manager") AND TITLE-ABS-KEY (offender* OR criminal* OR probation OR "service user" OR "resident*") AND TITLE-ABS-KEY (competenc* OR development OR attitude OR burnout OR confidence OR understanding OR train* OR supervision OR knowledge OR relat*) AND TITLE-ABS-KEY ("personality disorder" OR opd OR psychopathy) AND PUBYEAR > 2010) AND (LIMIT-TO (AFFILCOUNTRY, "United Kingdom")) AND (LIMIT-TO (LANGUAGE, "English"))	112

2.3.4 Selection process

A Population-Exposure-Outcome (PEO) algorithm was employed to guide the selection process. Specific components of each of these elements were as follows:

Population: Any individual or group of individuals identified as an offender meeting OPDP criteria and as being on probation. Also, any individual or group of individuals working within probation settings (Offender Managers or Approved Premises staff) and working with individuals identified as meeting OPDP criteria.

Exposure: The study population must have been the subject of OPDP consultation or formulation or of group training or have been in receipt of OPDP-probation direct joint working. The staff population must have been Offender Managers or Approved Premises staff and have accessed OPDP training, consultations, formulations, group training, or direct joint working with OPDP staff. Study settings must have been in the community (not custody or health settings) and OPDP service delivery must have been within the remit of core OM community delivery.

Outcome: For staff, any outcome related to risk management practices, competence and confidence in professional practice, wellbeing, burnout, and service-user relationships. For offenders, any outcome related to wellbeing, psychological skills development, interpersonal relating, risk of reconviction, risk of harm and community integration.

Initial screening was carried out on article titles and this involved two reviewers independently screening all titles for relevance to the OPDP core community delivery. Where it was not readily clear from the title whether a study identified impact or was definitely carried out in an OPDP community setting, abstracts were read for further information. Where disagreements about inclusion occurred, these were discussed until consensus was reached. To calibrate decision-making as regards final inclusion, both reviewers independently read the full texts of the first 10 articles that came through the initial title and abstract screening stage. Once a satisfactory level of calibration was reached (90%), the remaining articles were divided between the reviewers and a final agreed set of articles were retained for full data extraction.

2.3.5 Data collection process

A detailed extraction chart (Appendix A) was developed to ensure complete and systematic extraction of all relevant data from all included records. All data were extracted by the author and a selection of extract records was reviewed by a second reviewer. Where information was lacking in final articles, and where it was unclear whether a study related to the OPD Pathway, article authors were contacted for further information. Articles that additionally addressed subject matter beyond impact (e.g., processes or implementation of services) or unrelated to the specified OPDP outcomes had only review-relevant data extracted.

2.3.6 Data items

The specific outcomes for which data were sought were drawn directly from the overarching OPDP programme policy documentation and were categorised into qualitative and quantitative variables. These outcomes were -

Workforce: competence, confidence, psychologically informed practice, improved risk management;

Wellbeing (in relation to service-users or staff): interpersonal skills, thinking skills, coping strategies, prosocial behaviour, happiness, reduced self-harm, (staff-specific: burnout, job satisfaction);

Risk and reconviction: risk assessments, violent behaviour, recalls, reoffending;

Relational improvement (in relation to service-users or staff): between staff and service users, peer relations, family relationships.

Recall rates as outcomes were categorised under both workforce and risk outcomes as recall can be appreciated differently from each perspective. Reduced *use* of recall as a staff outcome was identified as a positive development indicating use of less reactive risk management strategies (Clark & Chuan, 2016) while in relation to offenders, reduced recall rates were noted as a pragmatic indicator of a lower rate of reoffending or offence-paralleling behaviour. Acknowledging that the dynamics of multiple external factors likely affected the interplay between these interpretations of recall rates, findings below were reported in line with their presentation in respective studies.

In addition to outcomes, contextual variables extracted were participant demographics (age, gender, offence type {for service users}, time in service {for staff}), participant type (staff or service user), number of participants, group characteristics (where applicable), intervention description, and intervention duration. The research context of studies was also extracted, with particular details including research design, overall aims, measures used, measurement frequency, analysis used, follow-up duration, alpha values (for psychometrics), themes identified (for qualitative studies), mean difference/change, effect size (for quantitative studies), and direction of effect. Where contextual information was slim or lacking, this was acknowledged as a limitation in the description of findings.

Owing to the highly heterogenous nature of studies included and the numerous outcomes explored, a formal statistical synthesis of findings was not possible as part of this review. Instead a narrative synthesis approach was adopted to summarise the data in relation to each overarching outcome explored. Sections of extracted data are presented in tabular form to further inform the reader on the nature of studies included.

2.3.7 Study risk of bias assessment

It was noted that the majority of studies included in the final review were carried out and written by those commissioned to deliver the intervention itself. Owing to the nature of the OPDP programme, with few areas having access to a dedicated objective research and evaluation resource, it was necessary to deem this as an acceptable risk of bias, as to exclude studies on this basis would result in little or no material to review.

2.3.8 Effect measures

Of the 12 studies utilising a quantitative or mixed methods approach six employed a variety of measures of effect size, reflecting the heterogeneity in research design and analytic approach. In

relation to workforce outcomes (e.g., competence, confidence), effects were indicated through the use of Cohen's d, Cohen's f, partial Eta squared, and the coefficient of determination (r). Differences were measured across a variety of timepoints including once (post-intervention only), twice (prepost), thrice (pre, post, and follow-up) and four times (multiple follow-ups) and intervals between measurements varied widely (from three months to one year). In relation to wellbeing, two quantitative studies addressed burnout at pre- and post-intervention across different intervals but only one stated a measure of effect, utilising Cohen's d. Risk and reconviction rates were measured in five quantitative studies and these ranged from single time-points for analysis of post-hoc data to four data collection periods. Three of these studies indicated measures of effect, utilising Cohen's d, Cohen's f, and partial Eta squared. One study utilised a measure of relational improvement once between an intervention and control group, indicating the degree of effect through the r coefficient. Of the 12 studies incorporating measures of effect in their analyses, the predominant approaches to analysis were tests of group difference (t-tests and ANOVAs). Table 2.2 column 5 presents the analyses used in each study.

2.3.9 Synthesis methods

Without the quality or consistency of data to conduct a formal knowledge synthesis, the PRISMA checklist items 13 – 'Synthesis methods', and 14 – 'Reporting bias assessment', were not completed as part of this systematic review. Instead, as noted above, tabular and narrative summaries of findings are presented. In order to sensibly categorise these findings, the results were summarised in relation to the participant group from whom outcome measures were gathered, staff or offenders, with articles addressing outcomes for both groups incorporated into each relevant section as appropriate. Findings were further broken down into the overarching outcomes of workforce, wellbeing, risk and reconviction, and relational improvement.

2.3.10 Certainty assessment

In order to evaluate the quality of the evidence produced by and contained within each of the included studies, the Mixed Methods Appraisal Tool (MMAT; Hong, et al., 2018) was applied to each article. For each study type, assessment outcomes were reported as a count of the total of five respective criteria and studies that did not meet the initial screening criteria (i.e., having clearly stated research questions and having collected appropriate and sufficient data to answer these questions) were not evaluated. In relation to screening criterion 1, articles that reported clear aims or hypotheses in place of research questions were deemed to have met this criterion. The final column in Table 2.2 indicates the study type (1 – Qualitative; 2 – Quantitative RCT; 3 – Quantitative

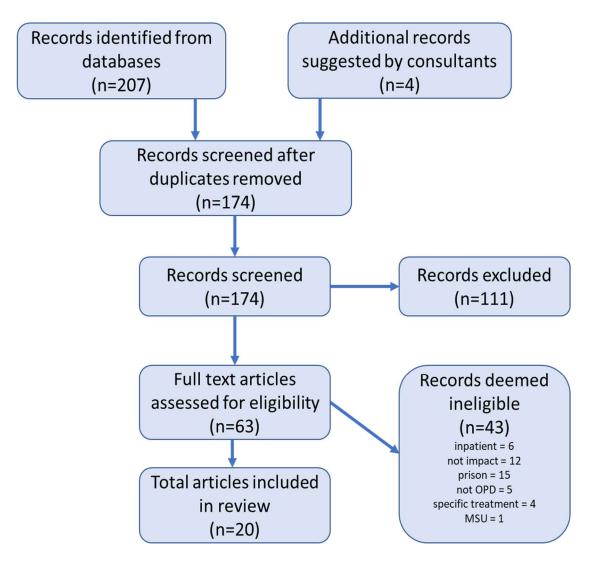
non-randomised; 4 — Quantitative descriptive; 5 — Mixed Methods) and the type-specific criteria achieved by those meeting MMAT screening criteria (see Appendix B). A score value of NG in this column indicates that the article was not graded due to not meeting initial screening criteria. While three articles did not meet the MMAT screening criteria required to be graded and an additional seven articles met only two or fewer of the five criteria relevant to their study design, all 20 articles were included in this review in order to present as complete a picture as possible of the potential impact of this multifaceted programme of interventions. It should be noted that the data available for analysis in these studies have largely been of a 'Real World' nature, necessitating convenience sampling of staff and service users operating in dynamic systems where interruptions to organised activity, high turnover and cross-deployment are commonplace. As such, while quality may fall short of the highest scientific standards, the difficulties of conducting research in this field suggest that any insights into the effective functioning of these services may still contribute to the broader evidence base.

2.4 Findings

2.4.1 Study selection

As outlined in Figure 2.1, 207 published articles were identified in electronic database searches. Additionally, key stakeholders of the OPDP programme suggested 4 articles that did not arise in the search results. Once duplicate entries were removed, all 174 articles were screened according to the criteria set out above, resulting in a final set of 20 papers for inclusion. The majority (n=19) of these articles were identified in electronic data bases while one was identified through consultant suggestion.

Figure 2.1Flow diagram of article search and selection process



2.4.2 Study characteristics

To collate all findings, results were grouped first by the overarching OPDP outcome explored - workforce (n=17); wellbeing (n=4); risk and reconviction (n=8); and relational improvement (n=6), and then by participant group to which they referred (e.g., staff (n=13), offenders (n=3), or both (n=4)). Rows in Table 2.2 follow this order of presentation. Column 7, MMAT scoring, is presented in the format "X.Y Yes/No/CT" such that X is the study type (1-5), Y is the specific criterion under that study type, Yes/No indicates where the criterion was or was not met, and CT (can't tell) indicates it was not possible to determine whether the criterion was met.

 Table 2.2

 Overview of studies included in systematic review including quality appraisal rating

Authors	Design / Method	Types of measures	Participants	Analysis	Summary findings (in relation to impact on OPDP outcomes)	MMAT
Blinkhorn, Petalas, Walton, Carlisle, & McGuire (2020)	Qual. Focus groups	Focus groups	Staff = 23 (4 groups of 4-8 participants)	Interpretive Phenomenological Analysis (IPA)	The psychological consultation service was found to build confidence and reassurance in OM's work and improved their understanding of personality disorder. Improved risk awareness and helpful insights on the importance of the relational process in offender management were also noted by the majority of participants.	1.1 Yes 1.2 Yes 1.3 Yes 1.4 Yes 1.5 No
Brown, Beeley, Patel, & Völlm (2018)	Mixed. Repeated measures; Open-ended questionnaires	Validated quality checklist; unvalidated questionnaire	Staff = 20 (10% att.)	t-tests	Significant differences were found in 7 of 10 checklist items in relation to case formulation quality after receiving 5 days of training on personality disorder, psychology and case formulation. Significantly higher PDKASQ scores were found post-training on subscales relating to self-assessed competence to work with personality disorder.	3.1 CT 3.2 CT 3.3 Yes 3.4 CT 3.5 Yes
Clark & Chuan (2016)	Quant. Repeated measures	Administrative data	Staff = 10	ANOVA	The rate of recalls significantly decreased year on year over three years of intervention for those still receiving input, indicating that psychologically informed practice can reduce officers' use of recalls for reasons of non-compliance and challenging behaviours while evidencing no increase in serious further offending.	3.1 Yes 3.2 Yes 3.3 Yes 3.4 CT 3.5 CT
Harvey & Ramsden (2017)	Qual. Single case study	Case study	Staff = 1	Case study	The OM reported being more confident in his probation practice and generalising his learning to other cases. Having increased awareness of interpersonal dynamics led to noticeable changes in his practice by being direct while validating offenders' vulnerabilities. Improvements in risk management were also reported as a result of psychological consultation and supervision.	Type: 1 Score: NG
Knauer, Walker, & Roberts (2017)	Quant. Non- randomised unmatched samples	Unvalidated questionnaire	Staff = 108	t-tests; ANOVA	Scores on all questions increased significantly, indicating improvements in self-perceived understanding, confidence, motivation and competence after consultations. Scores did not increase significantly after receiving a formulation letter following the consultation, indicating no additional benefit was perceived as a result of written formulation receipt.	3.1 Yes 3.2 No 3.3 No 3.4 No 3.5 Yes

Authors	Design / Method	Types of measures	Participants	Analysis	Summary findings (in relation to impact on OPDP outcomes)	MMAT
Mapplebeck, Ramsden, Lowton, Short, & Burn (2017)	Qual. Open- ended questionnaire	Unvalidated questionnaire	Staff = 21 (0% att.)	Thematic Analysis	No changes were noted in relation to how probation staff considered risk in relation to case vignettes presented after training. The adoption of a curious stance and a greater focus on offenders' experiences was noted as positive development in terms of psychological understanding. Slight qualitative differences post-training were noted as potentially additive to existing probation practice.	1.1 Yes 1.2 No 1.3 CT 1.4 Yes 1.5 No
McMullan, Ramsden, & Lowton (2014)	Qual. Focus groups and interviews	Focus groups and interviews	Staff = 12	Content Analysis	Greater understanding of personality traits and reasons for offending were noted impacts of team consultations on probation practice. A more person-centred and empathetic approach was also identified as a helpful outcome of the process.	1.1 Yes 1.2 Yes 1.3 CT 1.4 Yes 1.5 CT
Minoudis, Craissati, Shaw, McMurran, Freestone, Chuan, & Leonard (2013)	Quant. Repeated measures	Validated quality checklist	Staff = 76 (vignettes - 33; practice - 43	t-tests	In relation to one case vignette, formulation training and team consultation did not significantly improve the quality of formulations written by probation staff, however, in relation to the second case vignette, quality checklist scores did improve significantly. In relation to probation case formulations, team consultation over six months had no positive or negative effect on formulation quality scores.	3.1 Yes 3.2 Yes 3.3 No 3.4 No 3.5 Yes
Radcliffe, Carrington, & Ward (2020)	Qual. Semi- structured interviews	Semi- structured schedules	Staff = 5	IPA	Improvements in OM's interpersonal approach to offenders was noted as an outcome of the consultation and formulation process, with greater empathy and increased engagement resulting in better relationships.	1.1 Yes 1.2 Yes 1.3 Yes 1.4 Yes 1.5 Yes
Radcliffe, McMullan, & Ramsden (2018)	Quant. Non- randomised matched samples	Validated quality checklist	Staff = 36	Independent t- tests	Significantly higher quality checklist scores were achieved by those in receipt of 6 days formulation training plus ongoing psychological support as compared to OMs who received no training or support. For those trained, longer exposure to OPD support was associated with significantly higher formulation quality, indicating that the ongoing support around real life practice was key to workforce impact.	3.1 CT 3.2 Yes 3.3 Yes 3.4 No 3.5 CT
Ramsden, Lowton, & Joyes (2014)	Quant. Repeated measures	Unvalidated questionnaire	Staff = 46 (74% att.)	Independent t- tests	Significantly higher scores on self-perceived confidence and competence were achieved three months post-consultation	4.1 No 4.2 CT 4.3 Yes

Authors	Design / Method	Types of measures	Participants	Analysis	Summary findings (in relation to impact on OPDP outcomes)	MMAT
					intervention for the few who returned responses and statistical	4.4 No
					analysis was not possible on other measures.	4.5 CT
Shaw,	Mixed.	Validated and	Staff = 150	t-tests; ANCOVA;	Probation staff's self-reported understanding of and competency for	5.1 Yes
Minoudis,	Repeated	unvalidated	(att. not	thematic analysis	working with PD was found to significantly improve after one year	5.2 Yes
Craissati, &	measures;	psychometrics	stated but		of a tiered model of consultation, training and supervision, the	5.3 CT
Bannerman	Open-ended		apparent)		greatest improvements noted in those receiving the most input.	5.4 Yes
(2012)	questionnaires				Qualitative responses from 10 staff also indicated improvements in understanding of PD and perceived practice competence.	5.5 No
Webster,	Qual. Focus	Semi-	Staff = 32	Thematic analysis	Reflective practice group sessions were identified as useful in	1.1 Yes
Dogget, &	groups and	structured			helping manage job pressures (potentially indicative of preventing	1.2 Yes
Gardner (2020)	interviews	schedules			burnout) and helped improve psychological approaches to working	1.3 CT
					with complex individuals.	1.4 CT
						1.5 Yes
Jolliffe, Cattell,	Quant.	Administrative	Service	t-tests; Chi2	Significant improvements and significant dis-improvements in	3.1 Yes
Raza, &	Repeated	data; risk	users =		several criminogenic needs were found for individuals whose OMs	3.2 Yes
Minoudis	measures and	metrics	2092		had accessed the OPDP as compared to historic data from offender	3.3 Yes
(2017a)	treatment/				assessments from prior to OPDP implementation. Sub-group	3.4 CT
	PSM control				comparisons of risk indicated statistically significant improvements	3.5 CT
					for OPDP exposed offenders. This contrasted to clinician-rated risk	
					which increased significantly for OPDP offenders.	
Maltman &	Qual. Single	Case study	Service user	Case study	The application of an OPDP formulation was linked with housing	1.1 Yes
Turner (2017)	case study		= 1		success and plans put in place to reduce anxiety and gain access to	1.2 Yes
					external groups. The formulation helped manage emotional	1.3 Yes
					responses enabling better relationships with staff.	1.4 Yes
8 A' 1'		A 1	<u> </u>	cl :a ·	D:	1.5 No
Minoudis,	Quant.	Administrative	Service	Chi2; regression	Direct contact with OPD psychologists was negatively associated	3.1 Yes
Shaw, &	Exploratory	data	users = 341	analysis	with community failure and regression modelling indicated an 83%	3.2 Yes
Craissati (2012)					chance of success in the community following direct contact.	3.3 Yes
						3.4 No
Drugo Harrar	Quant	المريمانط عدما	C+off - 40-	4 NIOV / A	Staff salf reported by audadge and assessation as in wealth as with DD	3.5 CT
Bruce, Horgan,	Quant.	Unvalidated	Staff = 48;	ANOVA	Staff self-reported knowledge and competence in working with PD	Type: 3
Kerr, Cullen, &	Repeated	psychometrics;	Service		increased significantly after 1 year of psychologically informed	Score:
Russell (2017)	measures and	administrative	users = N		practice. One aspect of burnout significantly improved from	N.G
	non-	data	not stated		baseline to 12-month follow up but no other differences found. A	

Authors	Design / Method	Types of measures	Participants	Analysis	Summary findings (in relation to impact on OPDP outcomes)	MMAT
	equivalent controls				significant decrease in warning and recall rates was reported between pre- and six-months into the intervention while no reduction was seen in the control group.	
Bruce, Patel, & Stevens (2020)	Quant. Repeated measures and treatment/ control	Validated and unvalidated psychometrics; administrative data	Staff = 23; Service users = N not stated	ANOVA	Staff self-reported knowledge and competence in working with PD increased significantly within 6 months of PIP intervention and in comparison to control data. A measure of burnout showed significant Improvements on one subscale for the intervention group and there was a significant interaction effect between condition and time. No differences were found in offender outcomes post-intervention or in comparison group.	3.1 Yes 3.2 Yes 3.3 No 3.4 CT 3.5 CT
Harvey & Sefton (2018)	Qual. Joint case study	Practice observation	Staff = 1; Service user = 1	Case study	After receiving a psychologically-informed warning letter, the offender had fewer police call outs than before, started using the language used within letter to discuss feelings, was more honest and trusting with the OM and the OM reported the relationship had improved.	Type: 1 Score: NG
Shaw, Higgins, & Quartey (2017)	Quant. Randomised	Psychometric and rating scale	Staff = 77 (att25.6%); Service users = 39	Mann-Whitney U test	On a measure of relationship quality, OMs who collaborated with offenders in case formulation writing had significantly higher scores than controls. Formulation group OMs also scored significantly higher on self-reported confidence in managing their cases. Offenders who collaborated in their formulation writing reported significantly higher trust scores than controls.	2.1 No 2.2 No 2.3 No 2.4 No 2.5 Yes

2.4.3 Workforce outcomes

Staff participants

As anticipated, all (n=13) studies focussing specifically on staff participants and those utilising data from both staff and service user groups (n=4) explored the impact of OPDP core delivery on key workforce outcomes such as confidence in one's practice, quality of and ability to write case formulations, approaches to risk management, and generalisability of learning to the wider caseload.

Competence, Confidence, and Attitudes – In quantitative studies, competence, confidence and attitudes were typically explored through the use of the Personality Disorder - Knowledge, Attitudes and Skills Questionnaire (PD-KASQ; Bolton et al., 2010), an unvalidated measure of self-reported capabilities and understanding of working with PD. All studies utilising the PD-KASQ (Brown et al., 2018; Bruce et al., 2017; Bruce et al., 2020; Ramsden et al., 2014; Shaw et al., 2012) reported significant increases in competence and confidence for intervention groups receiving training and consultation compared to controls or to own baseline, with three studies not reporting effect sizes. Attitudes toward PD did not change in two studies (Brown et al., 2018; Shaw et al., 2012) while Ramsden et al., reported significantly increased post-intervention attitude scores. Both Bruce et al., studies only reported total scores so specific sub-scale differences cannot be stated. Competence was also explored in relation to the quality of case formulations produced by probation staff after receiving targeted training in case formulation writing. The McMurran Formulation Checklist (MFC; McMurran & Taylor, 2013; McMurran & Bruford, 2016) was utilised in all three quantitative studies assessing formulation training, and this measure underwent validation assessments as part of the Minoudis et al., (2013) study. Training in formulation writing varied in mode and duration of delivery, with some approaches utilising case vignettes alone while others provided continuous practice-based guidance after a dedicated training period. Greater exposure to the intervention was associated with greater improvement in formulation quality, as rated by the MFC. This was demonstrated by Minoudis et al., (2013) seeing no change in overall quality of probation formulations after four 2-hour training sessions while Radcliffe et al., (2018) reported significant improvements in formulation quality after six days training combined with continuous consultative support.

Impact on practice – Qualitative changes in workforce development were also noted as a result of consultation, training, joint working and reflective practice, again with varying degrees of impact.

One case study (Harvey & Ramsden, 2017) of the impact of consultation and limited joint working highlighted the OM in question reported increased self-awareness leading to improved confidence in

his practice, an ability to generalise his learning, and better risk management practices. In contrast, Mapplebeck et al., (2017) explored the impact of a six-day course of personality disorder induction training on 36 probation officers using two open ended questions and found "only slight qualitative differences" (pp.43), noting that the training resulted in staff taking a more curious stance but that professional priorities, such as understanding one's history, remained the same as prior to training. Similarly, reflective practice sessions for probation staff were seen as useful but as having only an indirect effect on approaches taken to general practice (Webster et al., 2020), with increased psychological-mindedness the main additive effect. Blinkhorn et al., (2020) noted some staff felt added pressure as a result of involvement with the Psychologically Informed Consultation Service (PICS) and that this service did not contribute to applied operational practices but rather it served as an emotionally containing space.

Risk management – Reduced use of recall for reasons other than further offending (e.g., behavioural reasons) were noted in Clark and Chuan (2016) who reported a significant reduction in recall rates over time per probation officer, sustained over two years into delivery of a consultation and training model. Similarly, Bruce et al., (2017) reported significantly lower rates of recall and warnings issued by Approved Premises staff who accessed psychologically informed practice (PIP) training and support in comparison to those who did not have access to PIP. However, a slightly modified version of the same intervention found no group differences (Bruce et al., 2020) and poorly matched comparison groups at baseline may account for differences found. Finally, Radcliffe et al., (2020) tentatively noted OMs felt consultation services supported their risk management practices, although this was only loosely evident from the qualitative data presented and the authors stated that while risk was always a major focus for OMs, consultations may serve to complement approaches taken.

2.4.4 Wellbeing

Despite the high-level outcomes of OPDP quality standards making specific reference to improving psychological health, wellbeing, and pro-social behaviour (DoH, 2011), there were considerable gaps in the literature in relation to direct impact on these outcomes for either participant group. Wellbeing in relation to staff had not originally been specified in strategic objectives, but has, over the years, evolved to be an intermediary objective. Staff studies primarily assessed burnout while offender studies scantly addressed coping strategies as a component of wellbeing.

Staff participants

Burnout – Although burnout has been identified as one of the major risk factors of working with personality disordered offenders (Freestone et al., 2015), only two quantitative studies and one qualitative study addressed this area of staff wellbeing. The Maslach Burnout Inventory (MBI; Maslach, 1981) was utilised at multiple timepoints in both Psychologically Informed Practice (PIP) studies (Bruce et al., 2017; Bruce et al., 2020), and showed some improvement, but only one subscale (personal accomplishments) reached significance across the full PIP intervention group. Sub-group analyses however, demonstrated significant post-intervention improvements in emotional exhaustion and depersonalisation for females as compared to male staff. These studies were hampered by shortcomings in design whereby both sets of control groups were maintained only for the first six months, preventing further comparisons later into intervention delivery, thus change over time comparisons may have been affected by external factors. Webster et al., (2020) tenuously noted that staff who more frequently availed of reflective practice (RP) sessions may be protected against the onset of burnout; as a potential knock-on effect of the observed improved ability to manage job pressures reported by those attending RP sessions.

Offender participants

Coping strategies - A case study (Maltman & Turner, 2017) on the impact of utilising and sharing a psychological formulation outlined how the formulation had helped identify precipitating factors around an offender's potential reoffending, leading to practice changes which saw key protective factors prioritised. As a result of improved stability in housing and transitioning to the community, as suggested in the formulation, the individual was reported as not having used previously relied upon coping strategies of self-harming since leaving prison over two years prior. Engagement with local groups also appeared to have been as a result of considerations made within the formulation.

2.4.5 Risk and reconviction

Staff participants

Reconviction and recall – Studies addressing reconviction and recall varied in relation to impact. One study reported significantly reduced rates in the use of warnings and recalls by a group of staff receiving psychological training and consultation as compared to no reductions found in a comparison group (Bruce et al., 2017). In contrast, a slightly modified version of the same intervention found no differences (Bruce et al., 2020), and suggested further developments of the intervention were required before significant changes in use of recall could be observed. Somewhat anecdotal evidence was noted in a case study exploring the impact of psychologically informed

warning letters (Harvey & Sefton, 2018), whereby considerably fewer police call-outs were made in the months following receipt of the letter compared to the months preceding receipt.

Offender participants

Risk – Within the CJS, risk is assessed through several means including actuarial metrics built into established reporting systems (e.g., the Offender Assessment System; OASys) and professional or clinical judgement made by Offender Managers (known as Risk of Serious Harm; RoSH). Criminogenic needs (i.e., dynamic risk factors; Appendix F) are also calculated within OASys and indicate specific life areas in which problems may increase risk of offending (see chapter 3 for more details on these risk metrics). Jolliffe et al., (2017) explored differences in seven criminogenic needs between offenders who had some OPDP exposure and a group of historically matched controls (i.e., people who would have screened in to the OPDP had the programme existed at the time of their assessments). Improvements were reported in four criminogenic needs (accommodation, alcohol misuse, attitudes, and thinking and behaviour) while the largest effect size was in relation to a significant non-desirable change in the criminogenic need of "lifestyle". This study also analysed changes in OASys risk and clinical scores, finding significant reductions in actuarial risks for those accessing the OPDP while clinical risk assessments significantly increased, although sample sizes at this point were very small, weakening the power of analyses. Additionally, the Maltman & Turner (2017) case study briefly commented on risk outcomes, but did not produce evidence directly implicating formulation in the individual's de-registration from MAPPA, instead suggesting formulation may be a medium through which safer transition to community is supported.

Reconviction and recall – The Minoudis et al., (2012) study indicated broad support for the implementation of OPDP community interventions but could not identify direct effects, with outcomes differing by geographical area in relation to reoffending and recall rates. Overall, 48% of those exposed to OPDP involvement were breached or recalled², with the majority of these being for non-compliance. These authors noted that direct contact with psychologists working within the OPDP project was strongly predictive of community success, however in terms of observed findings, the many different combinations of possible OPDP intervention to which participants were exposed made it difficult to identify what aspects may have had direct impacts.

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² Breach of licence conditions can result in increased probation monitoring or other punitive measures; Recall relates to returning to prison as a result of a licence breach or of committing a further offence.

2.4.6 Relationships

Staff and offender participants

A core principle of the OPD Pathway is a focus "on relationships and the social context in which people live" (HMPPS & NHSE, 2018, p.5). Intrinsic to this is an improvement in interpersonal relationships (family, friends, and the wider community) and professional relationships. While six studies explored relationships, these all focussed on dynamics of the OM-offender relationship, with no studies addressing any other aspect of interpersonal relating. Given this outcome directly concerns both participant groups, findings from all relevant studies were combined for this section.

Relational practice – All qualitative studies made reference to the role of OM's psychological understanding and communication methods in developing relational practice. Three case studies explored the impact on OM-offender relationships (Harvey et al., 2017; Harvey & Sefton, 2018; Maltman & Turner, 2017), all in relation to slightly different compositions of core community delivery. Harvey et al., (2017) explored the self-reported impact of the OPDP consultation and guidance process, noting that the case study OM became more aware of communication difficulties and through altering his approach, found a greater sense of openness and collaborative working. Maltman & Turner (2017) similarly noted how the formulation highlighted to the OM that her own emotional responses could affect probation supervision sessions; adjustments made as a result of this were seen as key to enhancing the OM-offender relationship. This in turn was identified as a protective factor for the offender who had struggled with insecure attachments. Harvey & Sefton's (2018) psychologically informed warning letters intervention was also noted as influential in improving communication between the OM and offender such that a more trusting and honest relationship was built. Two qualitative studies utilising IPA to explore findings from focus groups (Blinkhorn et al., 2020) and interviews (Radcliffe et al., 2020) in relation to OPDP consultations noted the importance of acknowledging difficult dynamics within supervision sessions. These studies noted how increased empathy and awareness of an individual's schemas could lead to improved engagement and more honest interactions. Finally, Shaw et al., (2017) used a measure of relating with both staff and service users to evaluate the impact of collaborative case formulation in comparison to staff and offenders who did not access formulation processes. Significantly higher overall scores were reported for both formulation groups in comparison to controls, with a measure of working alliance also reaching significance for OMs and scores in relation to trust reported as significantly higher for offenders in the formulation group than those in the control group.

2.4.7 Summary findings

The studies reviewed here suggest there are several elements of core OM that were well received by staff - a reflective and containing space was welcome and there is some indication that relational ways of working have had positive effects on supervision processes. Direct effects on risk management and offender behaviour outcomes were not widely evidenced, however. There are potential dose effects to consider in terms of the impact that training had on staff competence and confidence, however long-term outcomes were difficult to identify, with many studies describing pre-post differences with very high attrition rates at follow-up. Imbuing probation practitioners with better psychological understanding may have contributed to improved professional relationships and less reliance on punitive approaches, but definitive longer term impacts have yet to be evidenced.

2.4.8 Certainty of evidence (Limitations)

Overall, the quality of evidence presented in the studies included in this review could not be considered of a consistently high standard. Scores on the MMAT tended towards low to medium, with only two papers reaching a score of 4/5 and one qualitative paper meeting all five criteria relevant to their study type. For qualitative studies, while approaches used to analyse and gather data were appropriate, several studies failed to meet the criterion of adequately deriving findings from the data. This may have been affected by journal word limits preventing thorough representation of the data, however there were some clearly tenuous interpretations made. The one RCT included failed to meet most criteria, largely due to an absence of reported processes and figures, coupled with a high attrition rate. Of the seven non-randomised quantitative studies assessed, none met the criterion of accounting for confounders in the design and analysis and four failed to demonstrate that the intervention was administered as intended. These studies' strengths were in relation to appropriateness of data collection and measurement. The two descriptive studies reviewed differed in quality, but both failed to demonstrate a low risk of nonresponse bias and it was not possible to tell if the appropriate analysis methods were used. Finally, one mixed methods study was found to have not met quality standards for each methodological component and the integration of qualitative and quantitative findings were difficult to interpret.

From a power perspective, most quantitative studies appeared to be under-powered (this was not always reported but could be inferred from results) and suffered from high attrition rates. Where significant differences were reported, many analyses related to small sample sizes or convenience samples who may not have been representative of the wider population under study, even at a

regional level. Additionally, the use of unvalidated psychometrics or bespoke qualitative tools to measure key outcomes warrant caution in interpreting the true impact of the intervention under scrutiny, particularly where items were phrased over-simplistically or with a positive skew. Impact on outcomes reported in many of these studies may be better understood as of a perceived nature rather than as directly evidenced. In a similar vein, it was possible that post-training responses reflected compliance with training intentions rather than actual learning or development on the part of participants.

The use of historic records to match groups, while necessitated by an absence of contemporary controls, reduced robustness of comparisons made. The continuously changing policies governing probation supervision processes and activities, as outlined in chapter 1, suggests historic comparison groups would be unlikely to be equivalent. Follow-up periods in some studies were quite short or contaminated by exposure to additional elements of service delivery, limiting the scope of impact or strength of comparisons made. Weak design and poorly applied analytical methods meant that methodological rigour was also questionable in several studies. In relation to qualitative findings, all interview and focus group studies relied on self-selected participants, thus the likelihood of positive response biases was high. Those disinclined to engage with the evaluation process may have been those who saw no benefit in the intervention or who did not access interventions offered. Similarly, papers utilising case studies to demonstrate impact of the intervention under consideration presented somewhat anecdotal evidence, with some drawing tenuous links to outcomes that objectively may have been equally affected by unrelated factors. Many authors did however recognise significant limitations and warned against over-interpretation of findings, instead acknowledging potential directions for further, better designed and more controlled research. While the difficulties of successfully conducting real world research are acknowledged (Leatherdale, 2019), there are a number of useful approaches practice-based researchers can consider to help mitigate against these pitfalls. For example, embedding well-validated outcome measures at the outset of an intervention can help achieve larger and more representative participant samples. Maintaining control groups as control groups for the duration of an evaluation can ensure useful comparison are made. Where small-scale designs such as case studies are used, it is important to incorporate as much qualitative and quantitative source material as possible in order to present as complete a picture as possible. Finally, utilising an appropriate research design to fit with the available data and resource can strengthen the overall quality of evaluation undertaken.

2.5 Discussion

Clearly evidenced within this body of literature was the widely varied formats that OPD Pathway implementation has taken across regional community delivery models. Training programmes were delivered across a variety of different timeframes and to different levels of intensity. Consultations ranged from group discussions to standalone one-to-one meetings to repeated one-to-ones (sometimes jointly with the individual under discussion). Formulations were written exclusively by the psychologist or by an OM after training or in collaboration with the individual on whom the formulation was being written. Generalisability of findings, therefore, may not be applicable beyond the region within which each study was conducted or potentially even beyond the particular setting within which the research was carried out. It was also not always clear which psychological theories informed the training or consultation delivered, although it is likely that many services opted for hybrid approaches in line with Livesley's model of integrated treatment (Livesley, 2012) and in keeping with policy directives on prioritising relational practice (Skett & Lewis, 2019). Relatedly, given the multifaceted nature of OPDP community delivery, providing clarity around either 1) which element of delivery achieves specific results or 2) the level of each element of intervention received by participants is suggested as a consideration for future studies, where possible. Finally, it is relevant to question the flexibility around the specifics of service provision across services and regions. While there are certainly advantages to delivering services adapted to the local resource and demand, this can complicate the evaluation of the quality of services being delivered.

2.5.1 Gaps

Across the literature reviewed, notable gaps in the outcomes explored were evident. Workforce outcomes were the most frequently explored, however the quality of studies was not exceptional and as noted above, unvalidated and potentially skewed measures were used to identify changes in competency and in risk management. This would suggest more exploration of this key outcome is warranted. In particular, it may be useful to move away from simplistic measures such as increases in PD knowledge and instead explore what features of OPDP community delivery made a useful difference to OM practice. In terms of risk management, understanding the mechanisms of change in relation to therapeutic risk taking and what effect this may have on probation supervision processes may help inform service developments. One key takeaway from studies demonstrating workforce improvements was that greater exposure to OPDP delivery appeared to achieve greatest impact, thus a particularly useful area of further study would be to more closely inspect this observation. Comparatively, Raynor, Ugwudike and Vanstone (2014) noted that a wider array of skills use amongst probation staff resulted in lower reconviction rates. Raynor et al., (2014) noted

statistically significant correlations between skills of a relationship nature and a two-year non-reconviction rate. It would thus be useful, for example, to understand whether the impact of greater OPDP exposure was related to particularly effective components in relational working espoused by this programme or to individual staff availing of multiple skills-based offerings.

In relation to risk and reconviction, direct impact has not been rigorously evaluated, although it is appreciated that outcomes of this nature require lengthy study periods in order to allow for appropriate time for relevant events to be observed. Without dedicated objective research resources, longitudinal study design is unlikely in the current OPDP provision, certainly at regional levels. Intermediary outcomes, such as changes in factors known to affect risk levels and reconviction rates, were largely absent in the literature identified for this review. A large international body of research on risk and reoffending in relation to offender supervision practices may provide a useful resource for potential approaches to evaluating OPDP community impact (McNeill et al., 2010; Raynor et al., 2014).

Wellbeing, in spite of being a major intended outcome of the OPDP programme, was scarcely explored in the reviewed literature. This was particularly evident in relation to offender wellbeing, with no studies addressing skills development, coping strategies, substance use, self-harming or any other measure of psychological health. While direct psychometric measurement of these factors is achievable in a prison setting, such self-report measures may be more difficult to gather from a probation cohort. As such, qualitative approaches may be more applicable for evaluating these outcomes, not least in terms of identifying nuances in wellbeing factors on an individual level. Staff wellbeing was only directly addressed in terms of burnout, while brief mentions of job satisfaction and workplace stress occurred somewhat anecdotally in some qualitative studies. It would therefore be helpful to see more sophisticated approaches to research on wellbeing including addressing factors such as staff turnover and sickness or concepts such as compassion fatigue. Given the continuously changing policies directing probation work, it would be useful to gain an insight into whether and how OPDP processes could help in alleviating the inherent stresses of working in such an unpredictable system.

Finally, relational improvements have been noted as a key goal of the OPD Pathway, and while the OM-offender relationship was explored to some extent, no other element of relationship outcomes were evaluated in the reviewed literature, beyond at an anecdotal level. Indeed, in the context of the reunification of probation services, it would be particularly useful to explore the differential

impacts on staff wellbeing for those coming from an indirect, phone based supervision paradigm compared to those with in-person supervision experience.

2.5.2 Future research

In addition to these identified gaps, it must be noted that there were several studies which failed to meet quality standards for formal knowledge synthesis or which scored low to average marks on the MMAT. It is relevant, therefore, to consider whether greater gaps exist in our knowledge of core OM given the questionable reliability of some studies reviewed. In outlining directions for future research, it is not simply areas of enquiry that should be noted, but approaches to research design and analysis must also be considered. The real world nature of this area of research often presents insurmountable barriers to following a robust scientific design, however, through careful construction, a pragmatic use of routine practices, and perhaps a clearer focus on specific inputs or outcomes, it can be possible to generate high quality research content. Aligning research design with the underpinning Theory of Change for each service type within the OPD Pathway could help guide the production of relevant and useful findings that help identify areas of effectiveness and areas for improvement. Relatedly, given the considerable differences in the psychological complexities and offending risks presented by male and female OPD service users, future research designs should consider taking a gendered approach to help ensure clarity of outcomes as they relate to each group. Finally, external collaboration with academic institutions or independent researchers, both at a service-specific and national level, may help in overcoming potential bias in interpretation of findings and drive up rigour.

2.5.3 Limitations of review process

This review was carried out on published literature only and as such, there may be a substantial body of unpublished research which could have contributed to the knowledge base built herein. It is also acknowledged that search terms employed did not clearly map onto all outcomes explored, particularly in relation to offender search terms where specific outcomes of reoffending, risk, wellbeing, etc., were not utilised. Search terms were developed to ensure the correct participant groups were captured and less priority was given to specified outcomes to avoid potentially missing content that used vague or indicative language. Additionally, while the initial screening and selection stages of this review were conducted by two researchers, the majority of the extraction and all of the synthesis process was carried out by the author alone. As a result, the conclusions drawn and quality assessments made were not subject to any formal external validation processes.

2.5.4 Implications for practice and policy

The reviewed literature presented too little in terms of concrete outcomes directly resulting from OPD Pathway interventions to be informative about clear directions for criminal justice policy and probation practice, however, there were some useful indicative findings. Overall, there was some support for the provision of psychological guidance and consultation processes being helpful to probation staff in terms of their direct working with complex individuals. Gaining insights into the historic factors that influence behavioural responses to perceived triggers and learning to utilise more psychologically informed communication methods with their service users may help probation staff to identify and mitigate against potential risk factors for further offending or harmful behaviours.

Chapter 3 – Evaluating the Utility and Application of the Women's OPDP Screening Tool and its Potential for Revision

3.1 Abstract

Objectives: This study sought to explore the features and characteristics of women screened in to the Offender Personality Disorder Pathway (OPDP) in order to determine how a revised approach may better identify those in need of OPD Pathway intervention. Prior to undertaking this study, women's screening criteria were closely based on men's criteria, in spite of the well-established differences in presentation of personality difficulties amongst the male and female OPDP cohort. As a policy-informed study, all stages of analysis and exploration were presented to and commented on by a multi-disciplinary task group established to deliver a new women-specific screen.

Design: A two-part exploratory study of cross-sectional secondary data drawn from an MoJ database of all service users active (i.e., on licence or in custody) at the time of access (June 2019) was carried out. Group differences were explored to establish current cohort characteristics. With the aim of balancing risks and needs, this study was conducted in two parts. Study 3.1 utilised descriptive statistics to inform selection of risk parameters, or eligibility criteria. Study 3.2 consisted of predictive modelling of alternative screening items to determine key characteristics that may appropriately represent the psychological needs profiles of OPDP women.

Methods: Study 3.1 utilised group comparisons and crosstabulation of risk information on all female offenders in England and Wales, largely drawn from the Offender Assessment System (OASys). Study 3.2 was carried out across three phases, in which current screening function was assessed, alternative screening items were identified and consulted on, and predictive modelling of alternative items was carried out.

Results: A useful set of risk criteria were determined from Study 3.1 and analyses in Study 3.2 identified a group of 16 items that demonstrated good predictive utility in screening outcome.

Outputs from studies 3.1 and 3.2 were combined to create a revised OPD Pathway screening tool for women.

Conclusion: A practical and automatable tool was developed and rolled out for use across probation and prison services. This revised screening tool appeared more gender-sensitive than previous approaches to screening women for OPDP involvement while approximately maintaining the present women's OPDP caseload figures.

3.2 Introduction

Evident within studies reviewed in Chapter 2 was the notable absence of any discussion of the initial process of OPD Pathway core community delivery – the identification of individuals to be considered for this programme. This is with the partial exception of Shaw et al., (2012) who included the screening process as a response option in a question asking about the most useful element of the then pilot project. Several of these studies briefly described the process of screening individuals into the Pathway but did not explore the effectiveness or appropriateness of the method employed or the individuals identified. This is particularly notable given the "personality disorder" screening aspect of this identification process is the same for men and women in spite of noted differences in prevalence rates and types of PD presenting in each group (Dolan, & Völlm, 2009; Singleton, Meltzer, & Gatward, 1998; Rogstad & Rogers, 2008). It is possible that because this element of the programme was centrally directed with a defined set of criteria (in contrast to intervention delivery which was often adapted to meet local resources), researchers may not have seen any merit in querying the functionality of the screening process. Furthermore, the complexities of accessing appropriate data to thoroughly investigate the intricacies of this process likely precluded most interested researchers from conducting such analyses. After ten years of the OPD Pathway programme running, it was pertinent to investigate the utility of this screening process. The studies described below were the first instalment in a programme of work designed to address the suitability of the OPD case identification process. As will be detailed within this chapter and as noted in Chapter 1, these studies related to the utility of this process as it relates to women.

3.2.1 Background synopsis

The Offender Personality Disorder Pathway (OPDP) seeks to provide psychological support to Criminal Justice System (CJS) staff and service users to improve outcomes for high risk of harm violent and sexual offenders presenting with complex needs indicative of personality difficulties (Joseph & Benefield, 2010; 2012). While this strategy was primarily focussed on men due to roughly 90% of the target population being male, a separate strategy for women offenders with PD was developed later (d'Cruz, 2015). This programme was established in 2011 as a partnership operation between His Majesty's Prison and Probation Service (HMPPS) and the National Health Service – England (NHSE). It is well established in the literature that complex needs and mental health difficulties are highly prevalent in forensic populations (Andrews & Bonta, 2010; Andrews & Dowden 2007; Fazel & Danesh, 2002) and many programmes have been developed to help address various aspects of these difficulties (Home Office, 1998; McGuire, 1995; Palmer, McGuire, Hatcher, Hounsome, et al., 2009). Within the limited resource of the OPDP programme however, the remit is

to target interventions at individuals presenting with the highest levels of risk in conjunction with highly complex needs indicative of personality disorder (see introduction chapter for OPDP history). The first step in this process is the identification of individuals appropriate for OPDP intervention. The two major components of this process of identification are to 1) triangulate the level of risk through a number of factors including dedicated risk assessment metrics, sentencing information and offence details, followed by 2) establishing whether the nature of psychological complexity presented is indicative of personality disorder through a bespoke set of screening items. Individuals are deemed *eligible* for OPDP screening when risk criteria have been met and are deemed *suitable* for OPDP intervention when personality disorder screening criteria have been met. To be clear and consistent in discussing these separate aspects of identification, the term eligibility is used throughout this chapter to refer to matters related to risks while the term suitability is utilised to refer to considerations of complexity and psychological needs.

3.2.2 Eligibility – Sources of information for OPD Pathway risk criteria

OASys calculations – Within the CJS, there are multiple systems for recording information about individuals moving through the prison and probation services. For continuous management and monitoring of individuals on probation in the community, the system nDelius holds all relevant information on an individual's licence conditions, sentence plan, supervision processes, programmes attendance and many other areas of interaction with wider CJS and third sector agencies. Within prisons, the system pNOMIS holds prison-specific information around programme attendance, adjudications, incidents and all details relevant to one's experiences within the prison service, including transfers between sites. An individual's nDelius and pNOMIS records are continuously updated with any relevant details and activities to ensure continued oversight and while there is overlap of key information, these systems do not "talk to each other" and can only be accessed by service-specific staff. Separate to these service-specific systems, the Offender Assessment System (OASys; Home Office, 2006) is a cross-CJS system on which prison or probation staff record detailed accounts of one's offence information, personal history, and factors related to their current lifestyle. In contrast to the continuously updated nDelius and pNOMIS, a full OASys assessment is completed once at the beginning of one's sentence and reviewed and updated at various intervals depending on sentence length and other factors. Typically, a full assessment is not carried out more than annually.

As a structured clinical assessment and management tool, one of the key functions of OASys is to build a risk profile of the individual and this is presented in relation to how specific risks might

manifest in the community and in custody. To achieve this, 12 sections of varying length capture information pertaining to factors such as detailed offence information, family/relationship history, lifestyle factors, socio-economic information, and attitudes. Each section consists of tick-box questions with three forms of response categories. For some items, the responses are simply 'yes' (1) or 'no' (0). Some questions ask about the extent to which something is problematic and have the response categories of 'no problems' (0), 'some problems' (1), or 'significant problems' (2). Finally, some items ask for a 'tick if present', in which case absence of the item is presumed if left unticked. Open text fields allow more detailed information to be captured within each section. In addition to assessing overall likelihood of reoffending, OASys is used to identify specific criminogenic needs (calculated for each relevant section), assess and help manage risk of serious harm and other risks, and provide a means of measuring change over the course of an individual's sentence (Debidin & Fairweather, 2009).

OASys provides an overall risk of reoffending score based on static (historic factual information such as gender and offence information) and dynamic (amenable to change, such as substance use) risk factors. Over the course of the 20 year history of OASys, several other risk calculations with better predictive validity have been built in to the outputs of this system. The OASys General reoffending Predictor (OGP; Howard, 2009) estimates the likelihood of non-violent reoffending; the Offender Group Reconviction Score - version 3 (OGRS3; Howard, Francis, Soothill & Humphreys, 2009) is a static risk calculation providing a percentage prediction of reoffending; and the OASys Violence Predictor (OVP) score provides an estimation of the likelihood of serious non-sexual violent reoffending based on static and dynamic factors (Howard & Dixon, 2013).

Risk of Serious Reconviction – When the National Offender Management Service announced the privatisation of probation services for low and medium risk individuals, a tool was devised to help identify the most potentially serious reoffenders. This was to ensure appropriate allocation of high risk individuals to the publicly run National Probation Service (NPS) and of low and medium risk individuals to privately run Community Rehabilitation Companies (CRC; Ministry of Justice, 2013a; MoJ, 2013b). The Risk of Serious Reconviction (RSR) score is a predictor of future seriously harmful behaviour that is calculated based on offence type, criminal history, and portions of data drawn from the individual's OASys assessment (National Probation Service, 2014).

Risk of Serious Harm – In addition to these calculated risk metrics, the clinical nature of OASys contributes to the Risk of Serious Harm (RoSH) score. Risk of Serious Harm is a clinical judgement

that is heavily informed by details of an OASys assessment. The level of detail required to complete a full OASys assessment allows the prison or probation practitioner to form a comprehensive picture of the potential risks posed by the individual in the presence of relevant factors. These considerations relate to static, dynamic (including protective), and acute (liable to sudden change and indicative of critical risk such as loss of accommodation) factors that can influence an individual's behaviour and practitioners collate this knowledge to determine the level and imminence of risk of harm posed. RoSH is further informed by RSR and the actuarial measures of OGRS3, OVP and OGP, however the final result is a clinical assessment on the part of the HMPPS practitioner who must base their judgement on an individual case by case basis. A full account of the practice guidance for determining RoSH is outside of the scope of this chapter, however more specific information can be accessed in the MoJ RoSH supplement (Ministry of Justice, 2014).

MAPPA – While not a measure of risk but rather an indicator of recidivism risk, the Multi-Agency Public Protection Arrangements (MAPPA) apply to the highest risk individuals convicted of violent or sexual offences. The responsible agencies making up MAPPA are the police, probation and prison services while additional co-operative agencies include local education and housing authorities, ministers of the Crown, and others (National MAPPA Team, 2019). A strategic management board supervises the work of MAPPA and members of the public act as lay advisers. Individuals subject to MAPPA are categorised by offence type such that category of 1 relates to sexual offences, category 2 relates to violent offences and category 3 relates to other dangerous offences indicating that the person is capable of causing serious harm. Finally, MAPPA management is carried out at three levels, depending on sentencing details. Level 1 offenders are managed by the main agency responsible for the individual (e.g., Probation if the person is on licence in the community), and this requires no group meetings but for information to be available to share. Level 2 offenders require an active multi-agency approach with regular multi-agency meetings, and Level 3 individuals require representation from senior agency members at these meetings.

OPD Pathway eligibility criteria – at the time of analysis, the risk criteria for men were to 1) have a violent or sexual offence conviction AND 2) be serving a determinate or indeterminate sentence AND 3) have a high or very high ROSH status. For women, male criteria applied or eligibility was assumed if the individual was managed by NPS.

3.2.3 Suitability – the OPD Pathway personality disorder screen

Sources of information in relation to likely personality disorder (PD) and complex needs are less straightforward than for risks. As such, the history and development of screening for PD has involved a trial and error approach primarily utilising OASys information. The first mention of a personality disorder assessment within OASys was by Craissati and Sindall (2007; 2009) in which a 'Dangerous and Severe Personality Disorder tool' was noted as an available resource whose items were all reminiscent of the Psychopathy Checklist – Revised (PCL-R). These items were originally identified partially based on descriptive features of male violent offenders meeting the Dangerous and Severe Personality Disorder (DSPD) programme criteria (Coid et al., 2007) that were mapped on to OASys content. Craissati and Sindall described an 11-item tool, noting that scoring 1 or 2 on all or most items was indicative of possible DSPD. To identify their sample of potentially personality disordered individuals, these authors assigned a cut-off score of 8³ on this tool.

In their work to identify personality difficulties within a London cohort of probationers, Craissati and colleagues later described this tool as having begun as a 12-item screen with a threshold score of 8 out of 24, then 16 out of 24, owing to the 0/1/2 scoring format of many of the items (Minoudis, Shaw, Bannerman & Craissati, 2011). These authors noted that the score of 8/24 was too inclusive, identifying too many individuals than resources could facilitate. A score of 16/24 was, however, described as too restrictive to "severe" personality disorders, such as the non-clinical DSPD designation, and would not identify individuals with recognised personality disorders such as Borderline or Narcissistic personality disorder. As a resolution, these authors described two cohorts of individuals suitable for OPD Pathway involvement – the "severe anti-social" group presented with a high DSPD score, prolific offending and community failure while the "severe unspecified" group presented with high harm offences without a high DSPD score, and likely childhood disturbances (Minoudis et al., 2011). In further developing this work, Minoudis, Shaw & Craissati (2012) described a 10-item DSPD tool with a threshold score of 7 and proposed four additional indicators of personality disturbance to identify "unspecified" types. These indicators were childhood difficulties, mental health difficulties, self-harm or suicide attempts, and challenging behaviour (amended from "attacks on staff"), and the presence of any one of these was deemed satisfactory to screen an individual into OPDP services if the DSPD threshold was not met (Minoudis et al., 2012). Each of these additional indicator items had a brief description of the types of details that could be considered relevant to mark each as present as they did not all map directly onto OASys items. As

³ The exact steps involved in the evolution of this tool have been difficult to ascertain from the originators, thus the present description was generated from published accounts alone.

such, those carrying out screening could source information relevant to these indicator items from any accessible system including OASys tick-box items, OASys open text fields or from other CJS records such as nDelius or pNOMIS.

The final development of this PD screen was a two-part tool made up of 10 yes/no items with a threshold score of 7 followed by four additional indicator items with a minimum of two required to screen in to the Pathway (Jolliffe, Cattell, Raza & Minoudis, 2017b). Thus, while the core screen intended to identify PD was tied to exact items, the four additional indicator items carried more potential influence over the resultant caseload given that multiple sources of information could be accessed to identify presence of these criteria and that two items wielded as much power as seven. The ten items and their location in OASys are as follows:

- 1.5/1.8 One or more conviction aged under 18 years or Age at first sanction (if ≤18 count as a yes)
- 2.2a Any of the offences include violence/threat of violence/coercion?
- 2.2b Any of the offences include excessive violence/sadism?
- 2.6 Does the offender fail to recognise the impact of their offending on the victim / community /wider society? (Note this question is worded differently in the OASys)
- 5.5 Does the offender display over reliance on friends/family/others for financial support?
- 7.4 Manipulative/predatory lifestyle?
- 7.5 Reckless/risk taking behaviour?
- 10.7 Childhood behavioural problems?
- 11.2 Impulsivity?
- 11.3 Aggressive/controlling behaviour?

OPD Pathway suitability criteria – For both men and women, a score of 7 or more on the 10-item PD screen or two of four indicator items are required to be deemed suitable for OPD Pathway involvement.

In order to screen in to the OPD Pathway, the above described eligibility and suitability criteria must be met and there must be a clinically justifiable link between the personality disorder and the risk. Where none of these criteria have been met and the assessor maintains concerns around the individual's appropriateness for OPDP intervention, a clinical override option also exists. This allows a HMPPS practitioner to discuss the individual with an OPDP member of staff to determine overriding the screen results and allow access to OPDP services.

3.2.4 Women on the OPD Pathway

It is evident from the above that the complexities of female offenders have largely been overlooked in designing an identification process for personality disturbance, given the core PD screen was

based on descriptions of male violent and sexual offenders selected for the DSPD programme. In early documentation around the OPD Pathway strategic plans, it was stated that a separate, gender responsive approach would be developed in due course. In an attempt to achieve this, the women's screening criteria have undergone several changes over the 10 year history of the programme (see Figure 3.1). The requirement to meet criteria indicative of likely personality disorder remained consistent while various offence and risk related criteria were altered in response to wider service developments (Joseph & Benefield, 2012; HMPPS & NHSE, 2020). The most recent change to women's screening came about when probation services underwent a major reform, known as Transforming Rehabilitation (MoJ, 2013). This required low and medium Risk of Serious Harm (RoSH) individuals to be managed by privately contracted Community Rehabilitation Companies (CRC) and higher RoSH offenders to be managed by the public sector National Probation Service (NPS). With this development, the women's OPD criteria changed such that any women managed by NPS were deemed to have automatically met the risk section of criteria and were therefore only screened against the established OASys personality disorder items and additional indicators. With the reunification of NPS and CRC announced in 2019 for nationwide implementation in 2021, the risk screening function that this organisational split had provided was no longer applicable; all women would be NPS-managed therefore the women's OPDP criteria would need to be revised again to prevent a quadrupling of the OPDP female caseload.

Figure 3.1 Evolution of Women's OPD criteria, 2011-2021.

•The criteria for men* are met OR • Current offence of violence against the person, criminal damage, sexual offence (not economically motivated) and/or offences against children; and Assessed as presenting a high risk of committing an offence from the above categories; and 2011 – June • Likely to have a severe personality disorder; and 2014 • A clinically justifiable link between the above •As for 2011-2014 OR ·managed by NPS; and •Likely to have a severe personality disorder; and June 2014 -•A clinically justifiable link between the above August 2016 •Likely to have a severe personality disorder; and • A clinically justifiable link between the personality disorder and the offending; and •The case is managed by NPS (Women managed by CRCs with severe personality disorder August 2016 and at high risk of violent reoffending will be considered on an exceptional, case by case March 2017 basis.) •The case is managed by NPS; and •Likely to have a severe personality disorder; and • A clinically justifiable link between the personality disorder and the offending

*Note: Criteria for men specified violent or sexual offending; high RoSH; and determinate or indeterminate sentence. The term "likely to have a severe personality disorder" relates to meeting the 7/10 OASys PD screen or 2/4 additional indicators

To address this issue, the leads of the OPD Pathway established a task group to explore viable alternative options for screening women in to the Pathway. This group was comprised of clinical and operational leads in the OPD Pathway with specialist roles in women-specific services, OPD commissioners for women's services, representatives from the female custodial and community estates, the OPD research lead, and the author. This group tasked the author with undertaking the statistical exploration and analyses of all options and with investigating potential avenues for revision. An initial set of seven options were developed and reduced down to three once operational impracticalities of four of these were addressed.

The following points were established as a guide for decision-making in this task group:

The desired outcome is a set of WOPD pathway entry criteria that:

- 1. Achieves a balance between risks and needs of women on the OPD pathway
- 2. Provides a gender-responsive approach to screening and identification for the pathway
- 3. Does not result in a large expansion of the overall number of women screened in
- 4. Is informed by the available evidence and data
- 5. Will stand the test of time and, wherever possible, draws on existing systems and measures

The three alternative approaches to revising the women's screening process all sought to address a balance between risk of harm and psychological needs. Several variables that related to static and dynamic risk measures were considered, as well as features of personality related to issues of complexity. The specific details of these options were:

Option 1 – revert to previous criteria:

- likely to meet the diagnostic criteria for 'personality disorder' as determined by the OPD screen (NB the screening items may be subject to change)
- present a high likelihood of violent or sexual offence repetition AND present a high or very high risk of serious harm to others
- have a current offence of violence against the person, criminal damage, sexual offence and/or offences against children; <u>AND</u> be assessed as presenting a high risk of committing an offence from these categories

Option 2 – align entry criteria to the Multi-Agency Public Protection Arrangements (MAPPA)/ Risk of Serious Reconviction (RSR) threshold:

- likely to meet the diagnostic criteria for 'personality disorder' as determined by the OPD screen (NB the screening items may be subject to change)
 AND
- require MAPPA management <u>OR</u> where the risk of seriously harmful reoffending is above the agreed RSR threshold (a score of 6.9 or above) <u>OR</u> assessed as presenting at least a high RoSH

Option 3 – align entry criteria to the Offender Management in Custody (OMiC) complexity tool:

 likely to meet the diagnostic criteria for 'personality disorder' as determined by the OPD screen (NB the screening items may be subject to change)
 AND

- considered "high-complex" according to the Women's OMiC⁴ complexity tool
 AND
- an appropriate risk criterion

To ensure each option was evaluated appropriately and well-informed decisions were made at each stage, it was necessary to consult available data and explore the potential outcomes of each option through a series of in-depth analyses. In conducting preparatory work for these analyses, a number of developments around Option 3 came to light. Firstly, as the OMiC complexity tool was comprised of eight broadly descriptive items, it was not possible to accurately match all items to the data available for analysis. Secondly, the task group was informed that this tool was not for long-term use and therefore linking OPD outcomes with this process would not stand the test of time. Finally, as the OMiC tool was only applied to women in custody, it would not be applicable to women in the community. Option 3 was thus withdrawn and while some initial analyses on this option had been carried out, these will not be discussed as part of the current study.

To evaluate the remaining two options the author designed a two-part, multi-stage study to explore available possibilities and produce a suitable revised set of OPDP entry criteria that would appropriately balance risks and needs in relation to women. Both of the available options noted that the in situ 10+4 item personality disorder screen came with a "subject to change" clause, such that were these items deemed unsuitable or not appropriately gender-responsive, these suitability criteria may be overhauled. In contrast, each set of risk criteria were comprised of established metrics that could not be altered. Thus, as a practical approach, risk criteria were first assessed to determine the eligibility of women for OPDP intervention. Then, once appropriate risk metrics were established, the components of the OASys PD screen were evaluated with a view to potential revision.

3.3 The present study

This piece of work was approved by the HMPPS National research Committee (Ref: 2017-342). The research comprised of two distinct sets of analyses with Study 3.1 focussing on risk-related eligibility criteria and Study 3.2 addressing suitability criteria in relation to complex psychological needs. The first set of analyses addressed the various risk metrics available for evaluation and how these related to the OPDP female caseload. The second study explored the discriminant function of the

⁴ Changes in offender management practices in 2017 saw individuals nearing the end of their prison sentence being managed by a community probation officer to ease transition to the community. Officer allocation was based on risk status for men and a complexity tool was devised for women to ensure appropriateness of responsible officer.

established OPDP screening items in terms of how women were identified for OPDP intervention. Study 3.1 consisted of a simple descriptive approach, utilising frequencies and cross-tabulations to identify the necessary information to select and refine appropriate risk criteria to be carried forward. Study 3.2 consisted of three stages and utilised mixed methods including consultation of professional opinions, regression modelling to explore the utility of current PD items and modelling the predictive potential of a revised set of items.

Prior to detailing the intricacies of analyses involved in each stage of these studies, the following section provides a contextual picture of the data available for analysis and the characteristics of women currently screened in to the OPD Pathway as compared with the wider national female caseload.

Data available for analysis

Variables included in this dataset (see Appendix C) were general demographics (age, ethnicity, geographic region), all OASys tick-box items from sections 2-13, offence and sentence information (offence types, sentence length and types, prison or community location, MAPPA category and level), and risk scores from several static, dynamic and clinical risk assessments (OGRS3, OGP, OVP, RoSH, and RSR). Tick-box items within OASys are scored either 0/1 or 0/1/2 and two additional items at the end of each section ask whether the section topic is 1) linked to risk of serious harm, risks to the individual and other risks and 2) linked to offending behaviour. Section scores and criminogenic needs calculations were also included. Two additional binary variables drawn from a separate database (nDelius) were also included in this dataset, and these indicated the method by which screened-in women had been screened in to the OPD Pathway (i.e., through meeting the established eligibility and suitability criteria or through clinical override) with values of 0 in both indicating the woman had been screened out. For convenience in analysis, a new binary variable (labelled OPD case) was generated such that women with a value of 1 in either or both of these variables were assigned a value of 1 and women with a value of 0 in both of these variable were assigned a value of 0 to indicate presence and absence on the OPDP caseload respectively. Finally, as the four additional PD indicator items did not relate directly to specific OASys items, a set of proxy indicators was devised by the MoJ Data Sciences Hub for the purpose of this study and included in the present dataset. Each proxy indicator was comprised of multiple OASys items, the full set of which can be found in Appendix D. It should be noted that while these proxies are useful in determining likely screening outcomes, they do not reflect the recorded screening outcomes for these women; only the two nDelius items relate to recorded screening status.

Participants

A dataset of all active female offenders was drawn from the MoJ Segmentation database (see Appendix E) on the 30th June 2019. This was comprised of 16,428 women on the combined NPS-CRC caseloads at that time, accounting for 8.6% of the total prison and probation population across England and Wales. To ensure accuracy of analysis and reporting, anomalous, duplicated or incomplete case records were removed ahead of analysis, resulting in a final dataset of 16,307 women. Demographic characteristics of this cohort are detailed in the descriptive statistics section below.

Descriptive Statistics

Prior to evaluating each Risk option, it was necessary to establish an understanding of the make-up of the OPD cohort in the context of the present study. Table 3.1 presents the recorded screening status of all women as based on the aforementioned nDelius variables. While the specific "route in" to the Pathway (7+ or <7 with 2+ indicators, or both) was not specified, this was calculated in a two-step process utilising nDelius and OASys variables. First, the number recorded as "in by clinical override" was subtracted from the total recorded as an "OPD case" to give the number screening in through core criteria. Following this, those with a PD score of 7 or more out of 10 were identified as those meeting the 7+ criteria while women scoring 6 or less were identified as those requiring the additional 2+ indicators. Note, the number of women on the OPD caseload at the time data were accessed was 1,869, accounting for 50% of NPS women (11.5% of all women).

Table 3.1OPDP Screening status with routes into the OPDP caseload

	Route into OPD Pathway	N of OPD caseload	% of OPD caseload
On OPD caseload	Screened in with 7+ PD items	553	29.6%
	Screened in with <7 PD items	1268	67.9%
	Screened in by clinical override	48	2.5%
Total		1869	
Not on OPD caseload	(unscreened or screened out)	14438	
Total		16307	

As demonstrated, more than two thirds of those screened in presented with fewer than 7 PD items and instead appear to have screened in through the 2/4 indicator criteria, providing some support for the gender-responsive revision of the 10-item PD screen itself.

Using the proxy indicator items, it was further possible to extrapolate likely screening outcome post-NPS/CRC reunification. Proxy item counts were combined with OASys PD screen scores and cross-tabulated with women's OPD caseload status (see Table 3.2). For ease of interpretation, Table 3.2 is additionally split by organisation. Were 2017 criteria to be maintained after CRC and NPS remerged, there would be a total of 9,785 women meeting OPD criteria, increasing the OPD caseload to 524% of the present figure.

Note that the 1,195 NPS women who appear to meet OPD criteria but were not on the OPD database may have been women who were not yet screened, women who met proxy indicator items but were not recorded as presenting with these items when screened, or women who were clinically overridden out of the Pathway. Similarly, the 175 NPS women on the OPD database who did not meet criteria may have been a combination of those screened in through clinical override or those presenting with additional indicator characteristics not captured by proxy items.

Table 3.2OPD screening outcome for NPS and CRC as compared to current OPD caseload status

		On OPD c	aseload	Total
	OASys outcomes	No	Yes	
NPS	Screen out	698	175	873
	Screen in 7+ only	19	24	43
	Screen in 2+ only	946	1133	2079
	Screen in 7+ & 2+	230	536	766
CRC	Screen out	5649	0	5649
	Screen in 7+ only	19	0	19
	Screen in 2+ only	6455	1	6456
	Screen in 7+ & 2+	422	0	422
Total	Screen out	6347	175	6522
	Screen in	8091	1694	9785

Prior to exploring the potential benefits of each proposed revision option, first the characteristics of the combined NPS/CRC caseload were explored to understand the possible demographic and contextual influences on screening status. To provide this context, the following set of tables (3.4-3.7) presents demographic and offending information for the NPS and CRC caseloads alongside the relative proportions screened in to the OPD Pathway. Table 3.3 presents the total caseload figures of women in each organisation alongside the percentage of the OPD caseload coming from each organisation.

Table 3.3Caseload totals with associated proportions of OPD caseload

Organisation	Count	% of total	On OPD caseload
			(% of row)
NPS	3761	23%	1868 (49.7%)
CRC	12546	77%	1 (<0.01%)
Total	16307	100%	1869 (11.5%)

An important consideration in screening individuals for inclusion in a limited service targeting complex needs is the role and representation of ethnic diversity. In the dataset under analysis, highly specific ethnicity details were provided for all women, thus for practicality of analysis, these were grouped into six broader categories. Table 3.4 presents the ethnicity breakdown of the NPS caseload, with associated proportions of each ethnic group screened in to the OPD Pathway also provided. It is evident here that a slight over-representation of White and Mixed race women exists within the OPD caseload in conjunction with a slight under-representation of Black and Asian women as compared to the overall caseload, however with small numbers such as these, perfect proportional representation is unlikely to be achieved. The 'rate of screening' column provides perhaps more useful information, noting that well over half of Mixed race women were screened in to the Pathway in contrast to a third of Black women.

Table 3.4Ethnic group frequencies in NPS, with associated proportions of OPD caseload

Ethnicity	N	% of NPS	On OPD database (% of OPD)	Rate of screening in by ethnicity
White	3099	82.4%	1600 (85.6%)	52.6%
Mixed	177	4.7%	104 (5.6%)	58.8%
Black	286	7.6%	96 (5.1%)	33.6%
Asian	121	3.2%	48 (2.6%)	39.7%
Not known	48	1.3%	11 (0.6%)	22.9%
Other	30	.8%	9 (0.5%)	30%
Total	3761	100	1868	49.7%

Note: proportions across CRC were the same as NPS – the single CRC case on the OPDP caseload was White

Offence types

As offence type has previously been utilised in the eligibility aspect of OPD screening criteria, differences and similarities between women in each organisation were explored. In the dataset under analysis, highly specific index offences were provided for all women, thus for ease of

interpretation and analysis, these were grouped into six broader categories in line with organisational practice. Table 3.5 presents broad offence categories for each organisation, with the relevant proportions for OPD women presented alongside. With the exception of the slight over-representation of criminal damage offences, women screened into the OPD Pathway largely followed the same pattern of offending as the wider NPS caseload. Also notable in Table 3.5 is the contrast between patterns of offending between NPS and CRC, with a considerable proportion more violent and sexual offending apparent in the NPS caseload, as would be expected given organisational remits.

Table 3.5Frequencies of offence types by organisation, with associated OPD screening rates

Org.	Offence type	N	% of NPS/CRC	On OPD caseload (% of OPD)	Rate of screening in by offence
NPS	Criminal damage	283	7.5%	188 (10.1%)	66.4%
	Public order	113	3%	48 (2.6%)	42.5%
	Acquisitive	286	7.6%	121 (6.5%)	42.3%
	Violent	2447	65.1%	1255 (67.2%)	51.3%
	Sexual	249	6.6%	117 (6.3%)	47%
	Other	383	10.2%	139 (7.4%)	36.3%
	Total	3761	100	1868	49.7%
CRC	Criminal damage	296	2.4%		
	Public order	492	3.9%		
	Acquisitive	3735	29.8%		
	Violent	3274	26.1%	1 (100%)	
	Sexual	3	<0.01%		
	Other	4746	37.8%		
	Total	12546	100		

Sentence types

Finally, while sentence types were not considered in previous women's screening criteria, they are listed in men's OPD screening criteria. As women may be screened in when meeting men's criteria (see Figure 1), it was relevant to explore how sentence types have been represented in the OPD caseload to date. In the dataset under analysis, highly specific sentencing details were provided for all women, thus for ease of interpretation and analysis, these were grouped into seven broader categories. Table 3.6 provides the frequencies and rates of screening for each broad category of sentence types. As may be anticipated given the level of risk and complexity of OPD service users, longer sentence types were more prevalent in the OPD group than in the wider NPS caseload. A slightly larger proportion of recalls may also be indicative of the higher level of complexity presented

by this group. Relatedly, the much greater proportion of probation licences under 12 months in CRC as compared to NPS is again indicative of the clear case allocation processes within these organisations.

Table 3.6Frequency of sentence types by organisation, with associated OPD screening rates.

Org.	Sentence type	N	% of NPS/CRC	On OPD caseload (% of OPD)	Rate of screening in by sentence
NPS	Other	41	1.1%	20 (1.1%)	48.8%
	SSO*	657	17.5%	216 (11.6%)	32.9%
	Probation <1yr	483	12.8%	214 (11.5%)	44.3%
	Probation 12mnths+	1226	32.6%	686 (36.7%)	55.9%
	Prison <10yrs	663	17.6%	262 (14%)	39.5%
	Prison 10yrs to Life	486	12.9%	313 (16.8%)	64.4%
	Recall*	205	5.5%	157 (8.4%)	76.6%
	Total	3761	100	1868	49.7%
CRC	Other	109	.9%		
	SSO	2615	20.8%		
	Probation <1yr	7847	62.5%	1 (100%)	
	Probation 12mnths+	1161	9.3%		
	Prison <10yrs	710	5.7%		
	Prison 10yrs to Life	19	0.2%		
	Recall*	85	0.7%		
	Total	12546	100		

^{*}Note: SSO – Suspended Sentence Order; Recall – returned to prison after release and on licence in the community

OPD cohort - The previous section presented the diversity in demographic and criminogenic characteristics of women across both organisations while also providing context for how these characteristics are represented in the women's OPD population. While the current task was not to create a screen to identify women directly mimicking these characteristics, especially given it is as yet unclear whether those identified to date have been "the right women", it was useful to have this guide to help understand the features of the women currently receiving OPD services. To further elucidate the make-up of this cohort of women from the OPDP perspective, Table 3.7 provides the breakdown of how OPD screening patterns have differed across geographical regions. While most regions' proportion of the OPD caseload closely reflects their proportion of the national NPS caseload, it is evident that London and the South East regions are slightly under-represented while the North West is slightly over-represented, potentially reflecting tendencies towards under-screening and over-screening, respectively.

Table 3.7Proportion of national and OPD caseloads across geographic regions

Region	N	% of organisation	On OPD caseload (% of OPD)	Rate of screening in (% of region)
London	456	12.1%	175 (9.4%)	38.4%
Midlands	632	16.8%	313 (16.8%)	49.5%
North East	773	20.6%	406 (21.7%)	52.5%
North West	608	16.2%	366 (19.6%)	60%
South East and Eastern	533	14.2%	211 (11.3%)	39.6%
South West and Central	469	12.5%	260 (13.9%)	55.4%
Wales	290	7.7%	137 (7.3%)	47.2%
Total	3761	100%	1868 (100%)	49.7%

Prior to exploring the features of proposed eligibility and suitability criteria, the risks and needs of the current OPD cohort were explored to provide additional contextual understanding. To this end, OASys section links to risks and OASys Criminogenic needs calculations were observed. Within OASys, sections 2 to 12 end with a yes/no statement of the format: "(Section X) linked to risk of serious harm, risks to the individual and other risks". Table 3.8 presents the frequencies and percentages for all women on the OPDP caseload presenting with and without risk flags for each section. Given considerable differences in rates of risk linkage across these sections, and for ease of comparison in relation to OPDP significance, odds ratios are provided in the extreme right column. The sections most highly linked to risks were Section 2 (Offence analysis), Section 6 (Relationships), Section 10 (Emotional well-being) and Section 11 (Thinking and behaviour), with flags in each of these variables indicating much higher ORs for women screened in to the OPDP caseload than those screened out. Owing to the higher risk nature of the OPDP cohort, it was to be expected that all section links to risk would present with higher frequency than in the full caseload, but it is notable that these areas of psychological concern related to personality difficulties were most prevalent. It is also worth noting that the highest frequency risk-linked sections had an amount of overlap with OASys sections from which the 10 PD items were drawn. Specifically, three items were drawn from section 2, one from section 10 and two from section 11. Notably, section 6 (Relationships) contains no items from the 10-item PD screen in spite of interpersonal problems and relationship difficulties being a major point of focus for OPDP services and featuring in many DSM characteristics (Skett & Lewis, 2019; Shedler, Beck, Fonagy, et al., 2010).

Table 3.8Frequency and percentage of women currently on the OPD Pathway with and without flags for OASys sections recorded as linked to risks.

	Number*	Number* and percentage linked to risk				
OASys section linked to risks	N on OPD ca	PD caseload / N on O		aseload /	Ratio	
	Without ri	sk flag	With risk flag			
	N	%	N	%		
S2. Offence analysis	63/7519	0.8%	1787/8289	21.6%	25.73	
S3. Accommodation	922/1294	7.1%	945/3207	29.5%	0.41	
S4. Education, training, and	1646/15445	10.7%	220/662	33.2%	3.12	
employment						
S5. Financial management and	1288/14034	9.2%	578/2097	27.6%	3.00	
income						
S6. Relationships	266/8746	3%	1599/7382	21.7%	7.12	
S7. Lifestyle and associates	442/10572	4.2%	1423/5555	25.6%	6.13	
S8. Drug misuse	560/6264	8.9%	836/3776	22.1%	2.48	
S9. Alcohol misuse	785/11243	7%	1080/4882	22.1%	3.17	
S10. Emotional well-being	284/9290	3.1%	1581/6833	23.1%	7.57	
S11. Thinking and behaviour	134/8324	1.6%	1730/7769	22.3%	13.83	
S12. Attitudes	678/12198	5.6%	1186/3892	30.5%	5.48	

^{*}Note the calculations presented are in relation to complete data only, hence inconsistencies in total numbers provided for each variable.

While section links to risk are drawn from a direct question asking OMs to indicate if the overall section is linked to one's risk of harm, the identification of criminogenic needs is based on a threshold score calculated from OASys section scores, which in turn are calculated by summing specified questions within the relevant section (see Appendix F for scoring details). Two sections (5 - financial management and 10 - emotional well-being) are not scored as they were defined by the OASys Data Evaluation and Analysis Team within MoJ as sections that measure distinct problem areas that are not independently significant criminogenic needs (Moore, 2009). To explore the interconnection between criminogenic needs and OPD status, frequency counts incorporating odds ratios were assessed. Table 3.9 details the number and percentage of women currently on the Pathway who were calculated as having criminogenic needs in each section as compared with those without these criminogenic needs identified. It is notable here that odds ratios were considerably smaller between the OPDP cohort with criminogenic needs flags and those without, with the exception of section 6 (relationships) which demonstrated an eight times higher likelihood of being screened in if this criminogenic need was flagged.

Table 3.9Frequency and percentage of women currently on the OPD Pathway with and without flags for criminogenic needs associated with relevant OASys section.

	Numbe	Odds			
Criminogenic Needs	N on OPD cas	seload /	N on OPD cas	seload /	Ratio
identified	Without	flag With flag		ag	
	N	%	N	%	
S3. Accommodation	779/9256	8.42%	1086/6787	16.00%	1.90
S4. Education, training, and	606/7655	7.92%	1251/8142	15.36%	1.94
employment					
S6. Relationships	75/4091	1.83%	1783/11429	15.60%	8.51
S7. Lifestyle and associates	422/5709	7.39%	1441/10224	14.09%	1.91
S8. Drug misuse	1113/9656	11.53%	742/6181	12.00%	1.04
S9. Alcohol misuse	1322/11800	11.20%	537/4043	13.28%	1.19
S11. Thinking and behaviour	428/7122	6.01%	1437/9026	15.92%	2.65
S12. Attitudes	600/7397	8.11%	1265/8751	14.46%	1.78

^{*}Note the calculations presented are in relation to complete data only, hence inconsistencies in total numbers provided for each variable.

These observations relating to section links to risk and criminogenic needs provided useful information about the risks and needs of OPDP women which would help inform the revision process to follow. With this contextual understanding established, the Risk-related eligibility criteria under review were analysed as the main component of Study 3.1.

3.4 Study 3.1 – Eligibility criteria: risk metrics

3.4.1 Introduction

The first step in evaluating the utility of each set of eligibility criteria was to calculate the potential OPDP caseload numbers identified as a result of each approach. Too few women identified would indicate a set of criteria that was too restrictive and potentially exclusive of women who may require Pathway interventions. In contrast, too many women identified would be likely to jeopardize service provision, with resources being over-stretched and women potentially receiving a lower level of input than that required to meet their needs. The OPDP screening process has always been intended to perform a triage function, whereby over-inclusiveness was preferred and women could be appropriately directed to relevant services where required. As such, this evaluation of screening options sought to generate a set of criteria that would approximately maintain the OPDP caseload figures extant at the time of analysis (n = 1869), with over-inclusiveness favoured above an under-inclusive option.

3.4.2 Aims

Due to the restrictive nature of the options under consideration, the main objective of Study 3.1 was to identify risk measures that best align with current OPD caseload figures and characteristics. An additional aim was to ensure that as streamlined a process as possible was identified such that any superfluous metrics may be discarded.

3.4.3 Methodology

Design

A quantitative descriptive design was utilised for this study, with each available eligibility option reviewed in terms of appropriateness of numbers and of characteristics identified.

Analysis

Frequency tables and crosstabulation were used to examine the interplay between subcategories of relevant variables.

Step 1 – Reviewing options

Two options were available for selecting women for OPDP intervention based on a variety of criteria related to risks and offending characteristics. To proceed with detailed analyses, one option was

required to be carried forward and this was chosen based on frequency counts of each set of criteria.

Option 1 - The first option presented for consideration was to revert to a pervious set of criteria in which women met the 10+4 item OASys PD criteria and either:

1.1 presented a high risk of violent or sexual offence repetition $\underline{\mathsf{AND}}$ high risk of harm to others

<u>OR</u>

1.2 had a current offence of, <u>AND</u> presented a high risk of committing, violence against the person, criminal damage, sexual offence and/or offences against children.

To analyse the potential outcomes from Option 1, the following variables were utilised:

PD screen (calculated through OASys 10 items & 4 proxy indicators)

Offence type (index offence)

OASys Risk of Serious Harm (RoSH) level to indicate risk status;

OASys Violence Predictor (OVP) scores to indicate likelihood of violent reoffending;

Offender Group Reconviction Scale: version 3 (OGRS3) score to indicate likelihood of reoffending for all offence types.

Option 2 - The second option for consideration sought to align OPD criteria with three risk measures routinely calculated in HMPPS assessments. This option required women to meet OASys PD criteria **AND** either: require MAPPA management <u>OR</u> present a high risk of seriously harmful reoffending (as indicated by an RSR score of 6.9 or above) OR present at least a high Risk of Serious Harm to others.

The specific variables utilised for exploring option 2 outcomes were:

PD screen outcome (calculated through OASys 10 items & 4 proxy indicators)

MAPPA category and MAPPA level to indicate being eligible for management under MAPPA;

RSR score to indicate risk of reoffending;

OASys RoSH to indicate risk level.

3.4.4 Findings

While not all elements of Option 1 criteria were available in the dataset, it was however possible to calculate most combinations of criteria. Table 3.10 presents the breakdown of women who would screen into the Pathway within these parameters, with "route in" indicated and caseloads separated into CRC and NPS. Of those meeting these criteria, 61% would screen into the Pathway through

additional indicators rather than meeting the 7+ PD items threshold. Very low numbers were identified through Option 1 criteria, likely due to the small percentages of women meeting high risk status across the variables concerned. For example, it was noted that 86% of NPS and 78% of CRC women presented with OGRS3 scores of medium risk or lower (as indicated by a score of 74 and under). Similarly, 94% of NPS and 98% of CRC women presented with OVP scores of medium or lower (as indicated by a score of 59 and under). With just 756 women meeting these criteria, Option 1 was evidently too restrictive for the OPD Pathway's purposes.

Table 3.10Number of women likely to screen in to the Pathway through Option 1 criteria.

Org.	Option 1 criteria	Out	Screen in 7+ only	Screen in 2+ only	Screen in 7+ & 2+	Total
NPS	1.1	0	3	44	130	177
	1.2	12	3	115	149	279
CRC	1.1	0	0	0	1	1
	1.2	69	2	320	70	461
Total in*		N/A	7	459	290	756

^{*}Note: total figure is smaller than the combined figure meeting each aspect of risk criteria due to some women meeting both sets of criteria

The breakdown of frequencies of women who would screen into the Pathway via Option 2 is presented in Table 3.11, with "route in" indicated and caseloads separated into CRC and NPS. Of those meeting these criteria, the additional indicators route was again considerably more prevalent than the 7+ PD items threshold, with 71% of women screening in through indicators alone in contrast to 1.6% screening in through 7+ PD items alone. Also borne out in Table 3.11 is the predictable skew towards exclusion of CRC women, given the unlikelihood of CRC women being assessed as high risk of harm, high RSR or being subject to Multi-Agency Public Protection Arrangements (MAPPA).

Table 3.11Number of women likely to screen in to the Pathway through Option 2 criteria.

Org.	Option 2 criteria	Out	Screen in	Screen in	Screen in	Total
			7+ only	2+ only	7+ & 2+	
NPS	RoSH High	202	21	762	510	1495
	MAPPA managed	689	39	1612	590	2930
	RSR high	4	0	31	36	71
CRC	RoSH High	0	0	7	3	10
	MAPPA managed	4	0	7	1	12
	RSR high	2	0	2	1	5
Total in*		N/A	41	1798	707	2546

^{*}Note: total figure is smaller than combined figure meeting each aspect of risk criteria due to some women meeting both sets of criteria

In summary, as Option 1 was identified as being far too restrictive by finding such a small number of women eligible for OPDP intervention, Option 2 was found to be the most viable approach to take forward. Further analyses on the specific features of Option 2 criteria were required to determine how appropriate this approach was and assess what, if any, aspects of these criteria may need additional revision.

Step 2 – Refining risk criteria

The criteria comprising Option 2 as described above identified 2,546 women, amounting to 15.6% of the combined NPS and CRC female caseload as at 30 June 2019. In addition to achieving a balance between risk and need, an important goal of this revision process was to ensure that the screening tool developed was straightforward, easy to complete and free of any superfluous elements. An additional goal was to maintain the women's OPD caseload at a manageable level (approximately 2,000 women) given resource limitations. Within Option 2, risk was assessed by three risk measures, all targeting different elements of risk in relation to Criminal Justice System objectives. These measures were:

Multi-Agency Public Protection Arrangements (MAPPA) eligibility (Category 1-3 & Level 1-3) Risk of Serious Reconviction (RSR) score of high, defined as 6.9 or above Risk of Serious Harm (RoSH) status of high or very high.

The frequencies of women meeting each of these criteria separately are presented in Table 3.12 and cross-tabulated against the 10+4 PD likelihood criteria. The percentage of each element who would screen in are provided in the last column to give an indication of the relative role of each criterion in identifying women (e.g., 76.5% of women who are MAPPA eligible would screen in through Option 2). Note that risk measures are not mutually exclusive, therefore there is inevitable overlap within these numbers. It is notable here that a high RSR score was a rare occurrence with only 76 women of the entire 16,307 caseload (0.5%) presenting with an RSR score of 6.9 or above.

Table 3.12Cross-tabulation of risk metrics by PD screening criteria with percentage screening in

	PD screened	PD screened PD	
Risk metrics	out	screened in	screened in
MAPPA eligible	693	2249	76.5%
RSR 6.9+	6	70	92.1%
RoSH OASys High+	202	1303	86.6%

Considering all risk criteria in combination, 3,276 women were identified as meeting one or more of the risk criteria. This was in contrast to a count of 9,785 women meeting the 10+4 PD criteria. The number of women meeting both sets of criteria (i.e., screening in) was 2,546, thus risk criteria performed an essential filtering function in identifying those whose risks presented a concern. To establish whether there was any redundancy in these criteria (e.g., excessive overlap between elements or inadequate level of identification by individual elements), combinations of factors were explored. To this end, Table 3.13 provides the frequencies and breakdown of women meeting one, two or all three risk criteria cross-tabulated against meeting PD criteria and separated by organisation. The percentage of screened in women meeting each combination is also provided to help contextualise the impact of each combination of risk metrics. Rows within Table 3.13 are mutually exclusive, thus the total number of NPS women who were MAPPA eligible was 2,930. Of these, 1,204 were only MAPPA eligible; 7 were MAPPA eligible in addition to having a high RSR score; 1,004 were MAPPA eligible and high or very high RoSH; and 26 met all three risk criteria.

Table 3.13 *Eligibility criteria combinations cross-tabulated against suitability criteria, separated by organisation*

	Eligibility criteria	PD screened	% of
		in/Total row	screened in
NPS	MAPPA only	1204/1728	47.7%
	MAPPA + RSR	7/8	0.3%
	MAPPA + RoSH	1004/1165	39.8%
	MAPPA + RoSH + RSR	26/29	1%
	RoSH only	250/288	9.9%
	RoSH + RSR	13/13	0.5%
	RSR only	21/21	0.8%
	Total	2525/3761	100%
CRC	MAPPA only	8/12	38.1%
	RoSH only	10/10	47.6%
	RSR only	3/5	14.3%
	Total	21/12546	100%

As can be seen, of those women screening in through Option 2 criteria, being either MAPPA managed or high RoSH accounted for 2,522 women; 99% of the 2,546 cohort identified by Option 2. The inclusion of the RSR criterion added 24 women, less than 1% of the screened in cohort. The interplay between each of these first level criteria is presented diagrammatically in Figure 3.2, in which total numbers of each criterion are provided in colour-coded 'vats' with arrows flowing from each vat indicating the cross-over between criteria. Vertical arrows flowing directly from individual vats indicate the numbers meeting one criterion only (blue = MAPPA; red = RoSH; yellow = RSR)

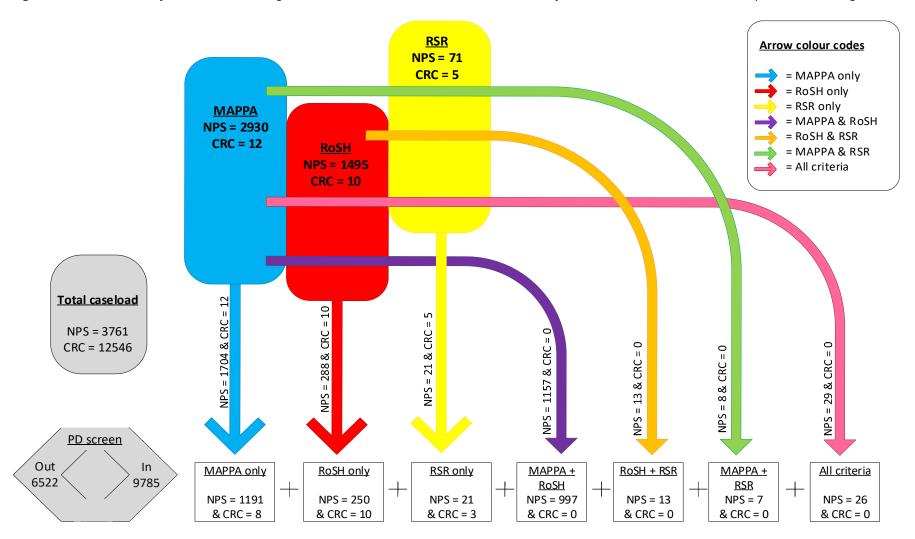
while arrows flowing through multiple vats are colour-coded to indicate combinations of criteria met (blue + yellow = green; green women are both MAPPA managed and have a 6.9+ RSR score). Boxes into which arrows flow indicate the number of women meeting the specified risk criteria in combination with PD items, thereby screening in through Option 2.

Some of the most notable points evident from these outputs are:

- that all CRC women who would screen in would did so through one or another risk criterion, never a combination of criteria;
- that for the 2,525 NPS women who met Option 2 criteria, most (n=2504; 99%) of these did so through either MAPPA (n=2241) or RoSH (n=1293) criteria, with an overlap of 1,030.

These figures clearly indicated some redundancy in the three sets of risk metrics, with more than double those identified by the RSR metric alone being identified simultaneously by one or other of the metrics (i.e., 46 NPS women met RSR + MAPPA or RoSH criteria in comparison to 21 meeting the RSR criterion only). With this in mind, and considering the goal of this revision process was to appropriately balance risk of harm with psychological need, the removal of RSR score from these criteria was explored through additional in-depth frequency analyses.

Figure 3.2: Colour-coded flow chart indicating crossover between risk criteria, total counts of each condition, and combined Option 2 screening outcome



= 2546 (NPS=2525, CRC=21) screened in through Option 2 criteria

The first port of call in this task was to review the current female OPDP caseload which revealed that a total of 8 women currently on the caseload would screen in through RSR score. Exploring alternative risk metrics, it was also noted that fewer than half of the 24 women meeting these criteria had high OVP scores and none had reached a high OGP score. These figures were discussed with the women's screening criteria task group and it was determined that there was adequate support for the removal of the RSR score criterion from the eligibility criteria going forward, despite excluding a small number of women who had already met previous screening criteria. Note that the removal of this factor would result in just 18 CRC women screening in through Option 2 criteria, therefore subsequent outputs are presented for the entire national caseload rather than split by organisation.

3.4.5 Interim Summary

When presented with two viable options for risk metrics to inform OPDP eligibility criteria for women, Option 2 clearly dominated. After examining the caseload impacts of this option, the three elements comprising these criteria were reduced to two – managed under MAPPA and having a high or very high RoSH status. Both a strength and a weakness of this study was its inherent simplicity, with a predetermined set of risk metrics available to select, rather than allowing for an in-depth exploration of possible alternative indicators of risk. Indeed, proponents of the Risk-Need-Responsivity model of offender rehabilitation have noted that not all predictors of risk and recidivism are gender-neutral (Andrews, Guzzo, Raynor, Rowe, Rettinger, Brews, & Wormith, 2012). It was however, outside of the scope of this study to perform an overhaul of systemic risk metrics, and given the multi-faceted nature of the metrics chosen, this was deemed acceptable for the present purposes.

3.5.1 Introduction

In revising the women's OPD screening criteria it was necessary to determine whether or not the current set of ten PD items and four additional indicators usefully identified women in need of OPDP intervention. As noted in the introduction to this chapter, the current tool was developed entirely with consideration of male violent and sexual offenders, both in relation to the 10-item portion and the additional four indicator items. All female adaptations have centred around the risk-related criteria alone, thus the present study is the first attempt at assessing the appropriateness and gender-responsiveness of the two personality disorder components in identifying women suitable for OPD Pathway intervention. Indeed, as outlined in the caseload descriptive statistics, women have historically screened in to the OPD Pathway predominantly through the additional indicators route, typically presenting with fewer than seven PD items. Women "screening in" with the revised eligibility criteria (MAPPA/RoSH; n=2522) presented similarly, with fewer than one third of these women (n=741) reaching the 7/10 PD item threshold and 1,781 requiring additional indicators to access Pathway services, as calculated using proxy indicators outlined in Appendix D. These crossovers are presented in Table 3.14 for clarity.

Table 3.14PD screen score and indicator combinations for the 2,522 women screening in through MAPPA/RoSH

		<u>Indicators</u>					
Pd screen	0	1	2	3	4	Total	
score							
0	0	0	15	6	0	21	
1	0	0	41	24	4	69	
2	0	0	101	48	9	158	
3	0	0	115	121	24	260	
4	0	0	162	156	49	367	
5	0	0	184	163	81	428	
6	0	0	176	184	118	478	
7	4	28	107	154	124	417	
8	0	8	47	94	97	246	
9	0	1	14	22	33	70	
10	0	0	1	1	6	8	
Total	4	37	963	973	545	2522	

Taking these concerns into account, it was necessary to thoroughly explore the utility of the OASys PD items and additional indicators in identifying women for OPD intervention. This study consisted of three iterative stages described as follows:

3.2a This stage involved exploratory analysis of the 10 OASys PD items and additional indicators in order to determine the need for revision. Scale and item properties were explored and differences between groups were analysed to evaluate this tool's discriminant utility. Regression modelling was also utilised to assess the tool's predictive power in determining screening outcome.

3.2b This stage was informed by the findings from 3.2a analyses and largely consisted of identification of alternative items for identifying women as suitable for OPDP involvement. This stage took a mixed methods approach, utilising expert and clinical opinions to first inform what gender-specific factors should be considered when determining suitability for OPDP involvement.

3.2c The final stage utilised binary logistic regression modelling to evaluate the predictive power of each of the items suggested in 3.2b in order to produce a coherent and manageable set of items that were better aligned with policy objectives for women. Characteristics of this proposed new set of criteria were explored and discussed as part of this stage.

3.5.2 Aims

The specific objectives of this study were to evaluate the ability of the extant OPDP screen to identify women for OPD Pathway intervention. Secondly, in the event of current criteria being found inappropriate, to identify and evaluate an alternative set of items to more usefully identify women for involvement with the OPD Pathway.

3.5.3 Study 3.2a – Understanding the current OPDP screening tool

3.5.3.1 Methodology

Design

A cross-sectional design was employed to first establish differences between individuals on the OPDP caseload and those not on the OPDP caseload. Following this, the validity of the current OPD suitability criteria was assessed in terms of their predictive power in identifying women suitable for OPDP intervention.

Participants

As Study 3.2a sought to understand the role of the current tool in OPDP screening outcomes to date, it was necessary to focus on women who were eligible for OPDP screening. To this end, only data from NPS women were subject to analyses of the current screening tool as up to this point, only NPS women were eligible for screening. Data were therefore available for the total NPS female caseload of 3,761 who ranged in age from 19 to 83 (M = 38.18, SD = 11.51). Demographic and offence-related characteristics are detailed in the introductory section of this chapter in Tables 3.3-3.7 of the data available for analysis section.

Analysis

Several analytic approaches were employed for this study, with both SPSS and RStudio software utilised. First, to determine how well the 10 core PD items functioned as a unit, Cronbach's alpha reliability analyses were run followed by independent t-tests comparing scale scores for NPS women on the OPD caseload to those in NPS who were not previously screened in to the Pathway. As described in Study 3.1, Pathway screening status was determined by two nDelius items incorporated into the database, which were coded into a new binary variable labelled *OPD case*. Women with a value of 1 in either or both nDelius variables were assigned a value of 1 and women with a value of 0 in both of these variables were assigned a value of 0 to indicate presence and absence on the OPDP caseload respectively. Chi² analyses were used to explore the relationship between OASys PD items and presence on the current OPD database, with Odds Ratios provided to indicate effect sizes of item function. Finally, to explore the predictive utility of each of the ten items and the proxy additional indicators, logistic regression analyses (Brauer & Curtin, 2018) were carried out and the accuracy of the resultant model's predictive strength was calculated.

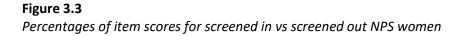
3.5.3.2 Findings

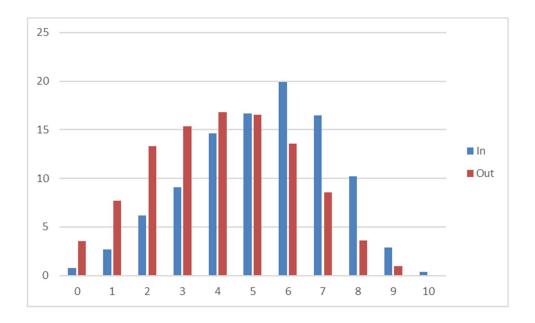
Reliability

Scale reliability was analysed through SPSS, using Cronbach's alpha (Cronbach, 1951). Following listwise deletion of cases with missing data, 3,662 cases were subject to analysis. A Cronbach's alpha of 0.626 was achieved, with a mean scale score of 4.73 (SD = 2.11) and a skewness of -0.133, indicating a close to normal distribution of scores. Only one item's removal (PD3 "offence involved excessive violence or sadism") improved reliability to a = 0.650, indicating overall that these 10 items taken together do not demonstrate a particularly high level of internal consistency. This is not too surprising given the PD screen was intended to identify a range of personality disturbances, with different constellations of items potentially identifying different presentations.

Group differences

While it has been established that women tend to screen in through the additional indicator route, it was important to determine whether there was a significant difference in total item count between those screening in and those screening out. Note that some OASys PD items follow a dichotomous "presence/absence" format while others are marked as "no problems/some problems/significant problems" with a scoring format of 0/1/2 respectively. To calculate a total scale score, all relevant PD items were converted to 0/1 such that "some" or "significant" problems were coded as a score of 1 for item presence, resulting in a total score of 10 being the maximum possible. Independent samples t-tests were run between NPS women currently on the OPD database (n = 1868) and those not on the OPD database (n = 1893). With equal variances in these groups, a significant mean difference of 1.21 (t = 18.382; df = 3759; p < 0.001) was found, with those screening in presenting with a mean score of 5.31 and those screening out averaging a score of 4.10, both well below the 7 item threshold. To further elucidate these differences, Figure 3.3 presents the percentages of each score reached by those screened in to the OPD Pathway as compared to those who screened out.





Correlation and Chi-square

To better understand the function of individual PD items in relation to PD screening outcome, correlation analyses were run between total score and screening outcome. A significant but weak correlation of r=0.287 (p<0.01) was found, further demonstrating that PD item count has not been useful in determining which NPS women screened in or out. Indeed, this is visually borne out in Figure 3.3 where almost exactly the same number of women with a total score of 5 screened in as screened out. The Chi² contingency table and associated Odds Ratios (OR) are displayed in Table 3.15. While all items were found to be significantly more likely to be present for those screened in than screened out, the OR indicated very low effect sizes on all comparisons, again indicating the limited utility in identifying women suitable for Pathway involvement. While these analyses provided useful information regarding current PD items, to gain deeper insights into the functioning of these items, regression analyses were required.

Table 3.15Contingency tables with ORs for screening outcome as a function of individual PD item

OASys PD item	N on OPD case Without item	N on OPD caseload / Without item		N on OPD caseload / With item	
	N	%	N	%	
PD1 conviction under 18	1144/2504	45.7	723/1246	58	1.27
PD2 offence involved violence/threat of violence/coercion	556/1379	40.3	1312/2382	55.1	1.37
PD3 offence involved excessive violence/sadism	1335/2913	45.8	533/848	62.9	1.37
PD4 fails to recognise impact of offending on victim or society	1718/3501	49.1	146/245	59.6	1.21
PD5 overreliance on others for financial support	964/2059	46.8	891/1644	54.2	1.16
PD6 manipulative or predatory lifestyle	812/1877	43.3	1046/1828	57.2	1.32
PD7 reckless risk-taking behaviour	288/706	40.8	1575/3033	51.9	1.27
PD8 evidence of childhood behaviour problems	1177/2737	43	691/1024	67.5	1.57
PD9 impulsivity	315/874	36	1553/2887	53.8	1.49
PD10 aggressive or controlling behaviour	414/1196	34.6	1446/2531	57.1	1.65

Regression analysis

The predictive function of each PD item was explored through the use of regression analyses carried out in the RStudio environment. As screening status is a binary outcome variable, logistic regression was the most appropriate analytic approach to utilise. Logistic regression produces output in terms of the log likelihood of the outcome, with the estimated value of each predictor variable indicating how much the presence of each item increases the likelihood of screening in, with all other predictors being equal.

Random effects - Prior to conducting these analyses, it was important to establish whether or not there were any grouping variables which significantly affected one's likelihood of screening in and which may have an arbitrary impact on any of the items under analysis. The benefits of incorporating random effects into regression modelling are particularly clear when working with real world data, where assumptions around independence are easily violated. Given the population-level data under analysis in this study, it was important to investigate if there was a nested structure to the data and to what extent, if any, nesting might affect true impact of independent variables on outcomes (Clark & Linzer, 2012). This would determine whether a mixed effects model was required to account for any non-independence in the data (Gardiner, Luo, & Roman, 2009). One approach to identifying possible random effects variables is through simple regression modelling of each of the variables

potentially creating non-independence in the outcome variable. For example, it has been noted that screening rates differ from region to region, with women in London screening in at a rate of 38.4% while women in the North East of England screened in at a rate of 52.5% of regional caseload (see Table 3.7, pg. 49). Simple regression models of region, ethnicity, sentence length and offence type were thus explored and reference categories in all of these models were determined alphabetically.

It was first relevant to explore the impact of geography on women's screening outcomes. In the NPS female dataset, the random variable *region* had 7 levels ranging from 290 women (Wales) to 773 women (North East). To test whether regional differences in screening rate differed significantly from each other, a simple regression model was run with *OPD case* (in/out) as the outcome variable and *region* as a single predictor variable, producing the output summarised in Table 3.16. This output demonstrates a significant effect of regional alignment on screening outcome, indicating the categorical variable *region* should be included as a random intercept in prospective models. Values under the Estimate column indicate how much more or less likely one was to screen in compared to the reference level (in this case London, as London was the first coded level) and values in the *Pr* column indicate where these differences were significant. The Intercept value shows that the log likelihood of screening in in London is significantly less than that of screening in in almost all other regions with the exception of the South East and Eastern.

Table 3.16Output from binary logistic regression model of region on OPD screening status

Deviance Residuals:	Min	1Q	Median	3Q	Max
	-1.364	-1.184	1.001	1.115	1.362
Coefficients	Estimate	Std. Error	z-value		Pr(> z)
(Intercept)	-0.42466	0.09806	-4.331	1.4	9e-05***
Midlands	0.44108	0.12722	3.467	0.0	00526***
North East	0.57258	0.12253	4.673	2.9	7e-06***
North West	0.85415	0.12923	6.609	3.8	6e-11***
South East & Eastern	0.04543	0.13339	0.341	0.7	33445
South West & Central	0.64387	0.13585	4.740	2.1	4e-06***
Wales	0.34403	0.15586	2.207	0.0	27292*
	Null devi	ance	5015.2 on 3617 <i>df</i>		
	Residual de	viance	4942	1.9 on 361	1 <i>df</i>
	AIC	4955.9			

Note: Output from model: $glm(formula = opdcase \sim region, family = "binomial", data = NPSwomen)$ Significance codes - Signif. codes: 0 '**'; 0.001 '**'; 0.01 '*'; 0.05 '.'; 0.1 ''; 1 As previously demonstrated, ethnicity of women on the NPS caseload was not normally distributed, therefore a simple regression analysis was run to explore whether the categorical variable *ethnic group* created non-independence in screening outcome. The output displayed in Table 3.17 indicates that screening outcome was significantly different between some groups, particularly between Asian and both Mixed race and White, the latter groups being more likely to be screened in than Asian women were. It is acknowledged however, that given the considerably smaller size of the reference category (Asian, N=121) this may have been an inappropriate choice of reference. Comparisons with Table 3.4 however do indicate notable differences in rates of screening across ethnic groups and taking this into account alongside Table 3.17, it was determined that this categorical variable ought to be included as a random intercept in prospective models.

Table 3.17Output from binary logistic regression model of ethnicity on OPD screening status

Deviance Residuals:	Min	1Q	Median	3Q	Max
	-1.341	-1.218	1.023	1.137	1.637
			_		

Coefficients	Estimate	Std. Error	z-value	Pr(> z)	
(Intercept)	-0.3840	0.1891	-2.030	0.04234 *	
Black	-0.2335	0.2276	-1.026	0.30499	
Mixed	0.7596	0.2461	3.086	0.00203**	
Not known	-0.6521	0.3987	-1.636	0.10189	
Other	-0.4633	0.4410	-1.051	0.29344	
White	0.4797	0.1926	2.490	0.01277*	
	Null de	Null deviance		on 3617 <i>df</i>	
	Residual	deviance	4959.0 on 3612 <i>df</i>		

AIC 4971

Note: Output from model: glm(formula = opdcase ~ ethnicgroup, family = "binomial", data = NPSwomen)

Significance codes - Signif. codes: 0 '***'; 0.001 '**'; 0.01 '*'; 0.05 '.'; 0.1 ''; 1

As noted in the caseload descriptive statistics, there was a range of sentence types represented across the OPD caseload, thus the categorical variable *sentence type* was queried for creating non-independence in screening outcome. The output of this regression analysis is presented in Table 3.18, in which the alphabetically determined "Other" sentence types represent the intercept reference group. Here it is indicated that there was a significantly higher likelihood of women recalled to prison being screened in than women with "other" sentence types. Separately, women with suspended sentence orders were significantly less likely to screen in than women with "other" sentence types. Noting the considerably smaller size of the "other" sentence type (N=41), Table 3.6 was reviewed for additional insight into differences between these groups. As the rate of screening

ranged from 32% to 77%, it was deemed appropriate to include sentence type in future models of screening outcome.

Table 3.18Output from binary logistic regression model of sentence type on OPD screening status

Deviance Residuals:		Min	1Q	Median	3Q	Max	
		-1.7077	-1.0991	0.7278	1.0678	1.4715	
Coefficients	Estimate	Sto	l. Error	z-value	Pr(>	z)	
(Intercept)	0.1054	0.3	249	0.324	0.74	572	
Prison<10yrs	-0.5056	0.3	349	-1.510	0.13	0.13110	
PrisontoLife	0.5113	0.3391		1.508	0.13161		
Probation12mnths+	0.1580	0.3	301	0.479	0.63	0.63209	
Probationunder1yr	-0.2925	0.3	381	-0.865	0.38703		
Recall	1.0879	0.3	651	2.980	0.00288**		
SSO	-0.7744	0.3	358	-2.306	0.02	110*	
	Null deviance			5015.2 on 3617 <i>df</i>			
	R	Residual deviance AIC		4797.3 on 3611 <i>df</i>			
				4811.3			

Note: Output from model: $glm(formula = opdcase \sim sentgroup, family = "binomial", data = NPSwomen)$

Significance codes - Signif. codes: 0 '***'; 0.001 '**'; 0.01 '*'; 0.05 '.'; 0.1 ''; 1

Finally, given the broad variability in offence types across the NPS caseload and the specification of committing particular offences in previous women's OPD screening criteria, the categorical variable offence type was also assessed for impact on screening outcome. A simple regression model was run with opdcase as the binary outcome variable and offence type as a single predictor variable, producing the output summarised in Table 3.19. The reference group in this output was the category "acquisitive offences" which accounted for 7.6% of the NPS caseload. Some significant differences in screening outcome were identified between offence types, the largest of which indicated that women with criminal damage convictions were substantially more likely to screen in than women with acquisitive offences. Perhaps surprisingly, women convicted of violent offences, while significantly more likely to screen in than those with acquisitive convictions, did not display as great a difference in screening likelihood as that seen in relation to criminal damage. This is likely as a result of the broad variety in classification of violent offending in combination with the much greater number of violent convictions (N=2447) within the caseload as compared to criminal damage (N=283). Offence type was therefore included as a random intercept in further models.

Table 3.19Output from binary logistic regression model of offence type on OPD screening status

Deviance Residuals:	Min	1Q	Median	3Q	Max		
	-1.5228	-1.2108	0.8676	1.1444	1.4115		
Coefficients	Estimate	Std. Error	z-value	Pr(>	z)		
(Intercept)	-0.21484	0.12219	-1.758	0.07	87.		
Criminal damage	0.99794	0.17909	5.572	2.51	e-08***		
Other	-0.32050	0.16280	-1.969	0.04	90*		
Public order	-0.02483	0.22838	-0.109	0.91	34		
Sexual	0.08242	0.17757	0.464	0.64	25		
Violent	0.29305	0.12897	2.272	0.231*			
	Null devia	Null deviance		5015.2 on 3617 <i>df</i>			
	Residual de	viance	494	2.1 on 361	2 df		
	AIC			4954.1			

Note: Output from model: $glm(formula = opdcase \sim offencetype, family = "binomial", data = NPS ... a set of the set of t$

NPSwomen)

Significance codes - Signif. codes: 0 '***'; 0.001 '**'; 0.01 '*'; 0.05 '.'; 0.1 ''; 1

These four factors with significant variance in screening outcome for the NPS caseload were thus indicated as useful to include in future regression models as random intercepts. To further explore this premise, an intercept only model was run and compared against each iteration of mixed effects model incorporating all four random effects. The summarised output from these analyses are presented in Table 3.20. Comparisons of model statistics between these models further supported the inclusion of these random effects variables in further models of screening outcome (see Appendix G for full R output of each model). With random effects variables identified, modelling of individual OASys items could proceed.

Table 3.20Model fit statistics for OPD outcome intercept-only compared with random effects models modelled on NPS data

Model	Model components	AIC	BIC	Log like.	Dev.
name					
Int.	opdcase~1	5017.2		0.02101	5015.2
only					
RE1	opdcase~1+region	4969.1	4981.5	-2482.6	4965.1
RE2	opdcase~1+region+ethnicgroup	4944.8	4963.4	-2469.4	4938.8
RE3	opdcase~1+region+ethnicgroup+offence	4896.6	4921.4	-2444.3	4888.6
RE4	opdcase~1+region+ethnicgroup+offence+sentence	4713.1	4744.1	-2351.6	4703.1

PD items modelling – As it has been established that women tended to screen in more on additional indicators than on the 10-item PD screen, the first model sought to explore the predictive power of the 10 PD items alone. Individual dichotomous items were modelled alone first, followed by the combined ten items as fixed effects with four random intercepts included. Modelling was fit by maximum likelihood with Laplace approximation (Bliese, 2016) and Table 3.21 presents the output from this initial mixed effects model. Under the Fixed Effects section of Table 3.21, the reference category (Intercept) relates to the log likelihood of screening in when all predictor variables are equal to 0 (i.e., not present). The estimate column indicates the change in log likelihood of screening in for each consecutive item when all other items are absent, and the z value column indicates the number of standard deviations from 0 that the estimate is (with a value of at least 1.96 required to reach statistical significance at p<.05). It was evident from this output that while six PD items reached statistical significance, only four of these demonstrated comfortably significant estimate values (as indicated by a value more than twice that required to reach significance). The highest predictive value was achieved by PD8 ("evidence of childhood behaviour problems"), such that having this item increased the log odds of screening in by 0.74. With an odds ratio of 2.1:1, this indicated there was a slightly higher than 2 to 1 increase in the odds of screening in if this item was present compared with not present).

Table 3.21Output from mixed effects regression model of 10 PD items on OPD screening status

BIC	logLik	dev.	df.resid
4519.1	-2198.1	4396.2	3603
1Q	Median	3Q	Max
-0.8180	0.3170	0.8058	3.3702
	4519.1 1Q	4519.1 -2198.1 1Q Median	4519.1 -2198.1 4396.2 1Q Median 3Q

Random effects:

Groups	Name	Variance	Std.
			Dev.
Sentence group	(Intercept)	0.22357	0.4728
Region	(Intercept)	0.08027	0.2833
Offence type	(Intercept)	0.21261	0.4611
Ethnic group	(Intercept)	0.10814	0.3289
Number of observations:	3618		
groups:	Sentence gro group, 6	up, 7; region, i	7; offence type, 6; ethnic

Fixed effects:

	Estimate	Std. Error	z- value	Pr(> z)
(Intercept)	-1.48128	0.34987	-4.234	2.30e-05***
PD1 conviction under 18	0.11026	0.08476	1.301	0.193288
PD2 offence involved violence/threat of violence/coercion	0.27028	0.08888	3.041	0.002357**
PD3 offence involved excessive violence/sadism	0.41964	0.09831	4.268	1.97e-05***
PD4 fails to recognise impact of offending on victim or society	0.11394	0.15948	0.714	0.474953
PD5 overreliance on others for financial support	0.05944	0.07951	0.748	0.454731
PD6 manipulative or predatory lifestyle	0.22641	0.08405	2.694	0.007066**
PD7 reckless risk-taking behaviour	-0.03682	0.10842	-0.340	0.734157
PD8 evidence of childhood behaviour problems	0.74028	0.08812	8.401	<2e-16***
PD9 impulsivity	0.40702	0.10486	3.882	0.000104***
PD10 aggressive or controlling behaviour	0.58151	0.09291	6.259	3.88e-10***

Note: Output from model "pditems4RE": glmer(opdcase~ pd1s1q5 + pd2s2q2b + pd3s2q2c + pd4s2q6rev + pd5s5q5 + pd6s7q4 + pd7s7q5 + pd8s10q7 + pd9s11q2 + pd10s11q3 + (1|region) + (1|ethnicgroup) + (1|offencetype) + (1|Sentgroup), family="binomial", data=NPSwomen). Significance codes - Signif. codes: 0 '***'; 0.001 '**'; 0.01 '*'; 0.05 '.'; 0.1 ''; 1

The function of the additional PD indicators in predicting screening outcome was also explored. For this modelling process, proxy items for additional indicators were utilised. Table 3.22 presents the output from this model, demonstrating that all indicator items significantly increased one's likelihood of screening in to the OPD Pathway, with Childhood difficulties and Mental Health problems having particularly large estimates (1.04 and 0.93 respectively). Fit indices also pointed to a better fitting model with an AIC of 4249.6 achieved, considerably better than that achieved when modelling the 10 PD items. It is important to note however, that all proxy items were comprised of a number of selected OASys items therefore taking these items forward would require additional computational steps in the screening process.

Table 3.22Output from mixed effects regression model of additional indicator items on OPD screening status

, ,	,,	 ,			
AIC		BIC	logLik	deviance	df.resid
4249.7		4305.5	-2115.9	4231.7	3609
Scaled residuals:					
Min		1Q	Median	3Q	Max
-3.1402		-0.7974	0.3252	0.7484	5.4845

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Groups	Name	Variance	Std. Dev.		
Sentence group	(Intercept)	0.31048	0.5572		
Region	(Intercept)	0.08319	0.2884		
Offence type	(Intercept)	0.06615	0.2572		
Ethnic group	(Intercept)	0.05790	0.2406		
Number of observations:	3618				
groups:	Sentence gro	Sentence group, 7; region, 7; offence type, 6; ethnic			
	group, 6				

Fixed effects:

	Estimate	Std. Error	z-value	Pr(> z)
(Intercept)	-2.13534	0.31928	-6.688	2.26e-11***
Childhood difficulties	1.04280	0.095371	0.935	<2e-16***
Mental health difficulties	0.92595	0.10919	8.480	<2e-16***
Self-harm / suicide attempts	0.52939	0.07870	6.726	1.74e-11***
Challenging behaviour	0.59477	0.08743	6.803	1.03e-11***

Note: Output from model "indicators": glmer(opdcase p dindchild + pdindmh + pdindsash + pdinddisrupt + (1|region) + (1|ethnicgroup) + (1|offencetype) + (1|Sentgroup), family=binomial, data=NPSwomen).

Significance codes - Signif. codes: 0 '***'; 0.001 '**'; 0.01 '*'; 0.05 '.'; 0.1 ''; 1

To investigate the interplay between proxy additional indicators and PD items, a model incorporating all 14 items was developed. This combination model achieved an AIC of 4167.9, indicating a better fit than either the 10-item or indicator-only models. However, as evidenced in

Table 3.23, many variables yielded low estimate values and were not statistically significant predictors of screening in.

Through an iterative process of removing items that did not reach significance and re-running analyses, the best fitting model was one comprised of five of the ten OASys PD items (PD2 "offence involved violence or threat of violence or coercion", PD3 "offence involved excessive violence or sadism", PD6 "manipulative or predatory lifestyle", PD8 "evidence of childhood behaviour problems", and PD10 "aggressive or controlling behaviour") and all four proxy indicator items. This refined model achieved an AIC of 4162 which indicated a slightly better model fit given the reduced number of component parts. This improvement was however found to have been non-significant as determined by an ANOVA, utilising Chi^2 , run between the 14-item model presented in Table 3.23 and the refined 9-item model ($Chi^2 = 4.0676$; $Chi^2 = 4.0676$; C

Table 3.23Output from mixed effects regression model of combined 10 items and additional indicators on OPD screening status

AIC	BIC	logLik	dev.	df.resid
4167.9	4285.6	-2065.0	4129.9	3599
Scaled residuals:				
Min	1Q	Median	3Q	Max
-3.5911	-0.7527	0.2809	0.7319	4.5122
Random effects:				
Groups	Name	Var.	Std.	
			Dev.	
Sentence group	(Intercept)	0.22968	0.4792	
Region	(Intercept)	0.08376	0.2894	
Offence type	(Intercept)	0.12367	0.3517	
Ethnic group	(Intercept)	0.04611	0.2147	
Number of observations:	3618			
groups:	Sentence gro	oup, 7; regio	on, 7; offer	ice type, 6;
	ethnic group	-		
Fixed effects:				
	Estimate	Std.	z-value	Pr(> z)
		Error		
(Intercept)	-2.52902	0.32614	-7.754	8.88e-15***
PD1 conviction under 18	-0.01536	0.08931	-0.172	0.8634
PD2 offence involved	0.22973	0.09264	2.480	0.0131*
violence/threat of violence/coercion				
PD3 offence involved excessive	0.43632	0.10298	4.237	2.27e-05***
violence/sadism				
PD4 fails to recognise impact of	0.03329	0.16562	0.201	0.8407
offending on victim or society				
-				
PD5 overreliance on others for	-0.05668	0.08281	-0.684	0.4937
financial support	-0.05668	0.08281	-0.684	0.4937
	-0.05668 0.19763	0.08281 0.08712	-0.684 2.269	0.4937 0.0233*
financial support				
financial support PD6 manipulative or predatory lifestyle				
financial support PD6 manipulative or predatory	0.19763	0.08712	2.269	0.0233*
financial support PD6 manipulative or predatory lifestyle PD7 reckless risk-taking behaviour	0.19763 -0.15185	0.08712 0.11435	2.269	0.0233* 0.1842
financial support PD6 manipulative or predatory lifestyle PD7 reckless risk-taking behaviour PD8 evidence of childhood behaviour problems	0.19763 -0.15185	0.08712 0.11435	2.269	0.0233* 0.1842
financial support PD6 manipulative or predatory lifestyle PD7 reckless risk-taking behaviour PD8 evidence of childhood	0.19763 -0.15185 0.39034	0.08712 0.11435 0.09378	2.269 -1.328 4.162	0.0233* 0.1842 3.15e-05***
financial support PD6 manipulative or predatory lifestyle PD7 reckless risk-taking behaviour PD8 evidence of childhood behaviour problems PD9 impulsivity	0.19763 -0.15185 0.39034 0.18568	0.08712 0.11435 0.09378 0.11067	2.269 -1.328 4.162 1.678	0.0233* 0.1842 3.15e-05*** 0.0934.
financial support PD6 manipulative or predatory lifestyle PD7 reckless risk-taking behaviour PD8 evidence of childhood behaviour problems PD9 impulsivity PD10 aggressive or controlling	0.19763 -0.15185 0.39034 0.18568	0.08712 0.11435 0.09378 0.11067	2.269 -1.328 4.162 1.678	0.0233* 0.1842 3.15e-05*** 0.0934. 8.21e-06***
financial support PD6 manipulative or predatory lifestyle PD7 reckless risk-taking behaviour PD8 evidence of childhood behaviour problems PD9 impulsivity PD10 aggressive or controlling behaviour	0.19763 -0.15185 0.39034 0.18568 0.43733	0.08712 0.11435 0.09378 0.11067 0.09807	2.269 -1.328 4.162 1.678 4.460	0.0233* 0.1842 3.15e-05*** 0.0934.
financial support PD6 manipulative or predatory lifestyle PD7 reckless risk-taking behaviour PD8 evidence of childhood behaviour problems PD9 impulsivity PD10 aggressive or controlling behaviour Childhood difficulties	0.19763 -0.15185 0.39034 0.18568 0.43733 0.83852	0.08712 0.11435 0.09378 0.11067 0.09807 0.10197	2.269 -1.328 4.162 1.678 4.460 8.223	0.0233* 0.1842 3.15e-05*** 0.0934. 8.21e-06***

Note: Output from model "pdindiall": glmer(opdcase~ pd1s1q5 + pd2s2q2b + pd3s2q2c + pd4s2q6rev + pd5s5q5 + pd6s7q4 + pd7s7q5 + pd8s10q7 + pd9s11q2 + pd10s11q3 pdindchild + pdindmh + pdindsash + pdinddisrupt + (1|region) + (1|ethnicgroup) + (1|offencetype) + (1|Sentgroup), family=binomial, data=NPSwomen).

Significance codes - Signif. codes: 0 '***'; 0.001 '**'; 0.01 '*'; 0.05 '.'; 0.1 ''; 1

To understand how useful this combination of items may be at predicting OPD screening outcomes, an important step in regression analysis is to test the predictive accuracy of a model. To do this, the resultant 9-item model "pdindrefin2" was run on a subset of the data (n=2500) in order to train the model on the data. Following this step, using the remaining subset of available data (n=1118), this model was tested to see how well it predicted screening outcomes for the women in the remaining subset of data. This analysis resulted in an accuracy rating of 0.7111, indicating the model accurately predicted screening outcome of NPS women 71% of the time.

3.5.3.3 Interim Summary

While a 71% accuracy level is reasonable, there were several problems with this set of items. Firstly, two PD items PD8 (s10q7 - childhood behaviour problems) and PD10 (s11q3 – aggressive / controlling behaviour) are optional items, therefore their absence in the dataset could not necessarily be inferred as true absence given the possibility that the OM simply chose not to answer these questions. Secondly, there is a large degree of overlap in meaning between PD8 (childhood behaviour problems) and the indicator item "childhood difficulties" and indeed, the proxy item relating to this indicator was partially generated by this OASys item. Another problem with this set of items was that four were indices of calculations of multiple other OASys items (i.e., the four additional indicators) and so carrying out screening would not be a straightforward process for OMs and could in fact be more onerous than the current process. With all of this under consideration, it was deemed appropriate to explore an alternative set of OASys items for use in screening women in to the OPD Pathway.

3.5.4 Study 3.2b – Identifying alternative items

3.5.4.1 Methodology

Design

This second stage of the study followed a largely qualitative approach. To find items with better predictive power than currently in use, the full set of tick-box items from OASys was explored and items considered relevant were retained for further analysis. The OASys item pool alone was utilised for two reasons - Firstly, the data available for analysis consisted almost entirely of items from this recording system and did not include data from other HMPPS recording systems such as the probation-specific nDelius or the prison-specific pNOMIS. Secondly, the other systems on which potentially relevant data are recorded tend to be accessible only to separate branches of HMPPS, and as such, complete data for probation and prison service users together is only available within OASys. Item relevance was determined through a four-stage discovery process of consulting established diagnostic materials, surveying experienced stakeholders and referring to policy documentation in addition to considering findings from previous stages of the overarching study. In order to allow for all potentially useful avenues to be explored, this stage of the study sought to be as inclusive as possible in scope, without losing focus on critical factors. However, it should be noted that as risk criteria were determined separately in Study 3.1, the analyses constituting Study 3.2 deliberately excluded risk measures so as to avoid double counting of these factors and to focus on psychological complexity and needs more specifically, in keeping with RNR principles underpinning the OPDP programme. All findings from each stage of analysis were discussed with the women's OPDP screening criteria revision task group and additional suggestions were invited from this group once initial discovery work was completed.

Participants

One aspect of this discovery work involved approaching individuals with relevant experience in working with women convicted of offending and women with complex mental health needs. To this end, a short anonymous survey constructed in MS Forms was disseminated to OPD women's services managers, leads of women's prison estate psychological services, strategic staff engaged in service delivery to female offenders (with mental health and/or OPD-specific functions) through snowball email sampling. All nine members of the task group were also invited to contribute suggestions for alternative OASys items to consider.

Analysis

Four phases of discovery work were undertaken:

- DSM IV criteria for personality disorders (including Anti-social and Borderline) were content mapped onto the full item set of OASys tick-box variables from sections 1 to 13.
- OPD Pathway overarching strategic goals (HMPPS/NHSE, 2018) were reviewed and any OASys tick-box variables from sections 1 to 13 that were representative of these goals were noted. This discovery phase was additionally informed by findings from earlier stages of this study and consideration of current items.
- A brief survey (detailed in Appendix H) was devised asking respondents to indicate what factors they considered relevant in identifying women who would benefit from OPD Pathway intervention. Recruitment was carried out by snowball emailing of 14 regional OPD leads who were advised to forward the survey to colleagues with relevant experience and knowledge. Respondents were asked to rank the order of importance of a list of relevant factors and to suggest any additional factors they deemed pertinent if not listed. Items in this survey were initially generated by the researcher and presented to the W-OPD screening revision task group for discussion and refinement.
- All OASys items available for analysis were provided to the W-OPD screen task group for their clinical and professional insights in selecting items for inclusion.

3.5.4.2 Findings

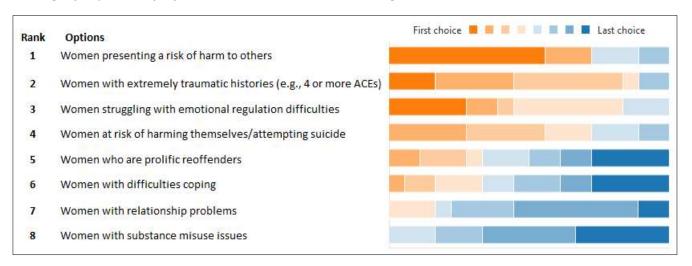
DSM IV criteria – There were 22 OASys items whose content mapped clearly on to DSM criteria for a number of personality disorders. Additionally, all items related to drugs and alcohol influences were deemed inapplicable due to DSM overarching PD criteria stating "The impairments in personality functioning and the individual's personality trait expression are not solely due to the direct physiological effects of a substance (e.g., a drug of abuse, medication) or a general medical condition (e.g., severe head trauma)."

OPD strategy and current screen – Overarching and intermediary strategic goals were consulted for content that could map on to OASys items. Four items were found, which was unsurprising given the high level and broad-scoping language used in such policy documentation. These items related to sexual and violent offence characteristics (see Appendix J for full list of items including source). The task group also discussed the relevance of current screening items in light of analyses to date and opted to include eight in the broad item pool, based on findings from Study 3.2a and on professional

opinion. Two items were also found to closely represent two indicator items, thus these were also included given the proxy indicators provided in the dataset under analysis were the result of multiple items in combination. Finally, four items previously noted as highly correlated with women's current screening status (see Table 3.8) were included in the item pool for analysis. Taken together, 18 items were included based on OPD strategic goals and current items.

Survey results – There were 18 responses received from across the OPD network, representing prison, probation, mental health and operational staff from both NHS and HMPPS. While responses numbered 18, some respondents (e.g., Wales community team) indicated they had provided a collective response from their team rather than completing surveys individually, therefore it is not possible to provide specific information on characteristics of individual participants. Responses were provided anonymously but a targeted approach was taken to emailing individuals working with women in the OPD Pathway. The combined rankings of proposed factors are presented in Figure 3.4. As anticipated, risk of harm to others was ranked the most important factor to consider when determining OPD Pathway inclusion, with 10 out of 18 respondents ranking this factor in first place and an additional three respondents ranking this factor in second place. Traumatic histories were the next most highly ranked factor, with 14 out of 18 ranking this factor in their top 3. The third most important factor was Emotional regulation difficulties, with 8 respondents ranking this in their top 3. It was notable that relationship problems were not ranked highly by many respondents, although it is acknowledged that the phrasing of this item allowed for broad interpretation of meaning.

Figure 3.4Rankings of importance for factors to consider when determining Women's OPDP inclusion.

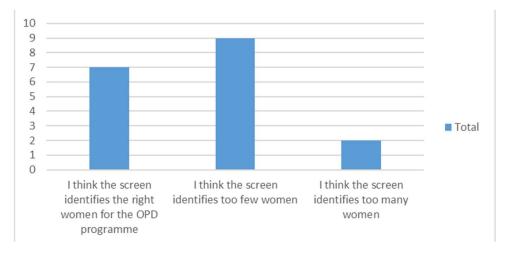


Respondents were asked to suggest additional factors to consider if these were not covered by the list provided. Suggested alternatives are detailed in Appendix I. Some suggestions related to features

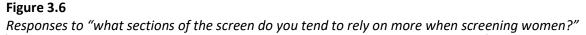
that would not be possible to generate from current assessments and instead would be better identified through a triage process (e.g., "additional value in being on the OPDP"; "women who tend not to approach services"). Suggestions that could be mapped on to OASys tick-box items included having a history of contact with mental health services (Section 10 questions 6 and 7); and risk of exploitation (Section 7 question 3), along with content of high ranking factors noted in Figure 3.4. There was some overlap in items mapping onto survey responses and those from previous discovery phases, thus three unique items (relationship with close family, experience of childhood, and attitude towards staff) were generated from this phase.

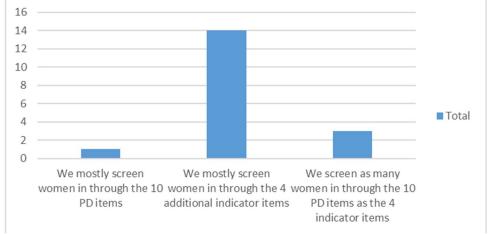
As a consultative step, this survey also asked participants to indicate their views on the functionality of the current screening process in terms of how accurately it identified women for OPD involvement and which section of the screen was most functional. It is clear from Figure 3.5 that very few participants thought the tool identified too many women, with the majority of respondents indicating either too few or just the right amount of women were identified.

Figure 3.5
Responses to "how well do you think the current screening tool performs?"



While it had already been established statistically that women tended to be screened in through the additional indicators route, this point was also queried with survey respondent in order to get a sense of the general perception of how the tool was used. Figure 3.6 further supported the revision of the tool, with the vast majority of respondents (n=14) indicating the dominance of the additional indicators in determining women's screening outcome.





Task group insights – The complete list of OASys tick-box items from sections 1 to 13 were presented to the Task group with all items identified from each discovery step highlighted and noted as to source. Members were emailed the full list of items and asked to indicate whether each should be included or excluded, and to provide any commentary on their selection if deemed useful. Six members of the task group contributed additional item suggestions amounting to another 25 items put forth for analysis.

In total, a pool of 68 items (see Appendix J for full list of items including source) were taken forward into the third part of this study for analysis. In stage 1, mapping of DSM content accounted for 22 items. In stage 2, aligning with OPD strategic goals identified 4 items; 8 items were carried forward from the current OPD screen while 2 additional items were noted as capturing the content of indicator items; and 4 items that correlated highly with screening status were included. In stage 3, a further 3 items were identified by the survey of professionals (noting their other suggestions had already been accounted for in previous stages). Finally, in stage 4, the task group suggested an additional 25 items for inclusion.

3.5.4.3 Interim summary

The 68 items identified for analysis were drawn from eight sections of OASys, many of which were indicated from multiple discovery sources. This wide array of factors for consideration was welcome, given the acknowledged absence of specific knowledge in relation to particular features that may be intrinsic to the female OPD Pathway caseload. Indeed, given the exploratory nature of this process, a

large item pool was considered useful for the purposes of ensuring all potentially relevant fields were considered.

It was notable from the survey results that relationship difficulties were ranked amongst the lowest priority areas for consideration, given the well-established links between difficulties in interpersonal functioning and personality disorder as borne out in DSM criteria and in the wider literature (Blackburn, 1998; Wright, Hopwood, & Simms, 2015). This was perhaps indicative of the forensic focus of the respondents and the overriding organisational priorities of managing risk and reducing reoffending. On reflection, and given the focus of this study was to consider psychological needs rather than risk factors, which had already been explored, the exclusion of the risk item in the survey may have resulted in respondents' thought processes being more appropriately aligned.

A potential limitation of this process was the absence of service user input into item selection. Multiple practical and operational factors precluded this study from involving service user contributions, as well as ethical considerations around the potentially triggering effect of trying to relate specific OASys items to why oneself was suitable to access OPD Pathway interventions. This may however be a useful avenue for future research when reviewing outcomes of revised screening processes.

3.5.5 Study 3.2c – Analysing and refining alternative items

3.5.5.1 Methodology

Design

The outcome under analysis in this study was OPD screening status as indicated by the variable opd caseload. Binary logistic regression analyses were used to explore the predictive power of a number of variables in determining this outcome. It is acknowledged that the methods for identifying women for OPD involvement have changed over the lifespan of the Pathway and that women on the OPDP caseload at the time of analysis represented a varied cohort – women who met men's criteria; women who presented with low scores on the 10-item screen but demonstrated significant mental health needs through additional indicators; and women who, by professional opinion, were clinically overridden into the Pathway in spite of meeting no established criteria. Women on the OPDP caseload were therefore not a homogenous group and were unlikely to have presented with a precise set of criteria distinguishing them from the wider NPS and CRC caseloads. As such, screened in women's presence on the OPDP caseload was what distinguished them from the wider national caseload. Owing to the non-experimental and instead real-world nature of this research, it was not possible to determine a more appropriate outcome variable for identifying women who "should" be on the OPDP caseload than current presence on the caseload. All variables under analysis in this study were regressed on to the single outcome variable "opdcase" and the resultant set of items were evaluated for appropriateness.

Participants

This final stage in the study sought to explore the predictive strength of individual OASys items in identifying women from the combined NPS-CRC caseload for OPDP involvement. As this model-building process was not an attempt to discover which items were diagnostic for having been on the Pathway but rather aimed to predict which women could be on the Pathway in the future, data from all women from both NPS and CRC were included. Once removal of cases with missing values (n = 3823) in any of the 68 variables under analysis was complete, a dataset of 12,484 women (NPS=3381; CRC=9103) was available for analyses.

Analysis

Study 3.2c centred around logistic regression modelling of alternative OASys items. Several steps were involved in preparing and carrying out these analyses. First, the data were prepared for modelling in the RStudio environment. Second, the random intercepts incorporated into NPS

modelling were explored. Following this, individual items were analysed through generalised linear mixed modelling (GLMM). Combinations of items were then modelled by GLMM to establish the best fitting collection of items in relation to OPDP screening outcome. Once a suitable set of items was identified, the task group discussed a number of pertinent points for consideration (e.g., clinical significance and caseload impacts) in relation to item inclusion and threshold setting.

Data preparation - OASys items tend to take the format of a) questions with response categories of "yes/no" or "present/absent" coded as 1 and 0 respectively; or statements to which probation officers indicate how much of a problem the issue is for the person on a 3-point scale of 0 (no problems), 1 (some problems), 2 (significant problems). The OPD screening tool in use at the time of analysis addressed presence or absence of an item, with scores of 1 or 2 taken as presence. To maintain this approach, all suggested items with a scale scoring format were converted into binary format, with 1 and 2 both recoded as 1, and 0 remaining as 0⁵. As noted in the participants section, women with missing values in any of the 68 items under investigation were removed from the dataset. This was in order to ensure all items were treated as binary and that N/A or missing values would not be interpreted as an additional value level, thus obfuscating findings. Once preparation was complete and a fully coded dataset was finalised in MS Excel, this was imported into the RStudio environment for analysis.

Random effects - To determine the likelihood of screening in to the OPD Pathway without any predictor variables, an intercept-only model was first run. Following this step, each of the random variables identified as creating non-independence in screening outcome in the NPS caseload were put through this same process for the full combined caseload.

Individual item analyses – Each of the 68 binary-format OASys items were subjected to GLMM with four random intercepts incorporated. The model formula for each analysis followed the structure TFitems2q2a<-(glmer(opdcase~s2q2a + (1|region) + (1|ethnicgroup) + (1|offencetype) + (1|Sentgroup), data=TFwhole, family="binomial")). Key figures from these analyses were tabulated in order to conveniently compare each item's individual predictive potential both in terms of model fit statistics (e.g., AIC) and estimate value or log likelihood. While individual item modelling is not a typical step in this process, given the large number of items under investigation, it was decided that this extra step would add to the robustness of the analytic approach.

88

⁵ this was with the exception of item 12.8 "motivation to address offending" which is scored 0 – Very motivated, 1 – Quite motivated, 2 – Not at all motivated, whereby 0 and 1 were both recoded as 0 while 2 was recoded as 1

Combined items modelling - To identify which items in combination would have the best predictive value, and potentially form an appropriate screen for women, regression models of items with the highest estimates were run. Stepwise selection was utilised for model selection. This was an iterative process, with one item added at a time in order to continuously monitor the model fit of the combined set of items. Items were removed from subsequent models if they were shown not to improve the model and this was determined by either the AIC increasing as compared to the previous model or the item achieving a non-significant estimate in the combined model.

3.5.5.2 Findings

Random effects – An intercept-only generalised linear model was run first to establish a baseline model fit index for screening outcome. All four previously identified random intercepts were then modelled and compared to the intercept-only model, the summarised output for this is presented in Table 3.24. Inclusion of these random effects variables was therefore deemed appropriate and an ANOVA utilising Chi^2 statistic confirmed this mixed effects model as better fitting (Chi^2 =3280.2; df=4; p<0.0001).

Table 3.24Model fit statistics for OPD outcome intercept-only compared with random effects models modelled on combined NPS-CRC dataset

Model	Model components	AIC	BIC	Log like.	Dev.
name					
Int. only	opdcase~1	10034		-1.8298	10032
RE1	opdcase~1+region	9999.1	10014.0	-4997.6	9995.1
RE2	opdcase~1+region+ethnicgroup	9882.3	9904.6	-4938.1	9876.3
RE3	opdcase~1+region+ethnicgroup+offence	8375.5	8405.2	-4183.8	8367.5
RE4	opdcase~1+region+ethnicgroup+offence+sen	6761.6	6798.8	-3375.8	6751.6
	tence				

Individual item analyses – Once random effects variables were established, individual item modelling proceeded. Items were tested in order of appearance in the OASys tool and relevant data were logged to inform order of imputation in combined items modelling. For completeness, binary format items were modelled as were items of a polychotomous format (where applicable) but, finding little difference in fit indices between these, and given the resultant screening tool would utilise a binary structure, statistics from binary format items were utilised. Table 3.25 presents the key statistics for

each of the 68 items modelled including the AIC, intercept (reference) value, estimate value (with significance level), and difference between intercept and estimate (used to inform order of item input for combined modelling).

Table 3.25 *Item statistics for binary-formatted OASys items*

Loc.*	Item details	AIC	Int.	Est.	р	Diff.
2.2a	Carrying or using a weapon	6840.7	-1.89	1.03	***	2.92
2.2b	Any violence or threat of violence/coercion	6789.0	-2.11	1.18	***	3.29
2.2c	Excessive use of violence/sadistic violence	6917.9	-1.74	1.05	***	2.79
2.2d	Arson	6987.0	-1.81	1.46	***	3.26
2.2f	Sexual element	7039.4	-1.74	0.59	**	2.33
2.3a	Were there any direct victim(s) e.g., contact targeting	6935.5	-1.97	0.69	***	2.66
2.3b	Were any of the victim(s) targeted because of racial motivation or hatred of other identifiable group	7046.3	-1.63	-0.17	n	1.46
2.3c	Response to a specific victim (e.g., revenge, settling grudges)	6972.4	-1.75	0.68	***	2.42
2.3d	Physical violence towards partner	7010.1	-1.68	0.63	***	2.31
2.3f	Were the victims(s) stranger(s) to the offender	6752.5	-1.69	0.24	***	1.94
2.7a	Peer group influences (e.g., offender easily led, gang member)	6761.7	-1.62	-0.11	n	1.51
2.9a	Sexual motivation	7044.4	-1.70	0.40		2.10
2.9c	Addiction/perceived needs	6760.3	-1.67	0.14		1.81
2.9d	Emotional state of offender	6879.2	-2.12	0.90	***	3.02
2.9e	Racial motivation or hatred of other identifiable group	6759.6	-1.65	0.42	*	2.07
2.9f	Thrill seeking	7036.0	-1.67	0.48	***	2.16
2.10a	Alcohol (dis-inhibitor)	6665.8	-1.81	0.67	***	2.48
2.10d	Psychiatric problems (dis-inhibitor)	6946.3	-1.74	1.09	***	2.83
2.10e	Emotional state (dis-inhibitor)	6906.7	-2.00	0.77	***	2.77
2.10f	Drugs (dis-inhibitor)	6738.3	-1.73	0.36	***	2.09
2.10g	Traumatic life event (divorce, redundancy) (dis-inhibitor)	7028.2	-1.69	0.42	***	2.11
2.11	Does the offender accept responsibility for the current offence(s)	6971.2	-1.54	-0.16	*	1.38
2.13	Are current offence(s) an escalation in seriousness from previous offending?	6662.1	-1.95	0.69	***	2.65
2.14	Are current offence(s) part of an established pattern of similar offending (optional)	6946.9	-1.83	0.20	***	2.04
3.6	Suitability of location of accommodation	6718.8	-1.87	0.45	***	2.32
4.3	Employment history	6587.2	-2.32	0.98	***	3.31
4.5	Attitudes to employment	6990.3	-1.81	0.50	***	2.31
5.5	Over reliance on family /friends/ others for financial support (optional)	6988.8	-1.85	0.49	***	2.34
6.1	Current relationship with close family members	6382.9	-2.43	1.05	***	3.48
6.3	Experience of childhood	6664.1	-2.67	1.47	***	4.14

Loc.*	Item details	AIC	Int.	Est.	р	Diff.
6.4	Current relationship with partner	7030.1	-1.72	0.28	***	2.01
6.6	Previous experience of close relationships	6933.7	-2.41	0.97	***	3.38
6.7a	Evidence of domestic violence / partner abuse victim	6982.1	-1.95	0.54	***	2.50
6.7	Evidence of domestic violence / partner abuse perpetrator	6873.4	-1.87	0.92	***	2.79
7.2	Regular activities encourage offending	6993.1	-1.94	0.49	***	2.43
7.3	Easily influenced by criminal associates	7016.7	-1.83	0.36	***	2.19
7.4	Manipulative / predatory lifestyle (optional)	6898.6	-2.08	0.81	***	2.89
7.5	Recklessness and risk-taking behaviour	6985.4	-2.16	0.62	***	2.79
10.1	Difficulties coping	6912.4	-2.49	1.04	***	3.53
10.2	Current psychological problems / depression	6842.6	-2.53	1.19	***	3.73
10.3	Social isolation	6892.9	-2.13	0.80	***	2.94
10.4	Offender's attitude to themselves	6799.7	-2.39	1.12	***	3.51
10.5	Self-harm, attempted suicide, suicidal thoughts or feelings	6530.5	-2.52	1.55	***	4.07
10.7a	Evidence of childhood behavioural problems (optional)	6730.8	-1.93	1.33	***	3.26
10.7b	History of severe head injuries, fits, periods of unconsciousness (optional)	7015.9	-1.65	1.01	***	2.66
10.7d	Ever been on medication for mental health problems in the past (optional)	6702.5	-2.11	1.19	***	3.30
11.1	Level of interpersonal skills	6853.9	-2.02	0.91	***	2.93
11.2	Impulsivity	6931.5	-2.24	0.85	***	3.08
11.3	Aggressive / controlling behaviour (optional)	6724.8	-2.46	1.28	***	3.73
11.4	Temper control	6779.1	-2.36	1.20	***	3.56
11.7	Awareness of consequences	7024.6	-2.02	0.43	***	2.45
11.8	Achieves goals (optional)	6844.8	-2.24	0.96	***	3.20
11.9	Understands other people's views	6872.1	-2.30	0.91	***	3.21
11.10.	Concrete / abstract thinking (optional)	6865.1	-2.15	0.87	***	3.02
12.1	Pro-criminal attitudes	6964.6	-1.97	0.59	***	2.55
12.3	Attitude towards staff (optional)	6824.6	-1.99	1.03	***	3.02
12.5	Attitude towards community / society	6908.0	-2.04	0.77	***	2.80
12.8	Motivation (to address offending)	7032.0	-1.73	0.35	***	2.08
2 risk	Analysis of offence issues linked to risk of serious harm, risks to the individual and other risks.	6527.5	-3.74	2.56	***	6.30
3 risk	Accommodation issues linked to risk of serious harm, risks to the individual & other risks	6805.9	-2.07	1.05	***	3.13
6 risk	Relationship issues linked to risk of serious harm, risks to the individual & other risks	6719.3	-2.61	1.38	***	3.99
7 risk	Lifestyle and associates issues linked to risk of serious harm, risks to the individual & other risks	6704.5	-2.40	1.26	***	3.67
10 risk	Issues of emotional well-being linked to risk of serious harm, risks to the individual & other risks	6465.2	-2.75	1.76	***	4.51
11 risk	Thinking / behaviour issues linked to risk of serious harm, risks to the individual & other risks	6568.9	-3.18	1.99	***	5.17

Loc.*	Item details	AIC	Int.	Est.	р	Diff.
3 beh.	Accommodation issues linked to offending behaviour	6654.4	-2.00	0.69	***	2.69
4 beh.	Education / training / employability issues linked to offending behaviour	6755.6	-1.70	0.22	**	1.92
6 beh.	Relationship issues linked to offending behaviour	6621.9	-2.42	0.98	***	3.40
10 beh.	Issues of emotional well-being linked to offending behaviour	6495.6	-2.56	1.27	***	3.82

^{*}Note: Loc. = Location of item in OASys with section, item, and sub-item indicated; Significance codes - Signif. codes: 0 '***'; 0.001 '**'; 0.01 '*'; 0.05 '.'; 0.1 ''; 1

Once all suggested items had been modelled in this way, the order of entry for combined items modelling needed to be determined. Due to the large number of items available for analysis, it was decided that items with the largest predictive value should be entered first. Predictive value can be determined by item fit statistics such as AIC and BIC, or by estimate value, or by the difference between estimate value and intercept value. As the intercept indicates the likelihood of screening in to the Pathway in the absence of the predictor variable, and the estimate indicates the likelihood of screening in to the Pathway in the presence of the predictor variable, the calculation of the difference between these values was chosen as the most appropriate value to determine order of item input.

Combined items modelling – As with previous models, a GLMM approach was utilised for combined items modelling. The first two items with the largest estimate-intercept difference were section 2 (analysis of offence) links to risks and section 11 (thinking/behaviour) links to risks. The abbreviated output for this model is displayed in Table 3.26. As evidenced, both items achieved strong and significant estimate values and so were retained for inclusion in the next model.

Table 3.26:Output from Model 1 - mixed effects regression model of first two alternative PD items

AIC	BIC	Log likelihood	Deviance	<i>df</i> residual
6111.5	6163.5	-3048.7	6097.5	12477
Scaled residuals:				
Min	1Q	Median	3Q	Max
-2.6248	-0.2854	-0.1077	-0.04412	2.4556
Fixed effects	Estimate	Std. Error	z-value	Pr(> z)
(Intercept)	-4.2166	0.5870	-7.183	6.81e-13***
Section 2 linked to risk	1.8829	0.1567	12.015	<2e-16***
Section 11 linked to risks	1.2966	0.1146	11.316	<2e-16***

Note: Output from model TF1 <-(glmer(opdcase $^$ s2linkrisk + s11linkrisks + (1|region) + (1|ethnicgroup) + (1|offencetype) + (1|Sentgroup), data=TFwhole, family="binomial")). Significance codes - Signif. codes: 0 '***'; 0.001 '**'; 0.01 '*'; 0.05 '.'; 0.1 ''; 1

Addition of items continued in this iterative process, with items being retained if they both improved the model fit statistic (indicated by a smaller AIC) and continued to demonstrate significant predictive value (as indicated by a large estimate) in combination with all model components. The first instance of an item appearing to weaken the model was at Model 6, the output of which is presented in Table 3.27 in abbreviated form. Here, it can be seen that the seventh item added (s10linkbehave – "Issues of emotional well-being linked to offending behaviour") did not significantly improve the fit of the model. While the addition of this item slightly decreased the AIC from 5547.5 (in Model 5) to 5547.3, it was determined that this item should be excluded from future models.

Table 3.27Output from Model 6 - mixed effects regression model of first seven alternative PD items

AIC	BIC	logLik	deviance	df.resid	
5547.3	5636.5	-2761.6	5523.3	12472	
Scaled residuals:					
Min	1Q	Median	3Q	Max	
-2.617	-0.240	40 -0.083 -0.031		31.635	
Fixed effects:	Estimate	Std. Error	z-value	Pr(> z)	
(Intercept)	-5.65229	0.56941	-9.927	<2e-16***	
Section 2 linked to risk	1.62119	0.15921	10.183	<2e-16***	
Section 11 linked to risks	0.80064	0.12288	6.516	7.24e-11***	
Section 10 linked to risks	0.50956	0.11633	4.380	1.18e-05***	
Section 6 Q3	0.95658	0.09113	10.496	<2e-16***	
bisection 10 Q5	0.94542	0.08378	11.285	<2e-16***	
Section 6 linked to risks	0.40709	0.09325	4.366	1.27e-05***	
Section 10 linked to behaviour	0.17094	0.11358	1.505	0.132	

Note: Output from model TF6 <-(glmer(opdcase \sim s2linkrisk + s11linkrisks + s10linkrisks + bis6q3 + bis10q5 + s6linkrisks + s10linkbehave + (1|region) + (1|ethnicgroup) + (1|offencetype) + (1|Sentaroup), data=TFwhole, family="binomial")).

Significance codes - Signif. codes: 0 '***'; 0.001 '**'; 0.01 '*'; 0.05 '.'; 0.1 ''; 1

Upon running Model 11, the addition of item 10.1 "Difficulties coping" resulted in an improved AIC but this item itself presented with a negative log likelihood value of -0.45989, while the intercept for this model was -5.65946. This could be interpreted that presenting with item 10.1 significantly decreased a woman's likelihood of screening into the Pathway if all other items in the model were absent, but slightly less so than having none of the other items at all. The correlation of fixed effects table (presented in Table 3.28) was consulted to elucidate this situation. This output describes the correlation between the effects of each item on the outcome variable, rather than the correlation between each item. While all other values in this table were notably small, the effects of items 10.1

and 10.2 "Current psychological problems/depression" appeared to be highly negatively correlated at r = -0.450. This implied that the effects of items 10.1 and 10.2 were somewhat co-dependent, in that if 10.2 weren't present, it was more likely that 10.1 would also be absent. Correlation analysis of the non-binary format of these items corroborated this proposal, with an r value of 0.693 (p < 0.01) found. With this, item 10.1 was retained for further modelling.

Table 3.28Correlation of Fixed Effects from Model 11

	(Inter)	s2lnkr	s11lnk	s10lnk	bis6q3	bs10q5	s6lnkr	s11q3	bs10q2	s7lnkr
s2 risks	-0.19									
s11risks	-0.06	-0.23								
s10risks	0.02	-0.05	-0.14							
s6q3	-0.09	0.00	0.04	-0.04						
s10q5	-0.03	0.03	0.04	-0.24	-0.11					
s6risks	-0.05	-0.08	-0.12	-0.16	-0.06	0.01				
s11q3	-0.03	-0.03	-0.16	-0.03	-0.05	-0.02	-0.04			
s10q2	-0.06	0.02	0.01	-0.12	-0.01	-0.12	0.01	-0.04		
s7 risks	0.00	-0.07	-0.25	-0.02	-0.03	0.01	-0.08	-0.09	0.01	
s10q1	-0.07	0.01	-0.04	-0.16	-0.07	-0.09	-0.01	-0.06	-0.45	-0.05

This iterative process of model building continued until no further improvements to the model were found and several subsequently added items presented as non-significant or weakened the overall model fit statistics. Items were added in order of estimate-intercept difference until either a) items that had a higher AIC than the intercept-only with random effects model (Model RE4) were left or b) items whose estimate value was relatively low in contrast to intercept value, indicating the item's absence had a greater influence on screening outcome than its presence. This stage was reached after 40 models were run and with a resultant 20 items in the final model, it was deemed appropriate not to explore the addition of more items. The abbreviated model building process with details of order of items added, model fit statistics and notes as to reasoning for exclusion or continued inclusion of items is available in Appendix K.

Upon building the thirty-sixth model, two items ("Section 6 links to risks" and "s2q9d - emotional state of offender") no longer presented as significant and had low log likelihood values, as evident in Table 3.29. As with previous iterations, these items were thus removed and logistic regression of the revised set of items (i.e., Model36a) was run. This model achieved a higher AIC than Model36, increasing to a value of 5161.5 from 5159.7, suggesting retaining these items may have been appropriate, although this difference may have been small enough to have been considered negligible.

Table 3.29Output from Model 36 – mixed effects regression model of twenty best fitting items

AIC	BIC	logLik	deviance	df.resid
5159.7	5345.5	-2554.9	5109.7	12459
Fixed effects:	Estimate	Std.	z-value	Pr(> z)
		Error		
(Intercept)	-5.96758	0.51656	-11.552	<2e-16***
Section 2 linked to risk	1.16894	0.16474	7.096	1.29e-12***
Section 11 linked to risks	0.59079	0.13577	4.351	1.35e-05***
Section 10 linked to risks	0.31783	0.10641	2.987	0.002819**
Section 6 Q3	0.73528	0.09745	7.545	4.51e-14***
Section 10 Q5	0.71412	0.09077	7.868	3.61e-15***
Section 6 linked to risks	0.14064	0.10092	1.394	0.163433
Section 10 Q2	0.44206	0.13060	3.385	0.000712***
Section 7 linked to risks	0.28617	0.09055	3.160	0.001576**
Section 10 Q1	-0.40764	0.14288	-2.853	0.004330**
Section 10 Q7(medication)	0.45088	0.07724	5.838	5.29e-09***
Section 2 Q2b	0.39246	0.08736	4.492	7.04e-06***
Section 2 Q2d	1.42284	0.21146	6.729	1.71e-11***
Section 10 Q7(childhood behaviour)	0.43708	0.08557	5.108	3.26e-07***
Section 3 linked to risks	0.26288	0.07974	3.297	0.000978***
Section 12 Q3	0.30307	0.08244	3.676	0.000237***
Section 2 Q9d	0.16298	0.08618	1.891	0.058610.
Section 2 Q2a	0.64637	0.08304	7.784	7.05e-15***
Section 7 Q4	0.29776	0.08242	3.613	0.000303***
Section 2 Q2c	0.70990	0.10785	6.582	4.63e-11***
Section 6 Q7(perpetrator)	0.24605	0.08241	2.986	0.002828**

Note: Output from model TF36<- (glmer(opdcase \sim s2linkrisk + s11linkrisks + s10linkrisks + bis6q3 + bis10q5 + s6linkrisks + bis10q2 + s7linkrisks + bis10q1 + s10q7medic + s2q2b + s2q2d + s10q7child + s3linkrisks + bis12q3 + s2q9d + s2q2a + pd6s7q4 + s2q2c + s6q7perp + (1|region) + (1|ethnicgroup) + (1|offencetype) + (1|Sentgroup), data=TFwhole, family="binomial"))

Significance codes - Signif. codes: 0 '***'; 0.001 '**'; 0.01 '*'; 0.05 '.'; 0.1 ''; 1

To continue testing, three subsequent items were built on to Model36a, none of which reached significance nor contributed to an improved model fit beyond that achieved by Model36. At this point, an ANOVA was run between Model36 and Model36a to determine the impact of retaining these items and this resulted in a non-significant difference between the two models (Chi^2 =5.7527; df=2; p<0.1). The 20 items of Model36 were thus presented to the women's criteria task group for discussion.

Model 36 consultation – Due to the real-world nature and policy implications of this research, the final revision of the women's screening tool could not be guided by statistics alone, hence the need for a mixed-methods approach and consultation with experts in the field. The twenty items

comprising Model 36 are presented in Table 3.30, with optional items given in italics and the items with non-significant parameter estimates given in bold.

Table 3.30Full set of items indicated as most predictive of women screening in to the Pathway

No.	OASys location and item detail (presented in order of appearance)
1	2.2a- (Did offence involve) Carrying or using a weapon
2	2.2b- (Did offence involve) Any violence or threat of violence/coercion
3	2.2c- (Did offence involve) Excessive use of violence/sadistic violence
4	2.2d- (Did offence involve) Arson
5	2.9d- (evidenced motivation) Emotional state of offender
6	s2- Analysis of offence issues linked to risk of serious harm, risks to the individual and other
	risks.
7	s3- Accommodation issues linked to risk of serious harm, risks to the individual & other risks
8	6.3- Experience of childhood
9	6.7- Evidence of domestic violence / partner abuse (perpetrator)
10	s6- Relationship issues linked to risk of serious harm, risks to the individual & other risks
11	7.4- Manipulative / predatory lifestyle (optional)
12	s7- Lifestyle and associates issues linked to risk of serious harm, risks to the individual &
	other risks
13	10.1- Difficulties coping
14	10.2- Current psychological problems / depression
15	10.5- Self-harm, attempted suicide, suicidal thoughts or feelings
16	10.7a- (reported) Evidence of childhood behavioural problems (optional)
17	10.7d- (reported) Ever been on medication for mental health problems in the past (optional)
18	s10- Issues of emotional well-being linked to risk of serious harm, risks to the individual &
	other risks
19	s11- Thinking / behaviour issues linked to risk of serious harm, risks to the individual & other
	risks
20	12.3- Attitude towards staff (optional)

The nature and apparent function of these items were discussed in relation to the benefits of retaining all items in the revised screening tool. To this end, the presence of optional items was noted as contentious; these non-mandatory items in OASys may be left unanswered whether or not the probation officer deemed that the person under assessment presented with the factors captured by these items. As four of the twenty items were non-mandatory, it was noted that screening outcomes could vary considerably for two women with similar presentations, based on the optional format of these items. It was therefore agreed that for a more reliable screen to be devised, none of these optional items would be included.

The two items that did not reach statistical significance in the final regression model were also discussed. Item 2.9d "Emotional state of the offender" (as an evidenced motivation for the offence) was noted as being clinically relevant in relation to the expression of personality difficulties and how these can manifest in offending behaviour. Similarly, the second item "Relationship issues linked to risk of serious harm, risks to the individual & other risks" was noted as being clinically relevant given the significant impact personality difficulties can have on interpersonal relationships and vice versa. This item was therefore deemed relevant to the female OPDP caseload, particularly given the importance placed on relational approaches underpinning the OPD Pathway ethos. While these items very slightly weakened the model fit statistics, their clinical relevance resulted in their retention in the revised tool. Table 3.31 was also functional in informing decisions made around retention and removal of questionable items.

Threshold setting – In setting a threshold score for screening women into the Pathway, a number of factors were considered. It was important that screening would be balanced and would not be too restrictive, thus too high a threshold score may exclude women with multiple complex needs while too low a threshold score may over-stretch OPD Pathway services. In discussing threshold-setting in clinical measures, Zhou, Obuchowski and McClish (2011) noted that while there may be no definitively right or wrong decision, values set should reflect the consequences of incorrect classification made, and this was taken into consideration in the present study (Zhou, Obuchowski, & McClish, 2011).

In investigating potential outcomes of a 16-item screen the thresholds of 8 vs 10 were discussed and contents of Table 3.31 helped informed this discussion. To ensure clarity of outcomes in terms of caseload figures, this table presents the total number of women who would screen in and out through a 16-item screen as compared to outcomes from an 18 item screen (i.e., retaining optional items and removing non-significant items) and a 20-item screen (retaining all items). Exploration of outcomes for a screen with optional and non-significant items removed (i.e., a 14-item screen) was not pursued. Note that numbers "screening in" in this table relate to women meeting eligibility (RoSH/MAPPA) criteria and reaching the respective thresholds of each set of suitability criteria. Here, it can be seen that a threshold of 8 on a 16-item tool would screen in 2,688 women, whereas with a threshold of 10/16, a total of 2,085 women would screen in. Interestingly, comparing 8/16 with 8/20, only 138 fewer women would screen in through the 16-item measure than the 20-item measure. This may suggest these optional items would not add much in terms of capturing appropriate women or may be an indication of their lack of use. Similarly, while the threshold of

8/16 (optional items removed) compared with 8/18 (non-significant items removed) would result in 58 women no longer screening in, 150 additional women would be captured by the retention of items 2.9d "Emotional state of offender acted as motivation" and "section 6-relationship issues links to risk" (an overall increase from 2,596 screened in through 8/18 to 2,688 screened in by 8/16). This indicated somewhat greater strength of the two "low power" items over the four optional items, further supporting removal of optional items while retaining the two non-significant items.

Table 3.31Crossover of screening outcomes comparing 16, 18 and 20 item screens with thresholds of 8 or 10

Screen format			Screen in b	by 8+ on 20-item	Screen in b	oy 10+ on 20- n
		Totals 👢	Yes	No	Yes	No
	Totals →	16307	2826	13481	2452	13855
Screen in	Yes	2596	2596	0	2452	144
by 8+ on 18-items	No	13711	230	13481	0	13711
Screen in	Yes	2014	2014	0	2014	0
by 10+ on 18-items	No	14293	812	13481	438	13855
Screen in	Yes	2688	2688	0	2443	245
by 8+ on 16-items	No	13619	138	13481	9	13610
Screen in	Yes	2085	2085	0	2085	0
by 10+ on 16-items	No	14222	741	13481	367	13855

Finally, to further explore the utility of a 16-item screen, the outcomes of this approach (with either an 8 or 10 point threshold) were compared to the current OPD database in Table 3.32. With a 10 point threshold on a 16-item screen, where all items are mandatory and therefore less likely to be inaccurately recorded, 2,085 women would be screened in to the OPD Pathway. This approach would result in 486 women being "missed", however in practice, these women would not actually be removed from the OPDP caseload. A score of 10 out of 16 represented one standard deviation above the mean, and this was reached by 3,884 women. It was also at this point in the distribution of scores that tapering off began (see Table 3.33), further supporting this threshold.

Table 3.32Screening outcomes for 16-item approach compared against current OPD database

Screen format			Screen in by 8+ on		Screen in by 10+ on	
			16-item screen		16-item screen	
		Totals 🖡	Yes	No	Yes	No
	Totals	16307	2688	13619	2085	14222
On OPD	Yes	1869	1603	266	1383	486
caseload	No	14438	1085	13353	702	13736

Scale statistics – Once the 16-item tool was confirmed, the properties of this revised set of OPDP suitability criteria were explored. Returning to the full dataset, and following listwise deletion of cases with missing variables, reliability analysis conducted in SPSS on 15,266 women found this 16-item screen to have good internal consistency, with a Cronbach's alpha of 0.840. The mean scale score across all women was 6.17 (SD = 3.83; variance = 14.648) with a skewness of 0.203 indicating a close to normal distribution of scores. The removal of one item ("s2q2d - Arson") very slightly improved reliability to $\alpha = 0.843$, however given the purpose of this scale and the clinical relevance of personality disorder in relation to fire-setting (Ducat, McEwan & Ogloff, 2017; Karsten, de Vogel & Lancel, 2016), no items were removed.

Combining Risk and Need criteria – Achieving an appropriate balance between risks and needs was the next important factor to consider. It is well-established that complex psychological needs are prevalent throughout offending populations, not just in those presenting a higher risk of harm to the community or to themselves. While acknowledging this, the OPD Pathway is a limited service that is aimed at addressing complex psychological needs in individuals who present a higher risk of harm or of re-offending. Setting a threshold score was thus also informed by exploring the overlap between complex needs, as indicated by the 16-item screen, and assessment of risk, as indicated by the risk criteria established in Study 3.1. Table 3.33 presents the crosstabulation of women meeting revised eligibility criteria with each possible total score on the 16-item screen. Of the 3,253 women meeting eligibility criteria, a total of 2,085 women presented with ten or more of the revised 16-item PD scale. As has been previously stated, the OPD Pathway operates at a somewhat flexible capacity of +/- 2,000 women within its services, thus the 10 item threshold would largely maintain this caseload (bearing in mind women currently screened in would not be removed).

Table 3.33Cross-tabulation of total scores on 16-item PD scale and risk criteria with cumulative % screening in at each score threshold

Alternative PD	MAPPA/R	oSH criteria	N screening in (%
items total score	No	Yes	of total)
0	989	11	3253 (19.9%)
1	855	15	3242 (19.9%)
2	1311	23	3227 (19.8%)
3	1636	47	3204 (19.6%)
4	1533	71	3157 (19.4%)
5	1203	88	3086 (18.9%)
6	1065	144	2998 (18.4%)
7	926	166	2854 (17.5%)
8	900	252	2688 (16.5%)
9	837	351	2436 (14.9%)
10	773	457	2085 (12.8%)
11	522	465	1628 (10%)
12	352	500	1163 (7.1%)
13	116	379	663 (4.1%)
14	35	214	284 (1.7%)
15	1	69	70 (0.4%)
16	0	1	1 (0%)
Total	13054	3253	

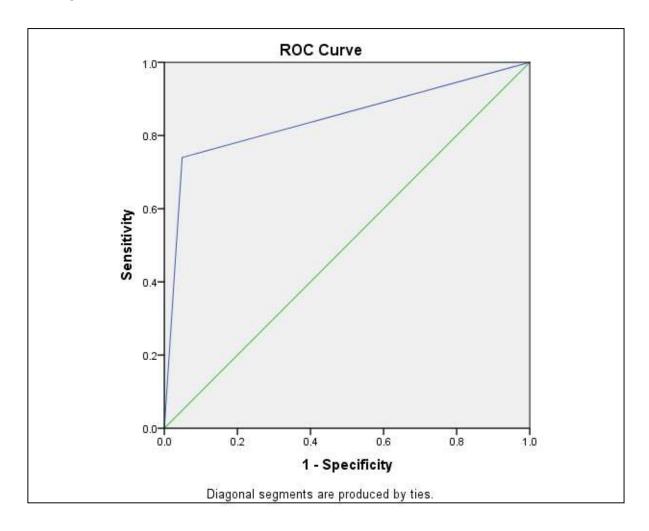
Accuracy – It was not possible to produce a confusion matrix of "actual" vs "predicted" OPD women from the full NPS-CRC caseload given that, at the time of analysis, the CRC caseload was as yet not subject to screening processes. Such a task was also confounded by the ever-present quandary of whether or not the "right" women for the OPD Pathway were those who were currently screened in, through whichever of the three possible routes they did so. In spite of this, in an effort to gauge the potential accuracy of this revised set of criteria, screening outcomes from the revised tool utilising a 10-item threshold were assessed against current OPD screening status, as detailed in Table 3.34. Making the assumption that currently screened-in women were appropriately identified, these figures allowed the percentage of sensitivity, specificity and precision to be calculated. The revised tool demonstrated a sensitivity of 74%, with 486 women currently screened in being "missed" by the revised criteria. It should be noted however, that in reality these women would not be denied access to services and taken off the OPD caseload, rather they would remain in addition to the newly identified women. In terms of specificity, which is the ability to correctly identify when a condition is not present, a rate of 95% was achieved. In a caseload where the condition being predicted is relatively rare, this was an unsurprisingly high value.

Table 3.34Revised screening criteria compared against current OPD caseload status

		Revised screening criteria			
		Out	In	Total	
On OPD	No	13736	702	14438	
caseload	Yes	486	1383	1869	
	Total	14222	2085	16307	

The trade-off between specificity and sensitivity can be calculated by producing a Receiver Operating Characteristics (ROC) curve, as displayed in Figure 3.7. The resultant Area Under the Curve (AUC) was 0.846 (s.e.=0.006, under nonparametric assumption), indicating an 84.6% "accuracy" in discriminating screened in from screened out women. While not directly comparable to the 71% accuracy rate reported in Study 3.2a due to different samples being involved, this was a considerably strong finding in support of this revised set of criteria.

Figure 3.7Receiver Operating Characteristics (ROC) curve produced between current OPD caseload and revised screening criteria outcome.



In evaluating a screening tool designed to identify a condition that is relatively rare however, a better estimate of accuracy is the precision rate. Considering OPD screening aims to identify a "condition" that is present in roughly 12% of the population under scrutiny, the revised tool's precision rate was calculated. The precision rate states the correctness of a positive prediction and is calculated by dividing the number of true positives by the total number of positives predicted. The precision rate for the revised screen was 66%, which in terms of accuracy, implies the revised tool was potentially over-inclusive. This is evidenced in Table 3.34 where it can be seen that 702 women would be "added in" to the OPD caseload through the use of the revised criteria. Taken in conjunction with the finding that half of survey respondents thought too few women were identified by the current tool, this precision rate was deemed acceptable.

3.3.5.3 Interim summary

All sections of OASys were considered as source material for a new set of criteria to identify suitable women for OPD Pathway intervention. Through the use of logistic regression modelling, a set of 20 items were identified as potentially useful in fulfilling this role. In depth policy-based discussions supported by additional inspection of relevant caseload figures resulted in 16 of these items being selected for inclusion in the tool. With items being marked present or absent (1 or 0), an overall threshold score of 10 was required to meet suitability criteria.

There was an observable grouping of item types within the 16 items making up the final suitability criteria. These were 1) those relating to overall section links to risk (6 items); 2) offence characteristics (5 items); 3) self-harm and psychological difficulties (3 items); and 4) past and present interpersonal issues (2 items). It was notable that several section links to risk were identified as predictive of OPDP screening. While Study 3.2 was specifically focused on establishing indicators of complex psychological needs, these items potentially perform a bridging function in connecting relevant psychological factors to risk while not directly implying presence of risk features themselves. This item type is significant also for the fact that OPDP criteria note a 'clinically justifiable link between the personality disorder and offending'.

A potential weakness of this stage of analysis was the inclusion of non-mandatory items in the modelling process, given those that were retained in the final model were ultimately excluded based on their optional nature. The decision to include these items in initial model building resulted from

the discovery processes including consultation and, similarly, decisions around excluding these items once noted as optional were made at a group level. While it was acknowledged that inclusion of these items would likely not have significantly affected resultant caseload figures (given over 12,000 data points were available for these items), the pragmatic approach to ultimately exclude these was based on a desire to deliver a robust tool free of variation in item use and the obscurities of the previous tool.

Strengths of this study included the thorough approach taken to initially identify potential OASys items to replace the current suitability criteria in use. Utilising established diagnostic information and acknowledging factors found to be associated with PD and types of offending amongst women (e.g., Warren et al., 2002) was important in identifying relevant OASys items for initial modelling. Additionally, seeking input from frontline and strategic professionals ensured a real-world applicability of the resultant criteria and scoping potential caseload outcomes at various decision-making stages ensured processes remained aligned with study objectives.

3.6 Overall chapter findings

The results of studies 3.1 and 3.2 were combined to produce a balanced screening tool for identifying women who were eligible and suitable for OPD Pathway involvement (see Figure 3.8 for final version rolled out). For women to be deemed eligible for OPD Pathway involvement, they were required to either present with a high or very high Risk of Serious Harm and/or be eligible for management under Multi-Agency Public Protection Arrangements. Once eligibility criteria were met, a threshold score of 10 out of 16 suitability items was required as indicative of complex personality difficulties.

Feasibility analysis

To assess potential caseload impacts and gather operational staff views on outcomes, a pilot process was undertaken in two OPD Pathway regions prior to national rollout of the resultant tool. Complications with local delivery of this piloting exercise meant that a fully robust process was not followed and findings generated from this exercise were considered indicative. In Wales, where NPS and CRC had already reunited, the revised tool was initially implemented only with women newly sentenced in the month of September 2020, with women as yet unscreened but sentenced before September being screened through the old method. The reasoning for this complication was provided by the local OPD lead as resulting from a desire not to over-burden too many staff with

learning the new process. This resulted in a very small number of women coming through the Wales pilot given the rate of sentencing of women generally, and particularly during covid restrictions where courts were scarcely operating. In spite of a backlog of women waiting to be screened, this locally-imposed limitation to implementation considerably reduced the anticipated number of participants. Extension of the pilot in Wales to December 2020 saw the eventual expansion of screening to all women waiting to be screened, resulting in a final pilot count of 59 women screened. This pilot process was also carried out in London from January to February 2021, resulting in 35 women screened through the revised tool. Local limitations were again imposed, such that only data from NPS women who had already been screened in to the OPD Pathway were subjected to the revised tool and this was carried out by OPD staff, rather than individuals' probation officers.

Success criteria for this pilot were as follows:

- screening outcomes are proportionate with findings from the data analysis (e.g., Wales 11.3% of female caseload; London 46% of NPS women)
- use of clinical override does not increase (proportionally)
- staff indicate women screening in fit with professional expectations
- qualitative feedback from staff indicates ease and practicality of use
- no adverse consequences arise as a result of screening outcomes

While neither feasibility process replicated fully realistic scenarios, the findings produced were in line with expectations given the circumstances present. Rates of screening were as anticipated, relative to each cohort, with Wales screening in 8 of 59 women screened and London screening in 25 of 35 NPS women who had already been screened. Clinical override was employed once across the 94 women screened. Feedback was gathered from 25 probation officers (Wales = 4, London = 21) who used the screen with 20 respondents agreeing that the screening outcome matched their professional expectations. Of the remaining responses three indicated a mismatch with previous screening outcome and two stated they didn't know the case well enough to say. The majority of respondents also noted that the tool was easy to use; the relevant information was very easy to find; and it was quick to complete.

Given the precision rate previously identified, the means by which women were screened out during this feasibility process were explored in order to determine if either set of criteria were more exclusive than the other. Table 3.35 presents the breakdown of criteria met by the 61 women screened out. Of these, 54 did not meet eligibility criteria and 44 did not meet suitability criteria. However, a further 11 women had no suitability information recorded as the practitioner did not

complete the screen once eligibility criteria were not met. In this case, it is possible that up to 55 women did not meet the suitability criteria, which would indicate a reasonable balance between the two sections.

Table 3.35 *Crossover of criteria met by 61 women screened out through piloting of revised tool.*

	Eligibility cr	Eligibility criteria		
Suitability criteria	No	Yes	Total	
No	37	7	44	
Yes	6		6	
(blank)	11		11	
Total	54	7	61	

Figure 3.8Revised W-OPDP screening tool implemented across England and Wales in June 2021.

		Personal information			
Surnan	ne:	Forename(s):			
DOB:	2,000	CRN:			
Offend	er Manager:	104 DC			
		Risk screening			
		for Multi-Agency Public Protection Arrangements on their current event/ — Cat 1-3 or Level 1-3)	YES/NO		
	he woman ha	ave a High or Very High Risk of Serious Harm score on their current event/	YES/NO		
		OASys Women's OPD Screening Tool	L.		
Item OASys Question Section					
	2.2a	(Did offence involve) Carrying or using a weapon	}		
Ë.	2.2b	(Did offence involve) Any violence or threat of violence/coercion			
	2.2c	(Did offence involve) Excessive use of violence/sadistic violence			
	2.2d	(Did offence involve) Arson			
5	2.9d	(evidenced motivation) Emotional state of offender			
5	Section 2	Analysis of offence issues linked to risk of serious harm, risks to the individual and other risks.			
7	Section 3	Accommodation issues linked to risk of serious harm, risks to the individual & other risks			
3	6.3	Experience of childhood			
9	6.7	Evidence of domestic violence / partner abuse (perpetrator)			
10	Section 6	Relationship issues linked to risk of serious harm, risks to the individual & other risks			
11	Section 7	Lifestyle and associates issues linked to risk of serious harm, risks to the individual & other risks			
12	10.1	Difficulties coping			
13	10.2	Current psychological problems / depression			
14	10.5	Self-harm, attempted suicide, suicidal thoughts or feelings	3		
15	Section 10	Issues of emotional well-being linked to risk of serious harm, risks to the individual & other risks			
16	Section 11	Thinking / behaviour issues linked to risk of serious harm, risks to the individual & other risks	8		
		Total score (count number of YES)			
SCREENING OUTCOME:		Part 2: I have answered YES to one or both items The total score is 10 or more The total score is 9 or less	Screen in		

^{*}Design credit: Laura d'Cruz, HMPPS co-commissioner for London and Women

3.7 Discussion

Combining outcomes from Study 3.1 and Study 3.2, a new process for identifying women for inclusion in the OPD Pathway was developed. This screening tool considered two essential elements - the risk of harm or reoffending, as indicated by routinely utilised systems-based identifiers, and a set of items identified as indicative of complex psychological difficulties. Guided by the presentation of the iterative in-depth analyses reported here, multi-agency and multi-professional discussions led to the final decision on threshold-setting of this two-part tool. Key criteria were drawn from a methodical and broad-ranging approach of consulting established diagnostic nomenclature, expert clinical and operational input and subjecting resultant output to further inspection to ensure appropriate fit.

Approval and implementation process

Prior to implementation, a consultation document including abbreviated versions of the entire analytical and decision-making processes underpinning the development of this tool was disseminated across the OPDP women's estate for feedback. This included requesting opinions on setting a threshold of 8 vs 10 on the suitability criteria and asking for any additional points for consideration so that these could be taken into account prior to national implementation. Responses (d'Cruz, 2021) were received from twenty individuals, which were grouped as follows:

- 6 Core/IIRMS OPD service leads (either operational or clinical)
- 6 from Probation (non-OPD pathway)
- 3 WOPD service leads (one in community; one in custody; one in WEMS)
- 2 from the Women's Prison Group Director (PGD)'s office
- 1 academic
- 1 OPD Co-Commissioner
- 1 from HMPPS Women's Team

From these respondents, seven were wholly supportive of the revised process while seven others indicated disappointment with the exclusion of medium risk women from OPD entry. The gender responsive approach was praised and some respondents noted training would need to be provided to ensure the tool was correctly utilised. Some queries were raised around wording of OASys items (which could not be changed) and clarity around MAPPA management being specific to the current sentence. In relation to the threshold set, 6 respondents favoured 8+, while 8 favoured 10+ and a further 6 did not express a view. These responses, along with additional commentary from respondents, were discussed and addressed accordingly by the W-OPD task group. The revised tool,

along with all consultation documents and subsequent responses, were presented to the OPD Programme board⁶ for final sign-off. The board requested further information on the potential impacts of the two alternative threshold scores of 8 vs 10, particularly in relation to women "missed" (i.e., women who were previously screened in but who would not meet the new criteria). An additional set of analyses was carried out to explore these impacts. Two additional datasets were accessed for this purpose – one relating to OPD activity at a core community level (regarding consultation and formulation activity) and one drawn from OPD interventions services (custodial treatment provision). The particulars of these analyses are set out in Appendix L, which was provided to the board in May 2021 with the significant caveat that only rudimentary analyses could be carried out given the inconsistent quality of the data available. The board subsequently approved the rollout of the revised tool with a threshold of 10/16 with the proviso that a review of outcomes would be carried out after one year of national implementation.

Once approved by senior leaders, these new criteria for screening women into the OPD Pathway were implemented across England and Wales in June 2021. This was managed through communications sent out through regional co-commissioners as well as posts made on a centrally managed online platform used by the entire OPD network. To allow for appropriate recording of outcomes on the new tool, the case management system nDelius was updated to include the screening outcomes of "WOPD Screen 10+" and "WOPD Screen <10". For completeness and validation purposes, an assurance was made that caseload figures and associated OPD activity undertaken with newly screened in women would be reviewed after one year of use. Data for this analysis have been requested and will be the subject of a future study.

Alternative approaches

There have been two other studies that have addressed personality disorder screening using OASys items and one additional study has sought to validate the established OPD screening tool. None of these studies utilised population-level data and none explored factors relating to gender in screening outcome. Each of the following studies took a limited approach to exploring personality disorder identification and did not utilise or consult with policy and practice insights.

Bui, Ullrich and Coid (2016) identified 10 OASys items thought to be indicative of PD and they used split sample validation in a cohort of 574 individuals drawn from the Prisoner Cohort Study (PCS;

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⁶ This board reports to NHS England Specialised Commissioning Strategy & Policy Group and HMPPS's Prison Management Board and Probation Management Board. The OPD board is comprised of 18 individuals occupying senior leadership positions across operational and strategic branches of NHS and HMPPS.

Coid et al., 2007) to establish accuracy of this screen. The PCS consisted of 1,717 prisoners convicted of violent or sexual offences completing diagnostic clinical interviews, one of the outcomes of which was personality disorder diagnoses. With a PD diagnosis as the outcome variable, Bui et al.'s 10 items were subject to logistic regression modelling, resulting in a sensitivity rate of 74% and a specificity rate of 71% within their test sample. While lauded as a useful screen for PD and having some degree of overlap with the established OPD screening items (n=3) in relation to impulsivity and age of onset of offending, this tool was not taken forward by the CJS. Additionally, although the PCS cohort consisted of male and female data, no consideration of gender differences in levels of sensitivity or specificity were noted and no attempt to identify gender-specific items was made.

In an effort to validate the OASys PD screen, Shaw, Minoudis and Craissati (2012) utilised the Standardised Assessment of Personality – Abbreviated Scale (SAPAS) with 447 individuals on probation in London. A Chi² test indicated poor agreement between SAPAS and the OASys PD screen outcomes with fewer than half of those screening in to the OPD Pathway reaching the SAPAS cut-off score. These authors further explored measures of association between the SAPAS and 9 other OASys items theoretically linked to PD and found significant associations for five of these. Notably, four of these five items were also identified within the final set of items proposed in the present study. While the SAPAS is not a comprehensive diagnostic measure of PD, it has been validated for use with probation service users (Pluck, Sirdifield, Brooker, & Moran, 2011), thus these findings are encouraging in terms of their implications for the present study, offering a degree of content validation. This was, however, a small-scale study within one probation region and while links with reconviction and other risk metrics were explored, no consideration of gender responsivity was demonstrated in these analyses.

Another study conducted in one OPD region explored the predictive value of the established OPD screen in correctly identifying individuals who were screened into the Pathway (Mawby, Newman, & Wilkinson-Tough 2020). Using clinical judgement as their dependent variable, contingency tables were used to calculate the rate of agreement between the findings from the established OPDP screening tool and clinical judgement. A positive predictive value of 72% and a negative predictive value of 91% were found and Mawby et al., noted that these rates were appropriate to the service requirements. Again, no element of gender-responsivity was explored in this study and no investigation into the various "routes in" was carried out. This study incorrectly claimed to be the first to explore the effectiveness of the established OPDP screen in identifying PD and also incorrectly attributed findings from Bui et al., to the content of the OPDP screen.

The present study was the first to investigate a revised means of screening for personality difficulties within a female offending population and it did so using robust statistical methods. While the three studies described above sought to identify PD as a standalone concept, the present study specifically sought to explore gender-responsive features of likely PD in a forensic population. It is of course likely that there will be some overlap in the presenting personality difficulties of male and female offenders, and this will be important to explore in future studies. However, with the HMPPS caseload being over 90% male, identifying those features that are gender-specific as opposed to gender-neutral may be particularly useful when exploring male PD features.

Strengths and Limitations

A clear limitation of this study was the use of current screening status as the outcome on which all items were regressed. This was problematic given this status was generated through a combination of using the male PD criteria, multiple changes in female eligibility criteria and a likely over-reliance on clinical override, resulting in a lack of certainty around whether "the right women" were identified. As noted however, this unavoidable condition was a factor of the real-world nature of the overarching study and a consequence of the service design and entry criteria. With regard to this latter point, the development of the OPD Pathway as a non-diagnostic programme which seeks to balance risks with complex psychological needs was purposefully positioned to consider likely personality difficulties rather than disorders. Thus it would not be desirable or feasible to carry out the level of psychological assessment required to diagnose personality disorder with every woman on probation or in prison in order to have a more accurate outcome. Indeed, the OPDP service was developed, at least in part, as a response to the lessons learned from the DSPD service where diagnosis was key to service inclusion. It was therefore deemed appropriate to pursue this approach.

On a pragmatic level, the process for exploring inclusion of random intercepts may have been better designed. Reference categories for the models presented in Tables 3.16-3.19 were determined by alphabetical position, resulting in some reference categories being the smallest group within the related variable. This is not an ideal outcome as comparing rates of an outcome in large groups to considerably smaller groups may result in skewed findings. Setting the reference category to more proportionally balanced groups may therefore have produced alternative insights. It is however acknowledged that the inclusion of random intercepts in regression modelling allows for consideration of potentially significant differences between groups, thus inclusion of these random intercepts in the overall modelling will not have influenced accuracy of model fit.

This study was strengthened by its position as both a policy-informed and policy-informing exercise. As a gender-responsive approach to identifying appropriate women for OPDP intervention had not previously been determined, this was a first step in addressing this gap in service provision. While exploration of proposed screening content was limited to the Offender Assessment System, this can simultaneously be seen as a strength given that all individuals convicted of offences in England and Wales are subject to regular OASys assessments. As such, this limiting factor allows for all individuals to be assessed for inclusion in a routine way, without any additional impact on resources. The regular discussions with task group members at key stages in analysis and the consultation of the wider women's OPD estate meant that the development process maintained alignment with policy while being critically informed by robust statistical processes.

Future research

Future research ought to consider how this newly devised screening tool differs in terms of the characteristics of women identified for OPD Pathway inclusion, the level of involvement undertaken with women screened in through this revised process, and the relative use of clinical overrides resulting from this change. Operational insights into the impacts of this revised approach could also provide useful points for consideration, particularly in terms of practice implications and any changes in the nature or frequency of referrals to other OPD or non-OPD services. Importantly, Andrews et al., noted that criminal justice programmes that do not address the major criminogenic needs may cause increases in reoffending whereas those informed by the RNR principles have been found to reduce recidivism (Andrews, et al., 2012). With this in mind, and given the restrictive nature of risk metrics allowed for consideration in this study, it may also be useful to explore rates of reconviction and recall, in conjunction with other indicators of community failure, to determine how risk and protective factors are considered with women presenting with complex psychological needs. Finally, as noted in the introductory content, the origins of the established OPDP screen are somewhat unclear and given the findings from Mawby et al., (2020) and Shaw et al., (2012), it is clear that the male OPDP criteria need to be examined.

Chapter 4 – Understanding the Functions of OPD Pathway Psychological Consultations

4.1 Abstract

Objectives: Psychological consultation between probation officers and psychologists is the main service provided as part of the Offender Personality Disorder Pathway (OPDP) core community delivery in England and Wales. This study explored the functions of these consultations with a particular focus on how they are utilised by probation staff in Wales.

Design: A large-scale qualitative cross-sectional approach, incorporating a follow-up component, was employed.

Method: Data from open-ended audit forms were analysed using conventional content analysis.

Data were gathered from OPDP staff and probation officers at two time-points - during consultation sessions and at follow-up approximately 3 months later. Complete data were available for 145 consultations and were subjected to conventional content analysis using N-Vivo.

Results: Three super-ordinate categories consisting of seven themes were identified, and these encompassed 28 sub-themes. The nature of sub-themes ranged from broad areas including 'working better' and 'psychological understanding' to more specific content including 'impact on workforce', 'understanding and helping the offender' and 'OM-offender interactions'. This chapter presents a summary of emergent themes within the context of OPD delivery in Wales. Conclusion: A model of consultation functionality was developed and this outlines the broad probation context surrounding consultations, the active psychological and practical components comprising consultations, and related outcomes experienced by consultees in relation to their working practice.

4.2 Introduction

Once individuals have been identified as meeting OPDP criteria, their Offender Managers (OM) are invited to consult with Psychologists or specialist probation officers on the presenting concerns of screened-in individuals. The support provided to OMs is intended to help them develop and maintain good engagement with typically difficult to engage individuals, in order to increase awareness of criminogenic needs and support improved sentence planning (Skett, 2014). Through an increased understanding of the biopsychosocial underpinnings of risky behaviours, OMs are assisted in their efforts to reduce the likelihood that complex and challenging individuals will re-offend. An essential part of this process is a discussion around the means by which an individual was screened in to the Pathway, whereby an OM can elaborate on the specifics of the criteria met. One step in this discussion is to determine if the outcome of the screening process was appropriate and whether a clinical override of this outcome may be required. As established in Chapter 3, the predominant route into the Pathway for women was through the additional indicators section, and given the breadth of content within indicator items, a key component of the consultation process is exploring the nature of the presenting complexities. It is through this process of exploring the presenting concerns of the individual (both from screening criteria met and from issues highlighted by the OM as arising in supervision sessions) that appropriate approaches can be identified within OPD consultation. This discussion may result in particular considerations being emphasised, such as awareness of the role of trauma in later interpersonal behaviour or the function of particular coping strategies which may stem from noted criminogenic needs. The role of gender in the presenting complexities is likely to be discussed also, with the possibility of particular gender-informed theoretical models being emphasised to assist management strategies pursued (Covington, 1998). While the contents of the previous chapter highlighted several areas of consideration for women accessing the OPD Pathway, it should be noted that the present study was carried out prior to the introduction of the revised women's screening process. With this in mind, note that the same source material for the presenting difficulties of both men and women (i.e., the former unisex screening tool) informed the consultation discussions addressed in the present study.

4.2.1 Establishing the need for psychological input

As noted in Chapter 1, significant changes to probation training and delivery towards the end of the last century resulted in a workforce which was less well-equipped to deal with the psychological complexities facing them in supervision sessions. Annison, Eadie, and Knight (2008) discussed developments in the focus of probation officer training, reviewing three studies addressing

probation officers' perspectives on this process. These authors noted that until the late 1990's, probation qualifications were positioned within the discipline of social work, whereby new recruits were provided with the necessary skills to carry out emotionally taxing and complex work. Political moves to harden the public image of this service led to probation training becoming a bespoke diploma course, with the outcome being the development of a service that was more correctional in nature (Raynor & Vanstone, 2007; Turner, 2010). With this move away from an interpersonal approach to offender management and towards a punitive stance, officer training became more concerned with identifying appropriate means of punishing potentially risky behaviour and less inclined towards collaboratively identifying and addressing precipitating factors. The studies reviewed by Annison et al., were large-scale (N=596 probation officers) and indicated that the most important factors for those seeking a career in probation work was the opportunity to work with people and to help people change (Knight, 2007). Feedback from trainees and newly qualified officers indicated that the reality of the role was different to what they had expected. Specifically, they had not expected such overwhelming caseload sizes, repetitive paperwork and time in front of a computer instead of working directly with people (Annison, 2006; Eadie & Winwin Sein, 2004). Without an adequate amount of time given to direct working and rapport building, probation supervision could be seen by both OMs and those on their caseload as a mere formality in terms of monitoring adherence to license conditions.

The high rate of personality disorder estimated to exist within probation and prison populations (Howells & Day, 2007; Pickersgill, 2013), means that this issue is further compounded for probation officers managing offenders with traits of PD. In the absence of specific training on the matter, issues such as volatility, mistrust, self-harming and impulsivity may be seen as grounds for increased monitoring and punitive action. Staff may not recognise problematic behaviours as indicative of personality disturbance and instead may misinterpret such behaviours as antagonistic. Responding with a punitive approach may then further exacerbate staff-offender relations. Indeed, Clark and Chuan noted that OMs faced with such presentations may focus solely on the perceived riskiness of such behaviours and move quickly to recall proceedings, which in turn does nothing to address the underlying difficulties perpetuating these behaviours (Clark & Chuan, 2016).

In an effort to address these offender management concerns, Ramsden and Lowton (2014) sought to clearly identify the various factors probation practitioners might have in determining how to engage with and motivate offenders with personality difficulties. These authors stated that well-functioning individuals can have the tendency to believe theirs is a shared understanding of everyday

interactions and motivations, thereby lacking awareness of the substantially different perspective less well-adjusted individuals may have. In the absence of a clear perspective on how a person with poorly formed attachments may have discordant views of the world, difficulties can arise in managing and communicating with such highly complex individuals under probation supervision. Difficulties in communication, on either side of the OM-offender relationship, can lead to misunderstandings and can delay or prevent the development of a collaborative approach to probation supervision. Ramsden and Lowton highlighted seven areas where probation officers might incorrectly assign meaning from their own thought paradigms to the behaviours of their service users and suggested that developing the supervisory relationship and taking a psychologically informed perspective rather than a personal one, may significantly improve engagement and management processes.

There was an apparent unmet need in probation practice, particularly in relation to working with individuals with complex needs. To establish the nature of this need, as part of the original development work for the Offender Personality Disorder Pathway programme, Shaw, Minoudis, Hamilton and Craissati (2012) investigated the competency of probation officers for working with offenders with traits indicative of personality disorder. Through the use of an unvalidated measure, the Personality Disorder - Knowledge, Attitude and Skills Questionnaire (PD-KASQ; Bolton, 2010), this study explored the self-reported competency of 150 probation officers (male=69, female=81) in working with offenders with traits indicative of PD. The authors appended three further forensic questions, addressing probation officers' understanding of the connection between PD and offending - both general offending and that of a sexual and violent nature - and their perceived ability to access specialist support. Scores were compared with data from staff from voluntary sector housing organisations as a loosely matched control group. Results showed that probation staff scored significantly higher on the 'understanding' sub-scale of the PD-KASQ than housing staff but no other significant differences were found. In relation to the additional forensic questions, fully qualified staff and staff from Public Protection Units⁷ (PPU) demonstrated greater awareness of the connections between personality disorder and offending than unqualified officers, although differences were not significant. Overall, results demonstrated that probation staff had no greater level of competency to work with PD individuals than a non-forensic comparison group. While these findings were clearly useful in identifying awareness of PD as lacking in this relevant group, an

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⁷ Public Protection Units manage the highest risk individuals on probation caseloads and are typically senior staff

additional comparison group of staff working in PD-specific services may have helped refine the level of training or input potentially required.

These findings led to an initiative for developing probation officers' level of competency to work with individuals with PD traits presenting with high risk of harm (Shaw, Minoudis, Craissati & Bannerman, 2012). This OPDP pilot intervention consisted of a tiered model of support to probation staff, with those managing the highest risk cases receiving the greatest level of psychological input. One-to-one and group level psychological consultations were provided to PPU staff in addition to monthly PD-related training. In meetings with project psychologists, case formulations and treatment and management strategies were developed. Training programmes focusing on different diagnostic categories and associated risks and treatment approaches were also delivered. In comparison, non-PPU staff were provided with one-day personality disorder awareness training and a supportive skills-focused training event.

To assess the usefulness of these initiatives, brief open-ended questions and PD-KASQ data were gathered at a one-year follow-up point. Using this measure, Shaw et al., (2012) stated that scores for all staff increased significantly in relation to understanding of PD, capability of working with PD and total scores. Only emotional reaction to working with PD was not affected. PPU officers obtaining higher scores at follow-up than non-PPU staff indicated that the greater intensity of service delivery to the former group impacted on their improved understanding and attitudes towards personality disorder. A similar pattern of differences was seen between PPU and non-PPU staff in response to the additional forensic questions. These findings indicated that the provision of psychological support and consultation processes to those managing high-risk individuals may improve offender managers' understanding of forensic links between personality disorder characteristics and propensity for violent and sexual criminality. Additionally, perceived knowledge of how to access appropriate psychological services was improved by consultation provision, suggesting potentially better longer-term outcomes for the individuals managed by officers accessing OPDP pilot services, if this acquired knowledge is put to use.

In order to ensure a relevant and useful service was established, Shaw et al., (2012) asked PPU staff what elements of the project were most useful. Disregarding the positive skewness of this question, responses indicated that case consultation provided the most useful support, followed by training, then group discussion and finally personality disorder screening processes. Additional comments indicated that working within the OPDP project improved understanding of PD and improved

professional competency. It was difficult to discern, however, which elements of the combined intervention produced which outcomes. Qualitative data implicating consultations as having the greatest impact were drawn from a small sample of 17 PPU staff. Additionally, some elements of improved self-report scores may have been attributable to general exposure to the intervention or training leading to a greater tendency to discuss PD or psychological features with colleagues. The specific features of this intervention were not clearly detailed, although this is likely due to the pilot nature of the programme and probable experimentation with processes at an early stage.

Encouraged by these findings, the Offender Personality Disorder Pathway initiative was rolled out to the wider probation service across England and Wales in 2013. This included the development of the OPDP strategy which outlined a set of standards to be implemented in all probation and prison regions nationally. One of the key elements of the OPDP framework was the introduction of case consultation and formulation processes which provide "targeted specialist advice and discussion between the staff from the [Health Service Provider] and the offender manager to consider the offender's psychosocial and criminogenic needs relating to their personality disorder and to make timely decisions about the sentence plan" (Skett, 2014 pp.4). Through the continuous development of the OPD Pathway, region-specific nuances emerged in the interpretation of exactly how consultation processes were delivered. Variances in approach tended to be determined based on resource availability and identified areas of need, with some regions favouring group-based approaches to consultation and others training specialist probation officers to deliver psychological consultations alongside psychologists.

4.2.2 Studies addressing the impact of OPD consultation

Over the next decade of OPDP delivery, several regional teams carried out research addressing consultation processes in order to evaluate the impact of the core community process of psychological consultations. As the structure, content and duration of consultation delivery differed to greater or lesser extents across regions, direct comparisons of findings were not possible. As such, the following section is structured in chronological order and the format of the service that was provided is described in brief. Within each segment, the research design, overall findings, and associated strengths and weaknesses are outlined.

Minoudis, Shaw, & Craissati (2012). The London Pathways Project: Evaluating the effectiveness of a consultation model for personality disordered offenders

Nature of the intervention: Over two years, two psychologists provided consultations and training to probation officers working in Public Protection Units in four London boroughs across East and South London. Additionally, co-working with offenders and monthly team discussions were also provided. Advice to OMs ranged from functional analyses to case formulations, with a small number of service users receiving psychological assessments. Recommendations related to strategies to improve engagement, appropriate pathways, case formulation to assist risk assessment, and general case discussions. Direct contact with offenders mostly took the form of letter writing, while contact such as video link, telephone or face-to-face was utilised to a lesser extent.

Methods of analysis: Records information and interviews with probation officers informed outcomes. Comparison tables and regression analyses with chi² statistic were utilised to indicate measures of success in terms of referral to services and community success rates.

Outcomes reported: Findings were presented in relation to movement into services and further offending statistics. Specific reference was not made to the impact of consultations, rather direct contact with psychologists was indicated as the primary factor, with 58% of those receiving letters responding with statements of interest in pursuing therapy. Additionally, general project involvement was associated with achieving movement into services for 157 (46%) service users. Significant associations were found between offenders who had responded to letters or had direct phone contact and entrance into programmes. This group also demonstrated fewer community failures than others, with an 83% chance of community success indicated by a regression model, holding other factors constant.

Strengths and weaknesses: While findings from this study were very positive in favour of OPD pathway processes, the authors noted the lack of a control group made causal links difficult to infer. This also draws into question the appropriateness of utilising Chi² analysis methods, as groups were not clearly defined, and the reliability of records and interview-based data is questionable. The amalgamated nature of the intervention made it difficult to attribute specific outcomes to individual features of the service. Overall it was shown that psychological involvement led to appropriate diversion into relevant programmes and an increase in probation officer awareness of available mental health services.

Minoudis, P., Craissati, J., Shaw, J., McMurran, M., Freestone, M., Chuan J., & Leonard, A. (2013). An evaluation of case formulation training and consultation with probation officers.

Nature of the intervention: In addition to the intervention described in Minoudis et al., (2012), probation officers in three London boroughs received training on how to write psychological formulations. Consultations consisted of team-based case discussions, whereby individual probation officers presented a case to their team, and this was discussed as a group which was facilitated by a psychologist. Over the course of six months, 43 case discussions using the 5 P's template took place across 12 teams, with each probation officer attending at least four discussions. Prior to this process, probation officers involved had received four 2-hour training sessions regarding formulation, understanding and working with personality disorder, and pathway planning for offenders with traits indicative of personality disorder.

Methods of analysis: The McMurran formulation checklist (McMurran & Taylor, 2013) was utilised to assess quality of formulations produced. Impact of training was assessed based on formulations written about fictitious case vignettes while case consultation was evaluated based on the quality of practice formulations written by the probation officers involved.

Outcomes reported: Results were mixed as no significant change in formulation quality as a result of training and case discussion were found in relation to one vignette while significant improvement was found in relation to a second vignette. A time-series analysis of different probation officers' formulation quality showed no differences over a six-month timeframe.

Strengths and weaknesses: This study presented with several flaws in its overall design. First, to expect the quality of complex psychological formulations to improve after eight hours of training and potentially only four case discussions was too ambitious. Additionally, practice formulations were assessed through time-ordered ratings and these formulations were written by several different probation officers over the course of six months' exposure to team consultations. It is difficult to discern how those produced towards the end of the study could differ substantially from those produced earlier, given the differences in numbers of sessions each officer may have attended. As such, the officer who wrote formulation number 43 may have attended fewer sessions than the probation officer who wrote number 20, therefore time-ordered ratings appear to have been a poor choice of analysis. Finally, as all probation officers involved in team case consultations also received structured formulation training, specific impact of consultations alone would not be possible to discern, although no quality differences were observed in any case.

Ramsden, J., Lowton, M. & Joyes, E. (2014). The impact of case formulation focussed consultation on criminal justice staff and their attitudes to work with personality disorder.

Nature of the intervention: A structured formulation-focussed psychological consultation process was provided to offender managers in the Yorkshire and Humber region. Consultations consisted of up to three one-to-one meetings of 60 to 90 minutes' duration, held over the course of a three- to six-week period. The Five "p's" framework (Dudley & Kuyken, 2006) was utilised and additional consideration was also given to the internal psychological drives behind problematic behaviours.

Methods of analysis: The specific area of focus was on changes in knowledge and understanding of personality disorder; perceived competency to work with personality disordered offenders; and attitudes towards personality disorder. These areas were assessed using the Personality Disorder Knowledge, Attitudes and Skills Questionnaire (PDKASQ; Bolton, 2010) and a bespoke, non-validated, self-report measure of perceived confidence and competence in relation to one's offender supervision practices. Data from 46 offender managers, 1 AP member of staff, and 2 unknowns were gathered prior to consultation and follow-up data were gathered within three months of the beginning of the consultation period.

Outcomes reported: Findings indicated significant increased knowledge and understanding of personality disorder between pre- and post-consultation data, however the rate of attrition was high (74%) and samples were not matched, thus specific inferences are difficult to make. Offender supervision scores also increased somewhat between data-gathering timepoints, however attrition on this measure was also high (n=23 pre- and n=6 post; 74% attrition) thus statistical comparisons were not made.

Strengths and weaknesses: The small sample sizes with high attrition rates preclude any generalisability of findings and the low power of the study weakens any inferences that might be made. The authors note that self-selection to complete follow-up questionnaires may indicate a potential bias in responding, such that those who responded may have only done so as they had positive experiences to report. The authors also noted that the nature of the measures used make it difficult to determine which specific elements of consultation had an impact. While there was slight improvement in perceived competency, this could not be directly related to having had a consultation given that other training and service access was available between data gathering periods.

McMullan, Ramsden & Lowton (2014). Offender Personality Disorder Pathway: Evaluation of Team Consultation.

Nature of the intervention: Team consultations following the 5 Ps model were provided in the Yorkshire and Humber probation region to three community probation teams, one prison probation team and one approved premises team. The consultation process involved identifying three goals for the consultation, gathering relevant information on presenting problems, applying psychological theory to these presenting problems, and reframing presenting problems in terms of coping strategies in order to consider how original goals may be achieved.

Methods of analysis: Focus groups and semi-structured interviews were carried out with teams who engaged with the consultation process and with those who had withdrawn. All data were subject to content analysis. Two focus groups were held (n=3 & n=6) and three semi-structured interviews were conducted with team managers, totalling 12 participants. The study protocol addressed criminal justice staff views of the consultation process, it's impact on their work and risk assessment, and whether or not there was anything they would change.

Outcomes reported: Four core thematic categories were identified from analyses. These were: 'awareness and understanding', which had five sub-themes addressing areas of learning around personality disorder and the factors that can influence various behaviours; 'person-centred approach', which highlighted the nature of change in offender managers' work to that of a more empathetic and responsive stance; 'defensible practice', contained five sub-themes which indicated that consultations were seen as a reminder of good practice and fitting in with previous training; and 'formulation' which referred to the importance of linking current behaviours to childhood events. Finally, in relation to suggestions for change, participants suggested that practical input and more flexibility from the Pathway Development Service would be welcome. The general findings from this study indicated that participants' understanding of personality disorder was improved and insights into one's own way of working were achieved by attendance at team consultation sessions. The authors noted in particular that thinking was in line with new (current) developments in formulation-focussed offender management strategies and benefits of the service were fed back to commissioning bodies to inform continued development.

Strengths and weaknesses: The inclusion of staff who had withdrawn from Pathway services was a clear strength in identifying processes that did not work for everyone. However, interviews were also conducted with managers of teams who had withdrawn from the service; as senior managers

are not typically offender-facing and may not have taken part in consultations themselves, it is difficult to attribute their experiences of this process to that of their staff.

Clark, S. & Chuan, J. (2016). Evaluation of the Impact Personality Disorder Project – A psychologically -informed consultation, training and mental health collaboration approach to probation offender management.

Nature of the intervention: The 'Impact' project entailed a forensic psychologist, assistant psychologist and specialist probation officer delivering services to a single London probation area over the course of three years. This intervention consisted of training and psychological case consultation to probation officers working with high risk of harm violent and sexual offenders managed by the Public Protection Unit (PPU) or in Approved Premises. Case consultations and training were designed to help probation staff understand connections between external behaviours and underlying psychological needs, developmental history, and risk. This intervention also aimed to help probation staff to improve supervision engagement, identify features of personality disorder, and understand processes involved in accessing community mental health services. Details of format and duration of case consultations were not provided.

Methods of analysis: The authors identified 10 probation officers who were consistently available throughout the study period, and the outcome measure was their rate of use of recall to prison. It was hypothesised that a psychologically informed approach to case management would lead to a reduction in recall to prison and that this would not be associated with an increase in serious further offences (SFO). Quantitative records-based data were analysed using within-subjects ANOVA to assess changes over time.

Outcomes reported: Results demonstrated that a significant main effect was observed for the intervention, with participating probation officers making a total number of 25 recalls in each of years one and two as compared to 57 recalls made at baseline, prior to intervention implementation. The effect size of ANOVA carried out was moderate, indicating reasonable reliability of findings. Additionally, where recalls did take place, non-compliance as a reason for this was reduced by a third and other behavioural reasons were similarly halved, potentially indicating better relational security between OM and offender. No change in SFO statistics was seen between baseline and post-intervention.

Strengths and weaknesses: While some impact was demonstrated within this study, several limitations were also present. The very small sample size of ten offender managers implies that results were not necessarily generalisable to the wider probation workforce who availed of the intervention for portions of the study period. Additionally, the multi-faceted nature of the intervention and single focus of the analysis meant that direct impact of any one aspect (e.g., consultations) could not be evidenced. Finally, while ANOVA demonstrated impact of intervention for those involved, without a control group it is difficult to infer whether or not a reduction in recall rates was directly the result of the intervention, or was impacted on by other features not measured within this study.

Bruce, M., Horgan, H., Kerr, R., Cullen, A. & Russell, S. (2016). Psychologically informed practice (PIP) for staff working with offenders with personality disorder: A pragmatic exploratory trial in approved premises.

Nature of the intervention: The Psychologically Informed Practice (PIP) intervention consisted of training and staff support for Approved Premises (AP) staff. Training in PD awareness, intensive training on understanding and managing personality disorder, therapeutic alliance, knowledge consolidation and application were delivered. Staff support included case formulation, supervision, reflective practice and 'rapid response' telephone consultation. The intervention was delivered to 13 staff at a London-based AP and data from a comparison group of 10 staff from an AP in the same London borough were also included.

Methods of analysis: Staff attitudes, understanding and level of burnout were evaluated across four time-points using the PD-KASQ and the Maslach Burnout Inventory (Maslach & Jackson, 1981). Resident outcomes were also explored in relation to warnings and recall rates. Data collection at the comparison site ceased after six months.

Outcomes reported: Findings indicated that the total PD-KASQ scores increased significantly in the intervention group between pre-intervention and post-intervention and this increase held at both follow-up points. Only total scores of PD-KASQ were presented. Additionally, scores on the personal accomplishment subscale of the MBI were higher at post-intervention and thereafter than at baseline for the intervention group, although this was not reported as significant. Comparisons to the control group were complicated. At baseline, both measures were substantially higher for the control group than for the intervention group and 'personal accomplishment' in particular was higher for the control group at baseline than for the intervention group at any point post-

intervention. PD-KASQ total scores remained stable for the control group (mean=72.5), resting half-way between the intervention group's baseline (mean=65.13) and post-intervention scores (mean=84.65). This suggests the two groups were non-comparable from the outset. In relation to residential outcomes, recalls and warnings were significantly reduced in the intervention group between the pre-intervention and 6-month follow-up periods. As with staff outcomes, control group figures were markedly different at baseline so useful comparisons could not be made.

Strengths and weaknesses: Comparison processes with the non-intervention group ceased at the post-intervention data collection point and exceptional variances in baseline scores negated the functionality of control group comparisons. It was also difficult to determine the full nature of the PIP process. In referring to delivery phases, the authors listed supervision, reflective practice and telephone consultation as "ongoing staff support" (pp. 5) however follow-up periods appeared to refer to time since training. As such, the duration of the intervention was difficult to establish and linking outcomes directly to consultation processed was not possible.

Knauer, V., Walker, J. & Roberts, A. (2017). Offender personality disorder pathway: the impact of case consultation and formulation with probation staff

Nature of the intervention: In Avon and Somerset, consultation meetings of one hour entailed discussion with OMs on the main issues they faced in managing the individual discussed. Discussions centred around the individual's offending information, general background and any additional pertinent information drawn from multiple sources. This led to the development of formulations to assist with case management planning.

Methods of analysis: A bespoke questionnaire was developed for this study. In relation to the individual being discussed in consultation, offender managers were asked to rate from 0 to 10, a) their knowledge about the individual; b) their confidence in working with the person; c) their motivation to work with them; d) their understanding of factors underlying problem behaviours; and e) the satisfaction with their plans for the individual. Responses were gathered at the beginning of consultation meetings, immediately after consultation and at several weeks' follow-up, which was noted as being after a formulation letter had been received. Data were obtained from 60 OMs who availed of individual consultations, 12 OMs who availed of group consultations, and 36 AP staff who availed of group consultations. Paired-samples t-tests were utilised to analyse pre-post data and repeated measures ANOVAs were used to explore changes across three time points.

Outcomes reported: Findings indicated that all ratings increased from pre-consultation to post-consultation in both samples (individual and group consults), with medium to large effect sizes reported, apart from the 'motivation' item which reported a small effect size of .26 in the individual consultation group. No further change was demonstrated at follow-up.

Strengths and weaknesses: The self-selecting nature of the participants may have had an impact on the motivation to improve practice and this group may not have been representative of their colleagues who did not avail of consultation. Additionally, the methodological approach was somewhat questionable - recency effects may well have been at play with participants being asked to rate their knowledge etc., immediately after a consultation that incorporated reviewing of case information. Attrition rates meant that follow-up analyses were underpowered and, while ratings were maintained at the post-consultation level, this did not take into account the potential impact of additional training and consultation available to participants between data-gathering stages.

Blinkhorn, V., Petalas, M., Walton, M., Carlisle, J., & McGuire, F. (2020). Understanding Offender Managers' Views and Experiences of Psychological Consultations

Nature of the intervention: The Psychologically Informed Consultation Service (PICS) service operated across four probation offices in Liverpool and offered training to probation officers as well as psychological consultation and case formulation. The specific service delivery model involved psychological consultation between a clinical psychologist and either an individual probation officer or a team of probation officers discussing multiple cases. The approach adopted involved discussing the individual's history, relationships and offending characteristics, as well as how offender supervision sessions tended to run.

Methods of analysis: To evaluate the impact of this service, focus groups of 4-8 participants were held with 23 fully qualified offender managers (8 male, 15 female) who had accessed PICS. The authors specifically sought to explore OMs' perceptions of consultations and took a focus group approach in order to avail of rich interactive data. Within the parameters of this study, the number of consultations accessed by participants ranged from 2 to 15. Data were analysed using Interpretive Phenomenological Analysis.

Outcomes reported: Four themes emerged from this study: 'Validation of thoughts, feelings and practice', which contained four sub-themes related to building confidence in one's work; 'Professional support', whose four sub-themes addressed perspective-taking and consideration of

risk; 'A personal touch', which had three sub-themes noting the safe reflective function of consultations; and 'Room for improvement', whose three sub-themes noted the difficulties in accessing the service and applying learning. Overall findings from this study indicated that psychological consultations were found to be beneficial to those OMs who availed of the service, improving thought processes around risk and providing a space where emotional support could be accessed.

Strengths and weaknesses: This study ran with a small group of offender managers in focus group settings, therefore findings may not be representative of the full region and may not be generalisable to the wider Pathway. Additionally, the use of IPA to explore focus group data appears an unusual choice. IPA is typically utilised as a means of understanding personal experiences from individual participants' perspectives (Smith, 1996), therefore analysing group data in this manner conflicts with this underlying premise as individuals making up these groups are likely to have had differing experiences. While the authors justified the use of this method and applied a modification to support group-based data, the apparent process followed indicated an approach more in keeping with thematic analysis.

Radcliffe, K., Carrington, B., & Ward, M. (2020). Exploring offender manager's experiences of psychologically informed consultation on relationships with service users within the offender personality disorder pathway

Nature of the intervention: A dedicated clinician provided consultation and formulation services in which OMs could talk about their OPDP screen-in service users. The authors noted the OPDP principle of being formulation-focussed in this work but did not describe the specifics of consultation delivery.

Methods of Analysis: Semi-structured interviews were carried out with five female Offender Managers who had availed of at least three OPDP formulation-focussed consultations. Interviews lasted between 29-48 minutes and were analysed using an IPA approach. The aim of the study was to understand the experience of these consultations as they related to the relationship between the OMs and their service users.

Outcomes reported: The authors reported a model of thematic outcomes which described the OM experience as being in an emotionally overwhelmed position before taking part in consultations, to then going through a process of learning to reflect on the service user's experience in order to

improve understanding. Specific consultation outcomes were then described in terms of the OM's change in approach and resultant improvement in the supervision relationship. Systemic constraints were also noted in terms of the time taken to adequately build relationships and the need to maintain a probation perspective while trying to work in a psychologically informed way.

Strengths and weaknesses: This was the first published study to specifically explore experiences of consultation processes on the OM-offender relationship and was strengthened by the in-depth approach taken. While appropriate to the method, these experiences related to just five probation staff in one sub-region of OPDP delivery, and so represent a potentially unique experience of one clinician's approach to consultation.

4.2.3 Summary of findings to date

The studies outlined above have demonstrated positive effects for probation staff resulting from aspects of OPD Pathway community delivery. It is also notable, however, that the majority of these studies related to pilot versions or precursors to the specific OPDP strategy that was rolled out in 2013. While case consultation is the core tenet of OPD Pathway service delivery in the community, many of these studies examined the influence of additional processes such as training and the provision of written case formulations in addition to psychological consultation. Qualitative studies indicated that the specific areas of effect related to improved understanding of personality disorder and how this could be applied to one's work (McMullan et al., 2014) and a sense of being supported in their practice (Blinkhorn et al., 2020). Quantitative studies indicated increases in perceived competency and understanding of personality disorder, although study conditions and small sample sizes lay these findings open to question as regards their generalisability and validity. While these studies have provided useful information on the overall impact of a variety of approaches to consultation, it remains unclear what specific needs prompt offender managers to pursue these meetings and what aspects of psychological consultation generate the most beneficial outcomes.

4.2.4 The consultation process in Wales

As noted, OPDP consultation processes differ across service delivery regions, with some taking the form of time- and resource-intensive formulation-focussed approaches such as that outlined in Ramsden et al., (2014) and McMullan et al. (2014) while others deliver less involved, often group-based or once-off consultations, such as those outlined in Bruce et al., (2016) and Knauer et al., (2017). The model delivered in Wales consists of offenders being identified through standard OPD screening methods (see Chapter 3) and arrangements being made for a psychological consultation

meeting with either forensic and clinical psychologists or specialist probation officers trained in providing PD-specific psychological input (Personality Disorder Probation Officers – PDPO) or both.

Once individuals have been identified as suitable for OPD Pathway inclusion, the process of service delivery begins with psychological consultation. These consultations are intended to provide psychological insights into offending behaviour and to equip Offender Managers (OMs) with the tools and information necessary to help them manage and engage complex and challenging individuals. By doing so, OMs may be supported to help these individuals function better in the community, thereby encouraging desistence from criminal thinking and reducing the likelihood of re-offending. The guidance provided is informed by multiple psychological schools of thought and applied as relevant to the specifics of the case presented for discussion and as fitting the OM's general approach and understanding.

While the primary format of consultations involves formal scheduled meetings, impromptu quick chats in the office hallway, phone calls or email exchanges are also utilised, particularly by OMs who have previously engaged with the formal approach. Scheduled formal meetings were the subject matter of this study. In Wales, these consultations are provided by a team of five specialised Personality Disorder Probation Officers three days a week and seven forensic or clinical psychologists8. Each OPDP team member may have their own style of consultation and depending on their training or psychological background, may promote a variety of approaches and psychological theories (including Cognitive Analytic, Schema focussed, Supportive Authority, etc.,) to help OMs manage their high-risk cases. Similarly, some may take a very structured approach to these meetings, requiring OMs to bring along or send in advance detailed case files and assessments, while others may allow each meeting to be guided by the needs of the OM in the moment. Some OMs may require additional review meetings to support ongoing developments or difficulties in case management, whereas others may only require a single one-hour session. As such, level of service delivered is commensurate with the presenting need as assessed jointly by the OM and OPDP practitioner. Guidance from these meetings also varies, ranging from general supervision input to direct treatment referral, and this will typically be incorporated into an appropriate level of case formulation report produced afterwards.

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⁸ Figures accurate at the time of analysis in 2018

4.2.5 The present study

Evaluating the many processes involved in psychological consultations is important in gaining an understanding of what works to help OMs carry out their role, how this works to reduce re-offending, and what insights can be gained from this to aid improved policy development and service delivery. Furthermore, identifying the particular challenges that lead an OM to seek OPDP support is crucial to improving the efficiency and effectiveness of the service.

4.3 Aims

The purpose of the present study was to identify the specific areas of need identified within consultation sessions (both in relation to case management and in relation to the offender's own wellbeing); what methods were suggested in order to achieve stated goals; and what outcomes and benefits resulted from consultations. It was anticipated that addressing these areas would provide additional insight into the specific functions of consultation sessions and that these insights may inform the continued service development.

4.4 Methodology

Design

A cross-sectional cohort design was applied and conventional content analysis was carried out on open-ended questionnaire-based text data.

Materials and Procedure

A three-part open-ended consultation feedback form was designed to capture several aspects of the consultation process (see Appendix M). The first section asked OMs to state, at the beginning of the session, their goals and management needs for the meeting through the following questions;

- What are your goals for this consultation? Please describe what you hope to get out of this meeting.
- What do you need to help you manage this case?

The second part, intended to be filled in over the course of the consultation meeting or at the end, provided space for any actions generated to be recorded;

- What actions have been generated from this consultation?

The final section combined open-ended feedback on the outcomes of the consultation with a brief set of rating scale questions enquiring about their use of the service and application of its content. Specific questions asked were;

- What were the key benefits of this meeting?
- Were the actions generated followed up?
- Was there anything you were unsatisfied with or do you have any as yet unmet needs from this consultation?
- Is there anything you would change about the consultation to make it more useful for you?

This final section was designed to be completed 2-3 months after the meeting, with the researcher calling OMs to gather their responses over the phone. Due to the varied nature of consultations and to staff taking alternative approaches to form completion, sections 1 and 2 were completed either by OMs alone, OMs and OPDP staff together in session, or OPDP staff immediately post-consultation, with the agreement of OMs as to the content noted. Data informing section 3 was gathered directly from OMs by the researcher either through phone contact or by email.

All data contained within the consultation feedback form was transcribed into an Excel database and each consultation was assigned a unique numerical code for the purpose of identification. Forms were received by hand or by email and data from sections 1 and 2 were entered by the researcher or with the support of an administrative assistant. Where phone contact was successfully made, the researcher endeavoured to capture spoken content as closely to verbatim as possible by taking detailed notes and asking the OM to repeat any unclear content. Where phone contact was not possible, the researcher contacted OMs by email and posed the same questions. Responses to these questions were transcribed directly into the project database. Anonymised Excel data was then imported into N-Vivo for qualitative analysis.

Action Research

The contents of this study related to a portion of a continuous service development initiative, whereby feedback on the appropriateness and effectiveness of data gathering methods was sought from those involved (e.g., OPDP psychologists and specialists). Over the course of the first couple of months of data gathering, it became apparent that the questions in relation to 'Goals' and 'Management Needs' were perceived as seeking the same information (e.g., the term "as above" was often written in response to 'Management needs' after detailed content had been provided in

response to 'Goals'). This was confirmed in discussions with OPDP staff, therefore the question regarding 'Management needs' was removed from later forms and data from these question fields were merged together under the title 'Goals'. The purpose of this was to prevent repetition of work and to ensure richness of content. See Figure 4.1 for a word cloud representing most frequent word content of 'Goals' responses.

Participants

Purposive and opportunistic sampling methods were employed at each data-gathering stage. Consultations took place across all probation offices in all five Local Delivery Unit regions across Wales. Once this auditing process had been in operation for a year, complete data were taken forward for analysis. Note, however, that due to the continuous service development nature of this work, data gathering continued beyond this point. Initially, 261 follow-up phone-calls were made, but due to various operational and practical obstacles in completing stage 3 collection, full data were available in relation to 145 OPDP consultations. These related to 84 OMs discussing 138 individual service users (male=124; female=21), across all five Local Delivery Units in Wales (Gwent = 53; North Wales = 15; South East Wales = 19; South West Wales = 42; West Wales = 16). Consultations were provided by 9 OPDP psychologists and 3 OPDP specialists either individually (psychologists - 106; specialists - 9) or jointly (30). These figures are not representative of the consultation workload of OPD staff in Wales, rather they derive from the consultations for which full data were available — where forms were not utilised no data existed and where OMs were not available to take follow-up calls or emails, incomplete data were not included.

Ethics

This study was considered by HMPPS as service evaluation research as it was undertaken in order to inform future directions of OPDP core community delivery in Wales, and did not collect data from people on probation themselves. As such, ethical approval was not required. However, all OPDP staff and all OMs voluntarily consented to the use of their consultation data for this purpose and BPS ethical research guidelines were followed (Oates, et al., 2021). Due to the service evaluation nature of this work, participant details such as demographics and workplace characteristics were not gathered as this information was not pertinent to the purpose of the evaluation. Details relating to the individuals being discussed were not gathered as part of this evaluation, but were captured on the feedback form for administrative purposes to be utilised by the OPD staff as part of standard recording practices.

Figure 4.1Word cloud in the shape of Wales depicting the most frequent words used in response to questions around goals and needs in OPDP consultations.



Analysis – *coding processes*

Conventional content analysis was carried out on data derived from these consultations (Hsieh & Shannon, 2005). Hsieh and Shannon (2005) describe conventional content analysis as distinct from directional or summative content analysis approaches. While the latter two methods are informed by external theory (directional) or quantifiability (summative), the conventional approach allows for themes and constructs to emerge freely from the data at hand. This type of approach is encouraged where there is little established theory or in depth understanding of the concept or process under investigation. As noted in the introduction and in Chapter 2, psychological consultation within the Offender Personality Disorder Pathway has been explored on a relatively small scale to date and largely in relation to early stages of the OPDP programme. Additionally, as delivery methods vary from region to region and given the niche field within which this process takes place, conventional content analysis was deemed the most fitting approach to take. This process involves thoroughly familiarising oneself with the data and identifying individual themes as they emerge. Once themes are identified, data points loosely fitting within the parameters of these themes can be labelled as such. As the process of coding continues, theme descriptions can be more strictly defined and, once all materials have been coded, previously coded data should be re-checked to ensure codes remain applicable (Vaismoradi, Jones, Turunen, & Snelgrove, 2016). In keeping with Sandelowski's (2010) view that a priority in coding qualitative data is the precision with which names are created ensuring the essence of the raw data is captured – effort was made to develop code names that most closely represented the nature of discussions being held within consultation meetings. Some codes were in-vivo or very closely extrapolated from raw data while others were conceptualised based on contextual characteristics.

The coding process carried out as part of this study consisted of six main phases, as set out below. Phase 1 - Once all data were amalgamated into the database, the researcher read through the full dataset case by case, reading all answers to each question for each case. Emerging sub-themes were coded broadly at relevant data points and sub-theme descriptions were developed as more aspects of individual sub-themes became evident. Descriptions contained explanations of how the sub-themes were interpreted in order to provide clarity of understanding.

Phase 2 - Once phase one was complete, the researcher read through the full dataset again, this time reading question by question, such that all answers to the question of "goals" were read, then all "actions" responses, followed by all "benefits/outcomes" responses. This allowed for a more focussed exploration of sub-themes emerging under these separate categories. Through this

process, sub-themes were refined, new sub-themes were generated and the application of thematic coding to raw data was tightened such that references to each sub-theme were logically applied. Where applicable, closely related sub-themes were combined into a group sub-theme (e.g., the sub-theme "Psychological theory" was generated out of themes addressing specific theories such as "CBT", "Schema therapy" and others). Sub-theme descriptions were revised in order to ensure relevance was maintained.

Phase 3 - The third phase of analysis involved reading through each sub-theme's reference data. The process of refining and tightening coding was followed again with the researcher deleting sections of transcript that appeared not to apply. New sub-themes were also identified during this phase, where deemed appropriate. Sub-theme descriptions were also updated at this point in order to ensure accurate mapping of content (Vaismoradi, et al., 2016).

Phase 4 - Ancillary to phase 3, separate Goals and Actions data from 130 consultations with Offender Managers who availed of 10 or more meetings (n=9 OMs) were explored to investigate whether the current findings applied to different but related raw data. This was carried out on data from a wider timeframe than the current data was drawn, with the purpose being to assess the fidelity and validity of sub-themes identified.

Phase 5 - As the overall purpose of this study was to understand the nature of psychological consultations in the OPDP and their impact, if any, on offender management practices, sub-themes that did not support this understanding (e.g., "medication", "debrief") were culled from the final set. Using coding stripes in N-Vivo allowed for the identification of sub-themes that overlapped substantially with other sub-themes and by exploring these, it was possible to identify sub-themes that did not provide additional useful interpretation of the data.

Phase 6 - The final phase in the coding process involved amalgamating sub-themes into coherent thematic groupings in order to arrive at a manageable number of meaningful themes. Sub-themes were again examined, and their descriptions read in order to assimilate a complete understanding of the meaning and purpose of each sub-theme. Themes emerged from this process such that constituent sub-themes had in common their roles as they related to the data e.g., whether they described static characteristics of the offender or features of the consultation or processes being considered within consultations. To refine these concepts into functional groupings in relation to their overall place in consultation processes, themes were grouped into superordinate categories. In

this way, descriptive and interpretive themes resulted, offering an understanding of the structure of consultations on an overarching level as well as a more in-depth view of the impact of consultation processes for offender managers.

4.5 Findings

Twenty-eight individual sub-themes were identified, one of which contained seven constituent sub-theme labels ("Psychological Theory", with constituent thematic labels relating to individual psychological approaches) and one which contained one supportive sub-theme ("Understanding Offender Perspective", with the sub-theme "Triggers"). Appendix N outlines the final codebook developed for this stage of the project.

Sub-themes were grouped into seven broad over-arching themes according to their function. Two themes related to the **context** surrounding psychological consultation — "Offender Difficulties" which included sub-themes related to the various struggles facing offenders about whom consultations were sought; and "Practicalities" which included pragmatic reasons for seeking consultation, such as an upcoming Oral Hearing or similar. Four themes related to the **active components** of the consultation process. These were "Specialist Input" provided by OPDP staff; approaches to improving "OM-Offender Interactions"; and the processes of "Understanding and Helping the Offender" and "Working Better". A consequential **related outcome** of consultations was the seventh theme — "Impact of consultations on the Workforce", which captured the additional impact on the OM personally, as complementary to the impact on working practices addressed within **active components**. Table 4.1 presents a the overall structure of this consultation model, with constituent sub-themes incorporated in order to detail the functions of OPD consultations.

While a common practice in qualitative analysis is to classify themes with greatest counts as the most important themes (Harding & Whitehead, 2013), this was not deemed appropriate for the current study. Firstly, as the study explored the functioning of consultations, it was important to give equal weight to all impacts identified, given the breadth of participant sources of information. Secondly, as noted, the participant group were a subset of the overall consultations that took place over the course of a year, with follow-up data gathered from 55% of those called, and those called accounting for 25% of all recorded consultations. As such, it was deemed inappropriate to weight high-frequency themes as it is possible other themes may have occurred with greater frequency across the entirety of consultations. Thirdly, the gender difference in relation to individuals

discussed in consultations was a factor in this decision, with 15% of consultations relating to women while 85% related to men. For this reason, to weight more frequent themes as more important may have misrepresented the importance of themes more prevalent in relation to women than to men. As a result, themes presented below are outlined in order of their position in the overall model described above.

Table 4.1 *Model of OPDP consultation processes and functions*

Functional	Context		Active components				Related
categories							outcomes
Themes	Offender	Practicalities	Specialist	Understanding and	Working	OM-Offender	Impact on
	difficulties		input	helping	better	interaction	workforce
Sub-themes	Diagnosis	Advice	Formulation	Improve offender	Share	Build working	Changing views
		sought		behaviour	information	relationship	
					and work		
	Self-harm	Oral hearing	Psychological	Offender		Challenging	Personal effect
			theory	perspective	Structuring	presentation	of consultation
					supervision		
	Substances	Release				Communication	Reassurance
		planning	Availability of	Improve offender			
			PD team	wellbeing			
						Engagement	reflective space
		Referrals to	Interventions	Psychological			
		services		understanding			
			I			Transparency	
				Role of family /			
				relationships			
							I
				Understand /			
				manage risk			
				manage nak			

The nature and content of these themes are set out in detail below in order of the process described above (Context -> Active components -> Related outcome). The graphical representations of themes that are presented below have been designed such that the theme name sits centrally while individual sub-themes orbit the central concept. In this way, sub-themes may be regarded as connected to the central concept while not directly interacting with each other. Where sub-themes contained grouped content (such as in "Psychological Theory") constituent thematic labels are presented as linearly linked to their parent sub-theme. Exemplary quotes are provided for each sub-theme. The unique consultation from which each quote is drawn and the question field to which it relates (goals, actions, or benefits) are also indicated.

4.5.1 Context themes

Two themes emerged which represent the contextual features surrounding how OPD consultations come about. These relate to person-specific features, such as the various difficulties with which offenders may be struggling and which often have a significant impact on risk or resistance to desistence. **Context** themes also take into account the wider organisational framework which may lead to consultations taking place, such as upcoming parole hearings or specific requests for referrals to external agencies.

Context theme 1: Offender Difficulties

This theme encompasses three sub-themes that describe or address challenges experienced by offenders, which OMs commonly raised during OPDP consultations. This theme is of a descriptive nature and its constituent sub-themes may be taken as added demographic information about the clients being discussed. Figure 4.2 presents sub-themes included under this theme.

Figure 4.2Theme "Offender Difficulties" with constituent sub-themes



The first theme related to concerns and discussions around *Diagnosis* (n = 26). Specific references to various psychological conditions experienced by the client were coded under this sub-theme;

"Discussion about ASD [Autistic Spectrum Disorder] traits and how best to understand and manage them." ID. 54 – Goals

"Diagnosis of BPD - recommended therapy inside but unwilling so came out in extremely unconventional manner without the usual processes having taken place." ID 20 - Benefits

The second sub-theme related to Self-harm (n = 9). This included references to offenders struggling with suicidal ideation or self-harming tendencies;

"She's a prolific self-harmer and lashes out a lot when things don't go her way. [Named OPD psychologist] was great at providing advice on how to deal with all of that. I've limited experience of self-harm, so it was really good to get that understanding." ID. 39 – Benefits

"To discuss with the Housing officer her approach to self-harm & what works." ID. 84 -Actions The third sub-theme related to *Substances* (n = 15). This included any mention of drug or alcohol dependence or support for addressing these;

"To explore (and be transparent about the reasons) the start of her drug use." ID. 33 – Actions

"He was very good at hiding his heroin use and now he's back inside." ID. 13 - Benefits

Context theme 2: Practicalities

This theme encompasses sub-themes that are functional in nature and address practical reasons underlying consultation requests, as well as direct functional outcomes of consultation processes. Figure 4.3 presents these four sub-themes diagrammatically.

Figure 4.3 *Theme "Practicalities" with constituent sub-themes*



The first Practicalities sub-theme related to *Advice sought* (n = 38). Direct requests for advice and guidance on case management, working styles, and processes were captured by this sub-theme;

"Review my current management of this case - I would appreciate any guidance to improve this." ID. 61 – Goals

"I don't know how to deal with him. I've tried to be the 'mother' but this hasn't worked. How can I get him to turn up and continue to engage even when I have nothing practical to offer him?" ID. 361 - Goals

The next sub-theme related to *Oral Hearings* (n = 16). This included specific references to requiring a consultation in advance of an impending parole board meeting both for the purposes of better understanding the psychology of the offender in question and being prepared for the processes involved. Oral Hearings involve the Offender Manager and the in-custody offender attending a panel of experts, including psychologists, in order to put forth grounds for or against the offender's release. The decision to approve release is made by the Parole Board. Participants said;

"Oral hearing - discuss how I was going to talk to him about it. I hadn't decided yet whether I was in support of his release or not." ID. 62 - Benefits

The third Practicalities sub-theme related to *Planning for release* (n = 23). Release from prison can occur as an outcome from an Oral Hearing or can come about as part of a planned Sentence End Date. While similar to the previous sub-theme, the sub-theme *Planning for release* applies to data points in which an offender is due for release and OMs request guidance in preparing for the process of transition to the community or in developing a sentence plan;

"Developing my understanding of why he fails so frequently in community. What's available in custody + community." ID. 134 – Goals

"Complex case - the basis of the consultation was to establish where I felt the best support and interventions would come from in the process of release from custody and transitioning to the community." ID. 56 - Benefits

The fourth sub-theme addressed *Referrals to services* (n = 34). This sub-theme captures any mention of offenders being referred to specific interventions or programmes or data points in which OMs are directed to external services.

"[Named OPD psychologist] made contact with local CMHT and looked into referral options." ID. 122 – Benefits

4.5.2 Active components themes

The next set of themes identified relate to the dynamic features of consultations that are carried out or imparted to OMs and are integral to the overall function and utility of OPD consultations. These have been termed active components due to their role in influencing how OMs proceed to work with and think about their OPD screened-in clients, post-consultation. These themes relate to the field of expertise brought to the consultation room to help OMs develop a psychologically informed approach to case management. The intricacies of understanding how best to interact with and safely

manage often volatile individuals are also captured within this set of themes, with attention given to perspective-taking and approaches to improving circumstances for the individual.

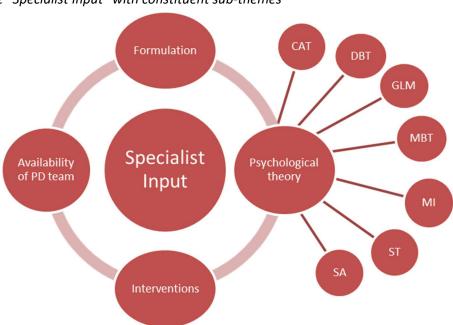


Figure 4.4Theme "Specialist Input" with constituent sub-themes

Active components theme 1: Specialist Input

The first **active component** theme comprises four sub-themes, one of which is further comprised of seven constituent thematic labels. *Specialist input* relates to the ideas and contributions that OPDP staff provide to OMs during consultation and these functions constitute core OPD work across the national Pathway. Included in this category are tangible outputs OMs can incorporate into their working practice as well as more abstract concepts. Figure 4.4 outlines the nature of this theme with its constituent sub-themes.

Availability of PD team - (n = 9) This sub-theme applies to references to OPDP team members' accessibility, both as a formal service and in more impromptu settings whereby OMs feel they can call upon psychologists and specialists as and when needed;

"It's great having psychologists at our disposal, even if they're not here every day we know we can access them and follow up if we need to." ${\rm ID.~10-Benefits}$

Formulation – (n = 25) The sub-theme Formulation addresses another core OPD function. Often the end purpose of a consultation, this sub-theme covers data points within which formulations of any level are discussed or reviewed;

"Review previous actions & update formulation." ID. 79 – Goals

"More difficult case and because he wasn't forthcoming with information, developing the formulation was difficult." ID. 16 – Benefits

Interventions - (n = 22) Interventions are frequently discussed in consultations. This sub-theme captures discussions of any psychological or behavioural interventions, queries about applicability of interventions and directly named interventions;

"The basis of the consultation was to establish where I felt the best support and interventions would come from in the process of release from custody and transitioning to the community." ID. 73 – Benefits

Psychological theory – (n = 62) One of the key elements of OPD work is to provide probation and prison staff with concepts and methodologies from a variety of psychological schools of thought. The sub-theme Psychological theory encompasses seven sub-categories, all of which are established psychological theories or approaches that have been directly mentioned or whose features have been referenced in consultation feedback. Theories included are –

Cognitive Analytical Therapy (CAT) – (n = 15) an approach which encourages forming a trusting and collaborative relationship and which provides practical concepts to help guide therapeutic work, such as 'CAT maps', 'the Boundary Seesaw' and 'Reciprocal Roles';

"Understanding reciprocal roles is very helpful. Reciprocal Roles diagrams are helpful to have on file to refer to." ID. 113 - Benefits

Dialectical Behaviour Therapy (DBT) – (n = 3) originally designed to treat Borderline Personality Disorder, this therapy has four main components including 'emotional regulation', 'distress tolerance', 'interpersonal effectiveness' and 'mindfulness' training;

"To introduce mindfulness exercises to each session. To use DBT emotion regulation techniques when appropriate." ID. 83 - Actions

The *Good Lives Model (GLM)* (n = 3) is an offender-focussed approach emphasising strength-based rehabilitation whereby one's wellbeing is inextricably linked to one's offending risk;

"To work in practical ways forward using a Good Lives approach. To be aware of his issues of identity and how these may interfere with the above." ID. 99 - Actions

Mentalisation Based Therapy (MBT) - (n = 20) frequently used to treat Anti-Social and Borderline Personality Disorders, this approach encourages clients to improve their ability to think about thinking and to try to see situations from others' perspectives;

"Mentalisation - try and identify what triggers non-mentalising. Identify steps to getting him to work on attitudes." ID. 72 - Actions

The *Motivational Interviewing (MI)* (n = 4) approach is one which is incorporated into Probation Officer training. Through helping individuals resolve ambivalent feelings, this approach helps encourage autonomy in decision making around behaviour change;

"Use Motivational Interviewing approach during supervision sessions to establish what is important to him." ID. 31 - Actions

Schema Theory (ST) (n = 3) posits that knowledge is organised in structured units and that individuals' understanding and actions are determined by how past experiences have been stored and how these are accessed;

"Very useful to get [named OPD psychologist]'s perspective on D**'s (schemas?), pointing out the issues that were important to him." ID. 21 - Benefits

Finally, the *Supportive Authority (SA)* (n = 14) approach presents a model that promotes human and respectful communication with offenders, with the aim of encouraging offender growth;

"To adopt a Supportive authority framework." ID. 104 – Actions

Due to the breadth of experience brought by psychologists and OPD specialists providing consultations, it was not uncommon for more than one theory to be drawn from in helping to understand and manage clients.

Active components theme 2: Understanding and Helping the Offender

This theme consists of six sub-themes, one of which encompasses one constituent thematic label.

This theme represents sub-themes that address features of consultations that encourage OMs to develop a better general understanding of offender behaviours and attitudes and to use this

learning to help their clients progress in the community. Sub-themes also apply to references to OMs improving their overall psychological awareness. The sub-themes included are outlined in Figure 4.5.

Improve offender's interpersonal behaviour – (n = 75). References to discussion of techniques to help offenders interact better with others and educating offenders about relationships were coded at this sub-theme;

"I'm now trying to teach him to take responsibility and let him realise the effects his actions have on others and on his situation." ID. 52 – Benefits

"The benefits of meeting for PD consultation with someone like M** is that M** generally walks through life wreaking social carnage with those he comes into contact with, and demands a great deal of intervention from Police / Social Services / Intensive Family Support Services / Housing / Substance Misuse Workers / Court System, which is heavily affecting those around him not least his children, and therefore if an intervention is to work it will reap great rewards in terms of his personal, social and financial impact." ID. 106 – Benefits

"Continue to work on immediate thoughts-feelings-behaviour connections. Address relating issues - options for masculine identity. Encourage physical activity to replace adrenaline from violence." ID. 48 - Actions

Understanding offender perspective – (n = 118). The sub-theme Understanding offender perspective specifically addresses discussions relating to influences on the offender's life, the impact of life events on the offender's current thinking and behaviour, and gaining an understanding of the individual's perspective on life and their personal development;

"Explore what A** 'gets' from his behaviour and how it makes him feel." ID. 64 – Actions

"[OPD psych] helped breakdown why he was like that, what events in his history may have led him to behave the way he does. This was useful in understanding how to deal with him." ID. 312 – Benefits

"Post-release 1) Use M.I. approach during supervision sessions to establish what is important to him. 2) Complete family / social history to explore significant relationship. 3) Complete 'life graph' to explore how he sees his 'world'." ID. 97 – Actions

"To have an understanding of what influences have impacted on his life and how to work effectively with him." ID. 162 - Goals

Figure 4.5Theme "Understanding and helping the offender" with constituent sub-themes



Contained within this theme is the constituent sub-theme *Triggers* (n = 11). This relates to gaining an understanding of, or acknowledging, the offender's triggers and what factors might provoke different reactions or responses. While one might intuit that this sub-theme relates more to risk, the application of the term in this study is in relation to triggers of a variety of reactions, not to risk of harm alone. Understanding triggers to certain thought processes, therefore, relates to gaining an insight into one's perspective.

"Conversation re: his triggers - review CAT map and how to cope with those emotional responses." ID. 11 - Actions

Improve offender's psychological wellbeing – (n = 49) In order to help begin the process of desistence from crime, addressing one's wellbeing is frequently a starting point. The sub-theme Improve offender's psychological wellbeing captures comments relating to emotional regulation or anger management, coping strategies, helping the offender develop a positive self-image and providing support to help the individual improve themselves;

"To develop strategies to have a realistic appraisal of his life and not shift between idealisation and catastrophising." ID. 84 - Actions

Psychological Understanding – (n = 94) A central function of the OPD Pathway is to develop a psychologically informed workforce. The sub-theme Psychological Understanding encompasses references to gaining psychological insight or having psychological assessments explained.

Additionally, directions to read specific psychological material or use specific psychological tools were captured by this sub-theme;

"We talked a lot about him, his narcissism and how to approach him. What to be aware of in terms of his manipulating supervision and how to talk to him." ID. 28 – Benefits

"I needed help understanding his emotional coping and helping him address this." ID. 353 – Benefits

"Further suggestions for areas to discuss in more detail during my contact with J**. Better understanding of PTSD & possible treatments." ID. 100 - Actions

Role of family and relationships – (n = 38) In order to understand an individual, gaining insight into their family dynamics can be useful. Consultations may seek to address the Role of family and relationships. Any references to the offender's interactions with family or partners, whether stated as protective factors or problematic, were coded under this sub-theme, as were references to seeking information from family;

"We talked about his attachment and how his relationship with his mum was functional in keeping him functioning well." ID. 21 – Benefits

Understanding and managing risk – (n = 69) How to deal with risk of harm is a frequently raised concern in consultations. The sub-theme *Understanding and managing risk* captures any mention of risk factors or risk indicators, understanding features of risk for the individual, discussing risk management strategies and identifying potentially precipitating factors of risk;

"Aim - to discuss how to manage relationship to enable sufficient risk monitoring without being intrusive to R^{**} . OM to review previous offending (sexual / violent) and identifying risk factors / protective factors to try to be clearer re: risk." ID. 26 – Actions

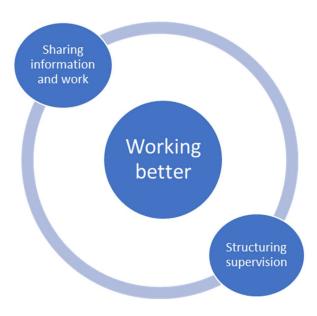
"Guidance on applying understanding of risk factors to risk management." ID. 225 – Goals

"I left the first meeting with a series of things I needed to find out and when we meet to review him we were able to fill in the gaps and focus on what his areas of need / risk are." ID. 79 - Benefits

Active components theme 3: Working Better

Two significant and ubiquitous sub-themes make up this simply titled category. Both sub-themes relate to approaches taken by OMs both to direct offender supervision and management itself and to the ancillary processes involved in supporting this function. Figure 4.6 presents this theme with its constituent sub-themes.

Figure 4.6Theme "Working Better" with constituent sub-themes



Structuring supervision – (n = 182) This was the most dominant sub-theme across the dataset. This relates to the core of offender management work; supervision meetings with their clients. This sub-theme was applied to any references to how to work with offenders in a one-to-one setting, guidance on how to proceed with the individual generally, and to techniques and ideas given that advise on structuring supervision sessions in relation to timing, interactions and overall management style.

"The consultation gave me an opportunity to discuss how I was structuring supervision and management strategies and to generally gain feedback on work I was doing with N** and to plan how to take the case forward in the future." ID. 142 – Benefits

"Monitoring his expression of emotion and OM's safety. Focus on him and how he wishes to use the time. Focus on practicalities of what he is doing and how he will manage his time." ID. 159 – Actions

"Reducing any resources or behaviour which make supervision a "learning" environment and therefore reminding A^{**} of school. Addressing the barriers to A^{**} 's engagement by

discussing it directly. Introducing a 20 minute supervision session agreement and asking A^{**} to keep time." ID. 20 - Actions

Sharing information and work - (n = 63) The importance of information sharing was often emphasised in consultation sessions. This can relate to sharing the workload with Offender Supervisors in custody prior to a client's release or with key workers and other agencies when shared but delimited case management is possible. Similarly, data points that mentioned accessing information from other agencies or sectors and utilising services provided by others or references to multi-agency working were also coded at this sub-theme.

"Link with mental health nurse and gather more info re: coping (and not coping) - to inform risk and protective factors for stability in prison." ID. 50 – Actions

"Better understanding of how to work with him and other agencies. He was possibly grooming a police officer. One of the actions was to invite the police officer to a meeting to gently bring it up." ID. 338 – Benefits

Active components theme 4: OM-Offender Interactions

Five sub-themes made up this superordinate theme, all addressing how OMs interact with their clients and the various factors that can affect this. These sub-themes largely centre around insession interactions but also take into account the nature of other forms of contact with one's client group, and the impact these may have on the overall professional relationship. Sub-themes making up this category are presented in Figure 4.7.

Building working relationship – (n = 88) This sub-theme includes references to establishing a rapport with one's cases and advice on how OMs might improve their approach to case management;

"To continue to develop the therapeutic relationship in order to create a safe environment for B^{**} to disclose or discuss painful information re: parent." ID. 83 – Actions

"Reinforcement that I was working the right way with him. Challenging his attitude. He's engaging a bit more over the last few weeks so this may have helped that." ID. 334 -Benefits

Figure 4.7Theme "OM-Offender Interaction" with constituent sub-themes



Challenging presentation – (n = 44) This sub-theme includes references to difficulties in probation supervision sessions whereby clients present with volatile, aggressive or deceitful behaviour. This also includes requests for help in handling such presentations;

"How can I work with him when he's so agitated and aggressive?" ID. 93 – Goals

"May have been at large at the time. Poor engagement. Still shocking engagement. Discussion was on how to manage him and his very challenging behaviour - he's aggressive to me and other staff." ID. 317 - Benefits

Communication - (n = 11) This sub-theme relates to advice provided to OMs on improving direct communication with offenders, whether this is in person, over the phone, or in writing;

"Follow up with letter - to be clear re: stance and rationale - short and concise." ID. 136 — Actions

Discussed how I might talk to him about the formulation in the future and how to share it with D^{**} ." ID. 152 - Benefits

Engagement – (n = 51) This sub-theme includes references to help in improving offender engagement, references to difficulties with engagement, and techniques suggested aimed at improving engagement;

"He wasn't working with me at all so this gave me guidance on how to approach things differently and he's really engaged in working with me now." ID. 31 – Benefits

"To find a point of entry to establish some level of engagement with C^{**} . He has a history of non-engagement with agencies." ID. 359 - Goals

Transparency - (n = 13) Closely linked to the concept of communication, this sub-theme specifically indicates data points where open and honest interactions are encouraged and OMs are advised not to be withholding of information from their clients;

"It was mostly about how to discuss things with him - be straight and upfront with him and don't let it look like I was trying to keep anything from him. [Named OPD psychologist] helped me see how he might respond if I did." ID. 18 – Benefits

4.5.3 Related outcomes themes

As already established, the end goal of OPD consultations is to improve offender well-being and decrease the risk of reoffending. An additional OPD strategic goal is the development of a psychologically informed workforce made up of individuals who are more confident in their own competence to safely and successfully manage offenders on the OPD Pathway. The theme outlined below addresses these related outcomes of psychological consultations, with specific areas of impact on the Offender Manager discussed.

Related outcome theme: Impact of Consultations on Workforce

This theme encompasses sub-themes that demonstrate how the OM can be personally and professionally affected by consultation processes. The four sub-themes comprising this concept are outlined in Figure 4.8.

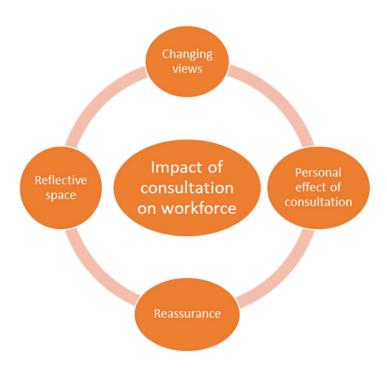
Changing views – (n = 16) Statements positing that a change in perspective or understanding has taken place or that the OM's way of thinking was challenged were coded at this sub-theme.

Additionally, references to changing one's management style were also captured by this sub-theme;

"Good to hear opinions that are juxtaposed to your own - makes you reflect and take a different perspective." ID. 41 – Benefits

"[OPD psychologist] got me to think of the offender perspective in contrast to risk management/public protection side of things we tend to have in probation." ID. 68 - Benefits

Figure 4.8 "Impact of Consultations on Workforce" with constituent sub-themes



Personal effect of consultation – (n = 35) This sub-theme covers any personal benefit the consultation has had on the OM as well as feelings expressed about the consultation process itself;

"It's really empowering to have these discussions. There was good time given to the effect the case has on myself - I find this very valuable." ID. 12 – Benefits

"For OM to remind herself of the tension between holding onto hope v being overly responsible for her." ID. 138 - Actions

Reassurance - (n = 27) Along a similar vein was the sub-theme Reassurance. Acknowledgement and reassurance that one's approach to work is appropriate and any confirmation that they are on the right track was covered by this sub-theme;

"To identify if I'm working with T^{**} appropriately and if I'm meeting her needs." ID. 108 - Goals

Reflective space – (n = 24) Many consultation meetings are used as a means of reflecting on features of a case or are seen as providing room to offload and take time to think more holistically than the typical workday allows. Data points which captured this concept were coded at this sub-theme;

"A reflective space to maintain personal resilience." ID. 105 – Goals

"More to discuss having a reflective space and having a constant person to offload to after sessions as these can be intense." ID. 240 - Benefits

4.5.4 Summary of consultation model

In answering the primary research questions, the findings presented above provide a comprehensive insight into the main areas of need raised by OMs within OPDP consultations, both in terms of contextual grounds and in relation to professional applications. Those delivering consultations provided specialist input to help develop OM understanding and perspective-taking while also providing a safe space to reflect and gain reassurance. In addition to these provisions, the active components outlined above demonstrate the complex and varied nature of consultation processes and how the application of these components can contribute to Offender Managers being more psychologically informed in their approach to complex case management. Through acquiring an understanding of the psychological underpinnings of offending behaviours, OMs can gain an alternative, person-centred perspective and therefore be supported to build better working relationships with their service users. Additional insights can then help structure supervision sessions, potentially resulting in improved OM-Offender interactions and related outcomes.

Unmet needs

It is acknowledged that due to this study seeking to understand the functions of OPDP consultations, the themes described above contain little in the line of negative impact commentary. In stage 3 data gathering, participants were asked about unmet needs or any unsatisfactory elements of the consultation service. While the majority response was "no" (n = 132), the seven OMs who did specify unmet needs noted issues that did not usefully relate to functioning or that were negative commentary on external factors. For example, wanting more (in quantity or time), wanting direct psychological contact for service users, or wanting consultations in relation to individuals who don't screen in to the OPD Pathway. Some of those reporting no unmet needs did expand on the difficulties of case management in general, with such comments as "No, just trying to incorporate consultation advice into case management within a structured system can be difficult" or "No, we identified that schema work was necessary but it's not provided so there's little we can do without

going private". There may therefore be some scope for exploring expansion of the remit of OPD staff as offering psychological insights without providing more direct practical input may have the unintended consequence of being seen to be withholding of professional input.

4.6 Discussion

In contrast to most previous research, this study sought to explore specifically how OPDP consultations alone were utilised within offender management practices. By directly targeting consultations, any impact identified should be attributable to this element of the OPDP service rather than to PD awareness training or contents of formulations produced. It is acknowledged, however, that some level of crossover in knowledge may have had a slight contamination effect, which was why targeted questions were asked in stage 3 data gathering.

According to the OPDP strategy (Joseph & Benefield, 2012), OPDP consultations are intended to improve offender well-being and reduce reoffending. In addition, an overall OPDP strategic goal is to develop a psychologically informed workforce who are more confident in their ability to safely and successfully manage offenders. The findings from this study demonstrated how OPDP consultations were utilised within offender management practices in Wales. These findings specifically illuminated why OMs sought consultation, the areas of focus within consultation, and the types of impact consultations had on the person and practice of the OM. While this model and analysis were derived from the OPDP area of work, the learning and insights provided may be valuable for consultation in other settings where offending behaviour and personality difficulties are relevant (e.g., prisons or forensic mental health sites). The four active components which describe the central focus and activities taking place within OPDP consultations demonstrate the multifaceted and varied nature of consultation processes. These components also indicate how the process is firmly anchored within a framework which can contribute to OMs being more psychologically informed in their approach to complex case management. Describing the ways in which this takes place is critical to showing how the consultation process works to meet the workforce development goals stated within the OPDP strategy (Joseph & Benefield, 2012). Sub-themes within Active Components echo the key psychological frameworks that underpin the OPD programme, acknowledging a need for greater understanding of the developmental factors influencing offending behaviour (Young et al., 2003), enabling staff to take a more relational approach to management (Haigh & Benefield, 2019). Additionally, the components of *Impact on the Workforce* showed that through acquiring a psychological understanding of offending behaviours, OMs can adopt an alternative, person-centred

perspective, echoing findings from Radcliffe et al., (2020). This in turn may foster better OM-offender working relationships potentially leading to collaboratively structured supervision sessions and pursuit of shared goals. This may further help reduce the use of recall as a response to presenting risky behaviours, as noted by Clark and Chuan (2016) and Minoudis et al., (2012) and as discussed in studies of effective probation programmes (Antonio & Crossett, 2017).

The impact of consultation on the workforce

These findings demonstrate several means by which consultations within the OPDP can have an impact on OM practice. These relate to improving OM understanding of complex individuals and how this understanding can inform practice. For example, exploring the sub-themes contained within understanding and helping can provide the basis for actions described within the OM-Offender interactions as highlighted in previous discussions of engagement in probation practice (Hughes, 2012; McMurran & Ward, 2010). Through exploring psychological models and theories, OMs can adapt and personalise their ways of working. This can include adopting a transparent communication style in order to encourage better engagement and consequently improve OMoffender interactions within supervision sessions. Learning through consultation, in contrast to classroom-based training, may be particularly appropriate for skills development in this context (Ugwudike, Raynor & Annison, 2017). Additionally, by centring learning on a personally relevant issue, the readiness of the OM to learn and the relevance of the content is likely to be maximised (Knowles, Holton & Swanson, 2012). The alternative perspective gained through consultation can enable the OMs to move away from the narrow correctional mentality of probation (Raynor & Vanstone, 2007) to a broader perspective in which this is balanced against an empathetic, personcentred, psychologically informed mindset. This can enable prioritisation of the individual's wellbeing alongside risk management. Importantly, focusing on improving OPDP offenders' psychological wellbeing and applying psychological models to help address interpersonal difficulties may result in a collaborative approach to tackling the issues underlying problematic behaviours and attitudes (Sorsby, Shapland, Farrall, McNeill, Priede, & Robinson, 2013).

The nature of the Welsh OPDP consultations as one-to-one sessions allowed for an individualised description of reflective space to emerge. While other qualitative studies have addressed team consultations, the individual approach reported here, and individual feedback, meant that concerns of any nature could be discussed away from potential disapproval or challenge by colleagues. Given that the nature of staff supervision within probation work tends to relate more to workflow management than personal wellbeing, OPDP consultations can be seen as providing a safe space to

discuss caseload worries without triggering managerial concerns regarding capabilities or resilience. This aligns with observations by Webster et al., who noted a benefit of targeted team reflective practice sessions was the opportunity for peers to support each other and reflect on team dynamics (Webster et al., 2020).

OPDP consultation processes have received largely positive feedback across the regions in which they have been evaluated. It is thus apparent that the introduction of PD-related psychological support and guidance can have multiple benefits for staff in criminal justice and related settings who are responsible for the care and management of offenders presenting with personality difficulties. It is important that mental health and psychological staff working in these settings are aware of the challenges faced by probation officers, as this additional perspective may help identify appropriate support that might be provided and avenues for additional training. By adopting this model of consultation within similar settings, inter-agency working might be enhanced through the provision of appropriate guidance around the key areas outlined above.

Impacts for service users

Through equipping probation staff with the tools and skills needed to work with those experiencing personality difficulties, working relationships may improve, leading to increased perceived relation security by both parties. Combined with an associated reduction in reliance on punitive measures to control risky behaviours and honest communication about criminogenic needs, service users can be better supported to desist from offending, potentially leading to a reduced rate of recidivism or reconviction. Findings arising from this study demonstrated a number of perceived consequences of consultations on individuals screened in to the OPDP, as reported by OMs. Through OM development of psychological approaches to offender management, being more transparent and communicating in a non-punitive style, service users may benefit from an improved supervision experience, potentially resulting in an increased willingness to engage and a decreased likelihood of presenting in a challenging manner (Ugwudike et al., 2017). The resultant enhancement of relational security in the OM-offender relationship may therefore lead to open discussion of the difficulties facing offenders, potentially mitigating the effects of dealing with or acting on these difficulties unsupported. The social, developmental and contextual factors that contribute to criminogenic processes are key discussion points (Joseph & Benefield, 2012). As evident across the themes reported, early discussion of potential treatment needs, and correct identification of these within consultation, can enable OMs to tailor their management approach to the needs of the individual

while also pursuing appropriate additional support form relevant agencies (O'Meara, Morgan, Godden & Davies, 2019).

It has been noted that the nature of probation work has changed over the decades, moving from a social work perspective to a correctional approach and more recently, with initiatives like the OPDP, edging back towards a psychologically informed, rehabilitative ethos (Annison et al., 2008; Raynor, 2019). Conflicting views within the workforce can lead to inconsistencies in management styles. Through consultation with OPD staff, OMs receive reassurance and validation that their approach to their work is appropriate while simultaneously being given space to reflect on how their perspective and management styles can impact on the working relationships they have with their clients (Maltman & Turner, 2017).

Regarding unmet needs raised by OMs, it is relevant to consider the extent of the function of OPD consultations. Several OMs noted they would like more input or that it was difficult to incorporate psychological learnings within a system that is quite prescriptive in approach. While OPD consultations may help expand OMs' psychological insights, it is worth querying the remit of this service. The jointly commissioned nature of the OPD programme allows for NHS input into probation delivery, however a limited amount is offered in terms of further access to more intensive interventions for those in need.

Strengths and limitations

This study benefitted from a large number of responses gathered over a wide timeframe, therefore findings can be taken as broadly representative of the Welsh OPDP consultation service. While follow-up data were only available for 55% of those completing stages 1 and 2, attrition was mostly due to OM availability rather than refusal to provide feedback (one OM directly declined to participate), and a large sample was nonetheless achieved. In contrast to previous studies, this research examined the consultation process itself (rather than including other components such as formulation) and purposefully sampled OMs for feedback rather than relying on self-selection. Furthermore, while impact is often difficult to attribute in qualitative research, the broad but specific nature of questions answered across a large sample allowed for the generation of relatively clear content on impact. This contrasts with the somewhat artificially generated impactive findings in Knauer et al., (2017) noted earlier.

An additional strength of this study was the relatively objective stance of the researcher. By not delivering consultations, nor any other element of core community delivery, the researcher remained independent of the process and undertook analysis without prior experience of consultation or preconceived themes in mind. Thus, themes identified related specifically to consultation audit data thereby assuring the robustness of the research. It may be argued, however, that due to the researcher's role as a member of the OPD team (whether practitioner or not), some OMs may not have wished to speak negatively about the service or to divulge more open criticism of consultations in terms of unmet needs. There were unanswered emails and voicemails and some of these may have reflected an unwillingness to discuss genuine views or negative outcomes. It may therefore have been useful to try to incorporate an anonymous approach to the gathering of feedback.

One of the limitations of this study concerns reliance on opinion and views of the perceived benefits for individuals subject to probation without direct input from service users themselves or 'hard outcomes' such as changes in reoffending, employment and successful community integration. Additionally, while a nationally representative study sample was achieved, these findings relate to a bespoke programme of intervention delivered in Wales. Therefore as discussed in Chapter 2, findings may not be generalisable to all OPDP delivery regions given the variability in approaches and principles underpinning regional programme delivery.

An additional limitation of this study was the adaptive method of follow-up data collection. Firstly, as it was not possible to audio-record phone call follow-ups, it was likely that some useful information may have been missed, in spite of efforts made to ensure key information was captured. Phone calls were chosen as the primary method of follow-up data collection as precursory study's attempts to capture the impact of OPD consultations by e-mail were met with such low response rates as to render the evaluation ineffective. However, given the likelihood for probation officers to be away from their desk while involved in supervision sessions, many phone calls went unanswered. As a result, email correspondence was attempted for those who were not available by phone on two successive attempts. While it was beneficial to employ this adaptation, those who responded by email had the opportunity to have every word of their feedback captured while those responding over the phone may have had some content missed. However, phone contact provided some scope for interactive discussion of the consultation, whereas email contact gave staff the option to respond in a pointed and perfunctory manner. Thus, while depth of responses did vary between

these methods, they also varied within each method, indicating this difference is likely to be as much a result of individual differences as of method of collection.

Practice implications

As indicated previously, this study took an action research approach and was not simply conducted for the expansion of knowledge in the field of inquiry. This study constituted an element of continuous service development and one noted benefit of the study itself was the introduction of the study-derived audit forms. Several OPDP staff noted the use of these forms helped guide the consultation process and that this was particularly effective for first time consultees who often arrived to these meetings uncertain of what to expect. Additionally, utilising the findings set out above and within the broader dataset, areas of particular need were identified and targeted workshops to address these needs were delivered within local delivery units, further aiding workforce development. Findings from this study may prove informative and useful in aiding the design and development of relevant consultation services to criminal justice staff working with personality difficulties in similar settings internationally.

Future research

As this study constituted a service evaluation, there were several limitations on the quantity and depth of information gathered about participating staff and the individuals under discussion. As a result, this study offered a broad insight into the general functioning of OPD consultations on the workforce as a whole. A useful future research study therefore, would be to explore the function of OPD consultations as they relate to different staff groups. Length of time in service and qualification route followed are likely to have some impact on whether and how consultations contribute to OM practices, both in terms of willingness to engage and in relation to application of psychological theories. Relatedly, the role of gender in consultation functions would be useful to explore in order to determine whether different theoretical teachings or relational approaches may benefit or hinder staff practice. The interplay between same-sex and inter-sex OM-offender pairings is likely to have a significant effect on the advice sought and practices promoted in OPD consultations. Given the majority of the OPD cohort is male and the majority of probation staff are female, it would be particularly useful to determine whether there may be gender-specific functions identified within OPD consultations, or whether any schools of thought are less applicable to either group. Finally, in order to provide better targeted consultations, it may be useful to explore differences in practical applications of this service in relation to offence type. The OPD cohort consists of violent and sexual offenders and thus it is clear that different risk management priorities will present for these groups.

Exploring the functionality of consultations as they relate to different offence types, and perhaps linking this to gender differences in OM-offender pairings, would likely contribute to a better understanding of the intricacies of this work.

Additional future research should attempt to assess the OM-Offender relationship and outcomes to strengthen our understanding of the direct impacts of the consultation process. As the OPDP consultation service is provided to offender managers, a similarly relevant future study might explore the instance of workplace burnout and staff turnover amongst those availing of OPDP consultations as compared to those who do not, particularly given findings by Blinkhorn et al., (2020) that accessing OPDP consultations led to increased feelings of pressure in one's work.

Chapter 5 – Overall Discussion and Conclusions

5.1 Thesis aims and their achievement

This thesis sought to evaluate the impact, utility and efficiency of screening and consultation processes within the Offender Personality Disorder Pathway. This jointly commissioned programme has been in operation across England and Wales for ten years and while there is some evidence to its effectiveness, this is patchy and inconsistent, as demonstrated in Chapter 2. Some key elements of the Pathway are also lacking in robust foundations, such as the methods by which individuals are identified for involvement, and this is particularly so for women. Separately, while there is some variation in the delivery of psychological consultations across regions, this component is the crucial next step in progressing individuals along the Pathway. As such, understanding how this service is utilised is important to help refine and progress related elements of OPDP core OM delivery.

The systematic review presented in Chapter 2 sought to determine what evidence had been established to date in identifying if and how the core OM component of the OPD Pathway has been achieving its overarching objectives. It was notable from the studies included in this review that while core OM relates to case identification, consultation, formulation and training, only one study made reference to the role of OPD screening processes. As a first step in addressing this gap in knowledge of the effectiveness of the OPD screening tool, the first empirical study in this thesis focussed on this identification stage of the OPD programme. Policy directives dictated that a gendered approach was taken for this initial foray into revising the screening process, and this proved useful in highlighting potential weaknesses that may also exist in relation to men. The second empirical study then addressed the key frontline aspect of OPD Pathway delivery, demonstrating how consultation processes may be applied to practice and utilised more effectively.

The overall aims of these studies were to:

- understand the impact, if any, core community delivery has had on OM's professional practice, risk of harm and reoffending, and psychological wellbeing and relationships of staff and service users;
- use available evidence and data to revise the OPDP case identification process for women such that a balance between risks and needs was achieved, without resulting in a large expansion of the overall caseload, and ensuring it would stand the test of time and draw on existing systems;
- identify the main areas of need raised by OMs within OPDP consultations and understand what OPDP staff provide to address these needs and how guidance might be integrated into practice.

In brief, these aims were achieved as follows:

In study 1, key search criteria were applied to two large literary databases in order to identify all relevant published literature addressing impact of the OPD Pathway core community service. Through following stringent review guidelines, a narrative synthesis of findings was generated which highlighted the clear absence of high quality evidence of outcomes. Gaps were also identified in relation to both specific components of interventions addressed and relevant outcomes explored.

In study 2, systems-based data were subjected to sophisticated and robust analyses to identify the pertinent criminogenic and psychological needs of women on the OPD Pathway. Through combining these with established risk metrics, an efficient, gender-responsive, and straightforward screening tool was developed. Initial scoping of the utility of this tool demonstrated that the female OPD Pathway caseload would not be greatly expanded through the implementation of this tool.

In study 3, a large qualitative dataset was generated through the use of an embedded audit tool with follow up interviews. Analyses resulted in the development of a clear and concise model of the OPDP consultation service in Wales. This model provided insight into the contextual grounds for seeking OPDP consultations and detailed how the specialist guidance provided could be applied to help improve relational working through the development of new perspectives.

5.2 Summary of key findings

5.2.1 Systematic review

Chapter 2 presented a systematic review of published literature exploring the impact of core OM delivery within probation settings. There have been hundreds of papers and reports written on various aspects of OPD delivery within custody and the community and a considerable number of these have been published. These studies have addressed the processes involved in OPD delivery, how specific intervention models are intended to work, the experiences of those delivering or accessing services, and the impacts of the various interventions explored. These studies have largely been carried out by those delivering the services in question, with a small number being nationally commissioned or semi-external projects. It was thus timely, from a central OPD HQ perspective, to get a clear understanding of what has truly been established in relation to the achievement of OPD outcomes. While the temptation to simply cite published reports in relation to transformative work being carried out and positive outcomes being achieved, it was prudent at this time to get a clear picture of what has actually been shown to work and how it works. This systematic review was therefore the first in a series of reviews intended to address the impact of OPD processes on

relevant outcomes, starting with the first point of entry into the programme. The purpose of these reviews is not only to establish what the evidence says but also to identify the gaps in OPD outcomes explored. This can enable the production of guidance around relevant areas of evaluation that can be made available to service-based researchers or interested external researchers to apply appropriately within their chosen field. To this end, it is hoped that identifying areas for future research and appropriate methodologies by which these may be explored, may encourage the production of high-quality studies that can usefully inform service delivery and policy development.

It was notable within this review that regional specifications of OPDP delivery varied to some extent, rendering direct comparisons or full synthesis of evidence for specified outcomes difficult. The twenty studies comprising this review did however provide some positive indications of OPDP impact on the workforce, both in terms of their professional practice and psychological skills learning. While useful, the application of unvalidated and potentially skewed measures suggests that more research in the field of workforce development is warranted, perhaps utilising mixed methods approaches and instruments targeting clear outcomes to ensure appropriate interpretation of results. It would be particularly useful to look beyond general competence of the workforce and explore outcomes related to psychologically-informed risk management and relational approaches. Wellbeing, in spite of being one of the high level outcomes of the OPD Pathway, was scantly explored in the reviewed literature. Two qualitative staff studies made brief reference to the additional pressure felt by OMs as a result of OPDP involvement. This raises the pertinent question of potential knock-on effects on staff (such as compassion fatigue) experienced as a result of developing a psychologically informed approach and understanding of offending behaviour. It may therefore be prudent to explore in more detail the implications of adopting relational ways of working, and the potential need for a graduated approach to becoming psychologically-minded. Perhaps the integration of bio-psycho-social theory into the established probation qualification training programme may support this development.

Outcomes for OPDP service users were less evident in the literature reviewed and tended to focus on risk and reconviction, being more tangible but also more ambitious outcomes to evidence over short timeframes. While more tangible in terms of measurability, these outcomes are more difficult to evidence as directly resulting from OPDP activity and those studies that attempted to do so could not identify direct links. As stated by Young, the entrenched beliefs around interpersonal relationships that result from the development of early maladaptive schemas and contribute to reoffending risks are not easily overcome and require repeated disconfirming before change can be

achieved (Young, 2003). Thus, while training OMs to apply attachment principles may help achieve better engagement in probation supervision, it is likely that a greater intensity of input would be needed to help achieve outcomes indicative of reduced risk and reoffending likelihood. Intermediate factors for these outcomes may be more informative, such as reductions in severity of incidents and considerations of mechanisms of change, as touched on by Clark and Chuan (2016) in exploring changes to the reasons for recall. Qualitative approaches to risk and reoffending outcomes may also be useful, such as interviews with OMs on the progress of their OPDP service users in the community.

Psychological health and prosocial behaviour are two high-level OPDP outcomes presented alongside wellbeing and yet only one study addressed coping mechanisms in their service user case study. It would be particularly useful to explore mechanisms of change as a result of the psychologically-informed and relational approach promoted by the OPDP (e.g., Haigh & Benefield, 2019) in order to determine if, and to what extent, improved wellbeing and mental health results. While studies from within custodial settings such as prison treatment units have provided some insights in this vein (McMurran & Delight, 2017), the complexities of offender rehabilitation in the community present particular challenges and warrant dedicated attention (McNeill, 2011).

Finally, several findings from the studies comprising this systematic review were undermined by methodological factors such as being underpowered or demonstrating weaknesses in design. The interwoven nature of interventions evaluated also complicated the learning as regards causality of outcomes. It is acknowledged however that the complexities of conducting real world research are manifold and these are compounded by the difficulties in gaining access to a highly complex population within a turbulent system. Attempting to do so with limited resources and experience further adds to these difficulties. Thus, one of the overarching learning points from this review is the suggestion that research of this nature should take into consideration the level of resource available and be carefully designed to maximise clear learning outcomes.

5.2.2 Women's screening tool revision

Chapter 3 presented the multi-faceted approach to revising the women's OPDP case identification process. This study was the first to address identification of personality difficulties in female offenders and it did so through an entirely female lens, rather than as an adjunct or comparison to male offender personality considerations. As a policy-driven study, there were several limitations on the extent to which this screening process could be revised. For example, as noted previously, the

eligibility criteria around risk metrics had already been set. This study came into existence after the W-OPD criteria task group had already been established and had already identified seven alternative approaches to screening women. The one component of all seven options was the maintenance of the OASys PD screen to indicate "likely PD", with the annotation that this was subject to review if it was not found to be appropriately gender-responsive. The researcher was invited to join this group to provide the essential analytic expertise required to accurately inform review processes. This involved the design and execution of all iterative stages of analysis detailed in Studies 3.1-3.2c, and the interpretation and explanation of all outputs. As this task group was made up of a range of strategic, operational and commissioning professionals with limited statistical or research experience, reporting to the group required skill in clearly and concisely explaining complex statistical methods and findings. Each next stage of inquiry was guided by outcomes of the previous stage and so it was crucial that the task group understood the intricacies and implications of each report.

Study 3.1 took a descriptive approach, as the options available for assessing risk were predetermined, precluding inferential analyses of risk metrics and related data. To be clear about the full characteristics of women identified by each set of criteria, cross-tabulation tables were presented not simply in terms of "screened in" or "screened out" but in relation to *how* women screened in. This not only allowed for clarity in understanding the cross-overs at hand but also provided a useful prelude to study 3.2 in demonstrating the evident dominance of additional indicators over PD items in screening women in to the Pathway.

Study 3.2 comprised multiple approaches to producing a better means of identifying women for OPD Pathway involvement. Through carefully exploring the functionality of the established OASys PD screening items in study 3.2a, there was little doubt that items in this tool did not usefully distinguish between women on the Pathway and those not on the Pathway. Utilising odds ratios to simply demonstrate this lack of distinction was useful to aid comprehension and supported further investigation. Through the use of the robust process of regression modelling, it was possible to determine the strongest items in predicting OPDP caseload status. While a reasonable precision rate was achieved, it was evident by the nature of the items that a more gender-responsive and efficient process for screening women in to the Pathway was likely to be found through exploring alternative approaches.

Given the significant policy implications of overhauling the women's case identification process, it was critical to access expertise and information from diverse sources in relation to identifying alternative items, as achieved by study 3.2b. A multi-stage discovery process was undertaken in order to ensure next steps were informed by relevant fields. It was important to ensure this process was efficient and concise, given the demanding workloads of those asked to provide their input. To this effect, survey respondents were asked specifically about key factors that determine whether or not a woman *ought to be on the Women's OPD Pathway*, rather than being asked to consider personality disorder more broadly. Concepts arising from external sources (DSM and survey findings) were mapped by the researcher onto OASys items and discussed with the task group to ensure agreement as to fit. The final set of 68 items covered a wide range of OASys content in terms of thematic topics, which was useful given the extant knowledge around high risk women and PD is relatively sparse (Blonigen, Sullivan, Hicks, & Patrick, 2012; Warren, 2002).

The penultimate stage of this study was the exploratory modelling of items potentially characteristic of women on the OPD Pathway. This involved a lengthy process of stepwise addition of each item to a mixed effects model, utilising all CRC and NPS data in order to identify those items most predictive of OPDP status. While a train-test approach may have been suitable for this stage, the imbalance in caseload sizes across the organisations (at almost 4:1) may have resulted in a skew in the representativeness of each set. Selection limiters such as risk factors, offence types, or sentence types may have been utilised to ensure some parity across train-test groups, however it was decided best not to over-engineer this important exploratory process.

The four types of items (section links to risk; offence characteristics; psychological difficulties; and interpersonal issues) comprising the final 16-item suitability criteria are worth discussing. Six items followed the format "(Section topic) issues linked to risk of serious harm, risks to the individual and other risks" with topics including relationships, lifestyle and associates, emotional wellbeing and thinking or behaviour. It is notable that these broadly encompassing items allow for some variability in the specific presentations of women rather than specifying exact issues within these categories. This perhaps draws into question whether the detailed content of the OASys assessment itself is predominantly male-focussed or appropriately gender-responsive. Separately, this reflects the overarching OPD principle of complexity of need being justifiably linked to the risk of harm presented by the individual (Joseph & Benefield, 2012). Nevertheless, these item types, along with those relating to past and present interpersonal issues, importantly reflect the bio-psycho-social framework underpinning the principles of the OPD pathway (e.g., Bowlby, 1982; Young et al., 2003).

Previous studies have noted that, left unacknowledged, traumatic experiences can lead to persistent and complex mental health conditions (Ashton, Bellis, Hardcastle, Hughes, Mably & Evans, 2016), poor attachment formation and difficulties developing positive interpersonal relating styles (Cloitre et al., 2005; McKechnie, 2015). This in turn can lead to behavioural effects such as violence and aggression (Widom and Wilson, 2015), which are reflected in the five items relating to offence characteristics. Considering the relational approach purported by the OPD pathway, it is notable that literature on women offenders have identified supportive relationship styles as positively impactful on women's ability to reduce anxiety, with more punitive approaches compounding a sense of injustice and reducing motivation to engage (Morash, Kashy, Smith, & Cobinna, 2014).

The final stage in the overall study was to combine eligibility and initial suitability findings to produce a complete screening tool for identifying women for OPDP involvement. Stages in this process explained and discussed at a group level were those relating to the inclusion or exclusion of optional items and the setting of a threshold for deciding OPDP suitability. It was therefore particularly important throughout this stage to be clear about numbers potentially identified as an outcome of each of these decisions, given a guiding principle of the task group was that the new process would not result in a large expansion of the caseload. This caseload limiter of the revision process was acknowledged as somewhat controversial, given the likelihood of excluding some women presenting with significant traumatic histories who most likely would benefit from OPDP intervention. As previously discussed however, this programme is relatively small-scale in its resource and overextending the service would likely disadvantage the target population who do fall within the remit of programme delivery. Additionally, the option for clinical override remained in place for those individuals raising particular concerns seen as appropriate for OPDP intervention.

5.2.3 Consultation functions

The second empirical study of this thesis involved the analysis of a large qualitative dataset drawn from OPDP consultations taking place over the course of one year in Wales. One of the criticisms of other consultation studies has been their lack of generalisability due to the combination of regional-specificity, small sample sizes, and non-exclusive focus on the consultation itself. While the present study was similarly limited by regional-specificity, this was balanced by maintaining a tight focus on consultation content and drawing from a considerably large participant pool over a broad timeframe. It should also be noted that the Wales region covers an entire country with a balance of urban and rural coverage, in contrast to some of the English regions which may be dominated to a greater or lesser extent by various socio-economic characteristics. Through the utilisation of an

embedded data collection process, an in-depth analysis of consultation functions was possible. This allowed the development of a multi-level model of OPD Pathway consultation delivery, which helped explain the means by which OMs were able to incorporate learning into practice. Evident within these findings were clear links to the relational practice ethos of the OPD programme, with several specific sub-themes (e.g., "Building working relationship", "Engagement", "Transparency") directly reflecting the importance of quality relational activity to effective service provision described by Haigh and Benefield (2019). Through understanding the organisational and supervision-based demands faced by OMs, such as preparation for an individual's release or specific issues faced by that individual, the broad context within which consultations take place could be better understood. It was then possible to locate OPDP consultations within this practice, in terms of the variety of input and depth of involvement in the guidance provided. This ranged from broad psychological perspectives in understanding offending behaviour and criminogenic needs, to more direct guidance on personal interactions within the supervision room. The array of psychological theories drawn from in consultations (e.g., "Psychological theory" and "Interventions" subthemes) additionally reflects Livesley's insights on the integration of multiple approaches as being dictated by the needs of the individual, rather than by any one therapeutic regime (Livesley, 2012). Finally, the personal impact of this service was similarly wide-ranging, encompassing the reassurance that one was working well while also encouraging a change in views.

Findings outlined in Chapter 4 bore some resemblance to earlier related studies such as McMullan et al., (2014), who found that changes in OM awareness of personality disorder helped increase understanding of offending behaviour and supported taking a more empathetic approach to supervision. Similarly, Radcliffe's model of OM's experience of OPDP consultations highlighted the significant change in practice resulting from addressing one's anxieties around supervision and applying psychological principles to help take a different perspective on the individual (Radcliffe et al., 2010). That these findings were replicated on a much larger scale in the Wales study supports the argument that the model outlined in Chapter 4 may be applicable in expounding consultation functions at a national (England and Wales) level. At a local (Wales) level, the usefulness of these findings were directly apparent, owing to the action-research nature of the study. Through All-Wales team feedback, interim findings from this study allowed for cross-region collegiate learning and discussion of the variety of topics addressed in consultations. Additionally, by presenting the team with figures on areas of greatest learning, ideas for dedicated training workshops (e.g., Schema or Cognitive Analytic Therapy techniques) were generated by the OPDP staff team for delivery to their local units.

An interesting point of note was that for those OMs who had multiple consultations in the dataset, the stated benefits and action of these were not all replicated across all consultations. For example, one OM described a consultation as helping her gain a better understanding of how to work with an individual and separately that another consultation helped her explore a client's childhood experiences as a factor in his behaviour. It may therefore be useful to explore the impact of engaging in multiple consultations in order to establish whether a 'dose effect' may be useful in broadening supervision skills.

5.3 Theoretical integration of findings

While the empirical studies in this thesis explored two distinct processes within the core OM delivery of the OPDP, there were a number of interesting links between findings arising from each study. One relevant observation between these studies was the finding that 15% of consultations analysed in chapter 4 were in relation to female offenders, and yet approximately 5% of the OPD caseload is female. The greater level of complexity and higher demand on resources presented by female offenders in comparison to males has been discussed elsewhere (Corston, 2007; Player, 2016), and this was borne out to some extent in this observation. Indeed, given the relatively higher levels of self-harm and histories of abuse experienced by women in the general prison population (Prison Reform Trust, 2015), it is perhaps unsurprising that women additionally presenting with personality difficulties pose a particular challenge for probation staff. It is notable also that studies reviewed in Chapter 2 relating to service users did not tend to address factors related to gender, potentially due to the predominance of men in the OPD cohort and to the focus having been largely on staff groups. It would be useful, therefore, to further explore the function of OPDP consultations as they relate to gender differences, and determine whether there may be particular skills or assistance needed in working with women with likely PD as compared to working with men. Further investigation into intersectionality with other protective characteristics would be additionally useful.

In relation to the content of findings, it is notable that a number of sub-themes emergent in chapter 4 bore resemblance to items comprising the revised W-OPD screening tool developed in chapter 3. The *role of family and relationships* sub-theme related to both the potential for these relationships to have a protective or problematic function for the individual and this was reflective of screening items linking relationship issues and linking lifestyle and associates to one's risk. *Self-harm* was raised by OMs as a concern in working with OPDP individuals and 'self-harm/attempted suicide' was a highly significant item in predicting women's OPDP screening status. In relation to *understanding* the offender perspective, this sub-theme considered factors influencing the individual's thinking and

behaviour and their personal development. Several screening items ('experience of childhood', 'emotional state of the offender', and 'thinking/behaviour linked to risk') reflected these considerations, further supporting the importance of these issues when thinking about how to work with individuals screened into the OPD Pathway. Similarly, the sub-theme *psychological understanding* reflected the OPDP function of helping OM's to become psychologically informed in their approach to working with complex individuals. Screening items such as 'difficulties coping', 'current psychological problems' and 'issues of wellbeing linked to risk' directly reflect areas of need where an increased understanding of psychological processes would be useful. While somewhat unsurprising in terms of the cross-over in content, it is relevant to note the nature of the concerns discussed reflect specific OPDP identification criteria.

5.4 A note on gender

It is notable that while Chapter 3 focussed on an element of the OPD Pathway as it relates to women, no other studies in this thesis took a gendered perspective. The circumstances leading to the women-specific approach to revising the OPD screening tool have already been described, but it is worth considering the applicability of a gendered lens to the rest of this work. The systematic review was notably non-gendered, with the majority of studies addressing workforce impacts as a whole and just one study addressing outcomes for a female service user (Maltman & Turner, 2017). As such, a review to this effect focussing on women would have been substantially limited in content. It is acknowledged however, that alternative approaches to this study may have been taken, such as exploring impacts for women in other areas of the OPD Pathway (e.g., McKeown & McCrory, 2019) or exploring factors for consideration when designing OPD services for women (e.g., O'Meara, Edwards & Davies, 2020). Relatedly, the consultation study may have utilised information on service user gender to explore any thematic differences associated with client gender and this may still have constituted a service evaluation rather than academic research. As noted in Chapter 1 however, this study was completed prior to the gender-focussed change in direction adopted in the screening study and so exploration of this nature was not pursued. The proposed future study outlined on pg. 159 may be particularly relevant in exploring gender dynamics. Additionally, some of the learnings from O'Meara et al., (2020) around the role of rapport and consistency of care in helping to disrupt the cycle of criminality experienced by women once they enter the criminal justice system may support the design of such a study.

5.5 Strengths and limitations

The latest OPDP strategy includes specific emphasis on the principle of service user involvement and this applies to research and evaluation as much as to service delivery and development (NHS-E & HMPPS, 2023). It is notable that neither empirical study was informed by input from those screened in to the OPD Pathway. It may have been possible, for example, to discuss various stages of the screening tool revision with women on the OPDP caseload in order to gain additional insights in terms of concepts to consider when identifying alternative items or in setting thresholds. While ethical concerns may have precluded direct discussion of one's own difficulties, some input on a general level may have been possible. Similarly, it may have been useful to explore knock-on outcomes of OPDP consultations with some of the individuals discussed in consultation meetings. This may have provided a means of validating the consultation model described in chapter 4 or indicated directions for model revision. Both studies did however incorporate involvement from strategic or operational OPDP staff groups and were therefore at least partly informed by practice priorities.

Previous approaches to revising the women's OPDP screening criteria were based entirely on adapting the risk elements as it was evident that women did not present with the same profile of risk of serious reoffending as men (d'Cruz, 2015). While it was clearly important to ensure appropriate risk considerations were made, this focus was somewhat short-sighted as the issue of gender differences extends beyond risk of harm characteristics. The "likely personality disorder" element of OPDP criteria were based on antisocial characteristics of DSPD men and while antisocial PD is present amongst female offenders, the complexities of OPDP women required a bespoke approach. Thus, a clear strength of Study 3 was the rigorous methodological approach taken which delved deeper into psychological considerations than any previous revision had attempted. While rigorous, the analyses undertaken were not exhaustive. It may have been useful, for example, to have more closely examined the details of women who had been clinically overridden in to the Pathway, both in terms of criteria met and in relation to the level of Pathway intervention accessed. This may have helped identify potential additional items to include in the modelling process or other issues for consideration such as other sources of non-independence to explore for inclusion as random effects. Relatedly, given the range in predictive strength of the 16 new PD items, it may have been appropriate to further develop the tool by applying relative unit weights to those items identified as most predictive of OPDP status. The use of Item Response Theory (IRT) approaches such as item weighting can improve accuracy of identification and reduce measurement error. However, given one of the assumptions of IRT is that the scale being developed relates to a unidimensional

trait, it was not deemed appropriate to follow this approach. As discussed, the 16-item suitability criteria were comprised of several conceptually different item types and while together these indicated one's probability of screening in to the Pathway, this in itself could not considered a latent trait. Indeed, five items relate to the highly dynamic offence characteristics section, which are liable to change considerably between assessments. It is also acknowledged that while IRT approaches add a level of statistical sophistication, the differential item functioning in relation to offender characteristics may have further complicated scoring processes. As noted, ethnicity differences were found in OPD screening status thus the application of item weights would need to account for this and other demographic variables (e.g., age) so as not to conflate item difficulty with item discrimination. With these additional considerations, the added complication of applying item weights to a manually scored tool was not pursued in favour of ensuring a straightforward process was devised. Upon reviewing the outcomes of implementing this tool however, this approach may be open for reconsideration.

A plausible strength of the consultation study was the unorthodox data collection process applied. Consisting of text-based first stages and interview-based follow-up with content generated both by OPDP staff and by their consultees, this approach was crucial to successfully answering the research questions. The real-world nature of the study was reflected in the fact that OM participants were not individuals who could easily allocate dedicated time to a full-scale interview and instead, data needed to be gathered in an integrated manner. Furthermore, the researcher being embedded in the Wales national OPDP team allowed for those in the field to help shape a useful data collection paradigm. Predecessors of this study had failed to achieve good response rates, with OMs being too busy to engage and also too disconnected from the purpose of the research to consider it meriting involvement. Engaging frontline OPDP staff in the process of data collection and recruitment of OMs meant that wide-scale buy-in was more achievable. This was then complemented by the relatively objective external nature of the researcher posing follow-up questions about the utility of consultation content, potentially reducing the occurrence of socially desirable responding which may have occurred otherwise.

5.6 Ethical considerations

The systematic review described in Chapter 2 addressed literary data only and did not therefore require ethical approval. The revision of the women's OPD screening process involved the analysis of secondary data only and therefore did not require ethical approval. One of the potential ethical considerations around this study was the impact on "false negatives" identified by the revised

process. As detailed within Chapter 3, no women who were accessing OPD services would be removed from the OPD service. It is noted, however, that screening in is not a "for life" condition and that once individuals come to the end of their sentence, they would need to be re-screened if they were convicted of a further offence. It is possible, in this scenario, that some women may not screen back in to the Pathway. This outcome may however be overridden by an OM in conjunction with OPD staff if presenting concerns are considered warranting OPD intervention. While this option is available, it should be considered that past screening outcomes may not have always been appropriate and the level or intensity of OPD service accessed by a given individual should also inform decisions around the use of clinical overrides.

The consultation study constituted a service evaluation and so did not require ethical approval. During the early design stages of this study advice was sought from MoJ colleagues who advised NRC approval would not be required. Had this study been designed to explore more academic content, ethical and governance approval would have been sought. However, there are ethical considerations to discuss, given the data-gathering method employed and the content of questions asked in the follow-up stage. First, it may have been stressful for OMs to discuss consultations relating to individuals they found difficult to manage, whether or not the consultation was useful in addressing these difficulties. Some OMs noted recalls to custody had taken place and so revisiting consultation content on those individuals may have generated feelings of disappointment or frustration. It is possible also that due to the generally acknowledged helpful nature of OPD consultations, OMs may have felt obligated to provide feedback on this process. It is noted that the nature of this evaluation was to understand the utility of consultations however, the personal impact of feeling more invested in a person's progress only to have to pursue recall proceedings for a particular reason was not explored. There may be unacknowledged benefits to maintaining a procedural and correctional mindset when working closely with highly complex, high risk individuals on probation and so developing psychological insights and becoming invested in the person's success may contribute to burnout and compassion fatigue. Indeed, with OMs requesting more involvement and noting the "reflective space" aspect of OPD consultations, one must ask whether enough is provided to probation staff to help provide some emotional support and containment given the complexity of the work undertaken. Recent developments in international standards of workplace wellbeing (Jain, Hassard, Leka, Di Tecco, & Iavicoli, 2021) would imply that those working in such intense environments should have access to support for their own wellbeing, in addition to that provided by OPD consultations directed at improving outcomes for their caseload.

5.7 Policy and practice implications

The systematic review highlighted the prevalence of the problem of under-resourcing in relation to high quality service evaluation. While the difficulties of conducting research within small-scale regional units have been discussed, it is clear that there are approaches that could be taken from a central governance position that may improve this situation. The two most common criticisms noted from the systematic review were the weaknesses in research design and the small-scale nature of studies conducted. As a national programme commissioning many such services, there is a clear need for these services to be supported to carry out higher quality evaluations and to be provided adequate resources to do so. Through accessing centrally delivered guidance on high quality research design, services may be supported to conduct high quality impact studies to usefully inform service delivery and development. Tailoring research design to suit the level of resource available and maximising utility of available data can contribute to a stronger evidence base for community-based programme delivery.

The novelty and importance of the screening study as a gender-responsive undertaking have been discussed, however it is important to acknowledge potential longer term impacts. The need for a thorough revision of the OPDP screening process for women was very clear, however the revised tool is as yet untested in terms of the resultant changes to the female OPDP caseload. It remains to be seen if the "right women" are now being screened in and out of the Pathway or if the constellation of presenting difficulties of women identified under the new process can be addressed by Pathway services. With this in mind, a crucial next step will be to carefully scrutinise the resultant caseload, paying close attention to those overridden in or out and reassessing the value of each element of the revised tool to ensure no harm is being done. Any additional learning from this reassessment can then be applied to further inform policy developments, in relation to both male and female screening processes.

In relation to consultations, much of the content centred around developing better ways of working with service users in order to improve the supervision experience for both parties. As indicated by Raynor and Vanstone (2007) and Annison et al., (2008), the erasure of the social worker perspective in probation training appears to have resulted in staff who struggle to understand or empathise with their service users. While the OPDP community delivery appears to address this shortcoming for those working with the highest risk and most complex individuals, it is clear that generic probation training would also benefit from more psychologically informed guidance. Including this provision

early in one's probation career may improve communication and transparency, leading to better engagement and better identification of protective and risk factors within supervision sessions.

5.8 Future studies

In light of the cross-over in content from the two empirical studies, it would be useful to explore differences in emergent consultation themes in relation to the gender of the individuals discussed. Furthermore, given the gender imbalance in probation staffing, with considerably more female probation officers than male (HMPPS, 2021), it would be particularly useful to explore any interaction effects between these groupings. Indeed, it may be particularly interesting and useful to explore the intricacies of the finding reported by Bruce et al., (2020) regarding gender differences in experiences of workplace burnout as a factor of OPD involvement. Identifying any gender-specific themes and the extent to which they vary on the basis of probation staff gender may provide more specific areas for probation training or service development. This would require a large pool of data drawn from multiple OPDP regions to ensure representativeness of findings.

In relation to women's screening, there are multiple avenues for further exploration. As stated previously, the outcomes for women screening in through the revised process will be explored in detail, both in relation to individual-level impacts (potentially following the journeys of a sample of those screened in), and in relation to wider programme impacts. It will be important to explore the extent of differences between women screened in through previous criteria and those screened in since June 2021 and determine whether the revised process may need to be adjusted. A similarly thorough treatment of the male screening tool is also indicated. Given the considerably larger number of males screening in to the OPD Pathway (approximately 31,000), the limitations preventing a train-test paradigm in the women's revision should be readily overcome. It will also be useful to explore the intricacies of all risk metrics noted in Chapter 3 in order to gain a richer understanding of how these interact with current OPDP suitability criteria.

One of the products from the OPD consultation study was the development of a checklist comprising areas of need for the workforce and their clients. Checklist items were drawn directly from the subthemes which emerged in Chapter 4, with the intention being that this tool could be utilised within all consultations to quantitatively inform specific areas of need. As the study sample consisted of a proportion of the total number of OMs accessing OPD consultations, it is likely that some factors identified may be high priority across the board whereas others may present as less of a concern. As noted, frequency of subtheme references was not weighted as indicative of importance in order to allow for these potential nuances. A future study incorporating this checklist could therefore help

identify greatest area of need nationally and further inform service development. To further inform and in some way validate the OPDP consultation model outlined in Chapter 4, a follow-up study may seek to explore outcomes for individuals screened in to the OPD Pathway whose OMs have availed of these consultations. It may be useful to discuss the service user's perspective on any perceived changes to the nature of the supervision relationship and related effects of these. If possible to take a mixed methods approach, it would be additionally useful to couch qualitative findings within the context of systems-based data, thereby providing a means of substantiating or explaining outcomes identified.

5.9 Reflexivity considerations

There were several advantages and disadvantages to being a researcher employed by the probation service in Wales and subsequently promoted to employment by HM Prison and Probation Service headquarters. These largely relate to the two empirical studies, however it can be argued that having an inside view on the OPD Pathway programme may have allowed for a clearer insight and more critical appraisal of the achievement of outcomes proposed by authors reviewed in Chapter 2. In relation to the screening and consultation studies, access to data and participants were clear advantages that would have been exceptionally difficult to obtain as an external researcher. In contrast, the embedded nature of the post in Wales may have added an alternative perspective on the consultation data that would not have affected a fully external researcher, potentially colouring interpretation of findings.

The data accessed for Chapter 3 required no Data Sharing Agreement to be drawn up as the researcher was using anonymised data held on her own MoJ laptop, thus security of the data was assured. This position also meant that the researcher had access to the MoJ data sciences professionals who generated the data and so any clarifications on the nature and format of the data could be readily sought and amendments made without the lengthy process of updating and revising Data Movement Forms that are associated with such data transfers to external contractors. Having spent some time working with MoJ data prior to this also afforded the researcher an understanding of the structure and origins of data which meant anomalies could be flagged and quickly remedied, while an external researcher may not have known what to question.

When the OPD programme board queried the threshold set for the women's revised screening tool, the researcher was again in a uniquely advantageous position. Working as an Evidence Specialist within the OPD central team's Research and Data unit allowed immediate access to several datasets

that provided additional information about women who had progressed through the pathway. This allowed for a cursory inspection of the data to help inform the thinking around the effects of setting the threshold chosen. While an external contractor would have had no access to additional data to help answer these queries, this situation highlights the complexities of the real world nature of this project. The datasets accessed were from three different (but overlapping) time points, only related to a portion of women meeting OPD criteria, and were not fully quality assured in terms of completeness of information captured. The analyses carried out would therefore be unlikely to stand up to robust statistical or scientific scrutiny and certainly would not be included in an academic publication of findings. This further highlights the ever-present need to "make do" with what is available under tight timeframes and within the limited resources available. Additionally, this scenario may offer some insight for the MoJ Data First team as to considerations to make in terms of accessibility of high quality data for both internal and external analysts.

While data access was a clear advantage of being an embedded researcher, the heightened security restrictions around MoJ software systems presented several barriers to progressing the revision of the women's screening tool. Analyses were conducted in R and in SPSS however, the version of R that was accessible to the researcher at the time of analysis was 15 versions older than the contemporary version available for download. This prevented the researcher from installing essential statistical packages and significantly delayed analytical processes that would have been completed in a fraction of the time on external systems. The MoJ's Analytical Platform has since been brought into existence and allows ready access to the latest R packages in a secure and sharable manner.

In relation to the consultation study, the researcher's position within the OPD team allowed ready access to probation staff which would have been extremely difficult for an external researcher to obtain without having strong connections to people working within the service. This relates to both the willingness to engage with an external interviewer on perceivably sensitive topics but also, on a practical level, to access to internal phone and email lists. Additionally, being part of the OPD team itself allowed for practical input on the design and content of monitoring forms to be sought from those providing OPD consultations. While this ensured useful and pragmatic data was gathered, it is possible that this contributed to the oversight regarding absence of more negatively targeted follow-up questions.

For the duration of the consultation study the researcher was based in an office shared by one part-time OPD psychologist, one part-time OPD probation officer, an OPD admin and visited occasionally by other members of the wider Wales OPD team. The clinical and operational OPD leads sat next door and at either end of the same hallway were two large OM rooms, each housing roughly 20 probation officers (one NPS room and one CRC room). This allowed some insight into the practicalities of consultation arrangements, although consultations themselves took place privately in another room. Being positioned within a probation building meant the researcher also gained some insight into the day-to-day activities, procedures, discussions, and difficulties experienced by probation staff. These insights undoubtedly afforded the researcher a contextually rich perspective from which to analyse consultation data. The researcher thus had direct exposure to commentary on consultations, both from OMs and consultants, and witnessed the practical impacts and frustrations around the accessibility of OPD staff. Additionally, exposure to the operational factors of probation work meant the researcher did not struggle to understand the technical jargon used by OMs when feeding back about consultations. An external researcher may have found this challenging, both in terms of accurately capturing the data but also in relation to interpretation of statements made.

It may be argued that the researcher's position within the OPD team favourably biased interpretations of data presented. It may also be argued that witnessing the difficulties of OM work with complex individuals within a system that imposes significant pressures on OMs to manage risks through draconian processes imbued the researcher with an awareness of the limitations of what could realistically be achieved from a one hour psychological consultation. It is argued that the researcher's relative distance from the operational team, being employed to evaluate OPD practices to inform local and central leadership, and work being overseen by an externally contracted academic research lead, likely dampened potential biases. All work carried out by the researcher was discussed with and reviewed by the supervisor, who was external to the project. This included discussions around interpretations of findings and acknowledgment of any tensions around the researcher's role as "evaluator" of the project.

Finally, in relation to overall PhD completion, the dual-role conflict of working within the OPD central team while enrolled in university became significant. While an agreement was in place to protect time assigned to PhD work, two significant workplace developments overrode this agreement such that the researcher opted to suspend the PhD while acting up two grades to the role of central team OPD research lead to provide maternity leave cover. Being inexperienced and unqualified for this position, this situation again reflects the necessity to "make do" within the constraints of an under-

resourced system. While overarching OPD leads wished to honour the protected time agreement, the researcher could not in good conscience ignore the enormity of work to be carried out in favour of PhD writing. Indeed, the drain on mental resources by this workload prevented any consideration of PhD work even if protected time were taken. As a result, the two year hiatus meant the researcher was not as immersed in the work as would typically be expected and completion of the PhD required an amount of reacquainting with the work carried out.

5.10 Concluding statement

This body of work consisted of two large-scale studies undertaken in a non-experimental, real-world context. While the author was working as a researcher within the core community team in Wales, the study of consultation functions was carried out with OPDP psychologists and their probation officer clients. This study sought to understand both the process and impact of psychological consultations carried out in Wales and what effect these consultations may have on offender management practices. Being granted access to systemic data from the combined England and Wales CJS caseload allowed for the women's screening study to be carried out. This multi-stage study applied predictive modelling combined with policy directives to overhaul the screening criteria previously used to identify female offenders for inclusion in the OPDP programme. Through the use of a single complete source of data, a highly efficient and automatable process was devised that better aligned with established knowledge on the psychological complexities of violent and sexual female offending.

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APPENDICES A-N

Appendix A: Contents of systematic review extraction chart

General **Authors**

Year

Title

Study characteristics

Outcomes

Primary aim(s)

Primary outcome/s

Related OPD outcome Secondary outcome/s

Related OPD outcome

Study type

Study design

Design - groups Power (quant only)

Inclusion criteria Exclusion criteria

Recruitment/sampling

method

Study setting

Population type **Participants**

> **Participants** Sample size

Attrition/ completion

Job type

Intervention features

Pathway feature Intervention category

Intervention sub-category Intervention description

Who delivers intervention? **Group characteristics**

Duration

Measurement frequency

Measure(s) Type of measure

Alpha (for psychometrics)

Analysis type Analysis

Follow-up duration

Themes identified Findings (qualitative)

OPD related outcomes

Findings (quantitative)

Mean change / difference

Effect size

Summary of results Overall findings

Direction of effect

Notes

Limitations

MMAT

S1

S2

Screening question

comments Type (1-5)

1

2

3

4 5

Additional comments

Total MMAT

Appendix B: Mixed Methods Appraisal Tool Criteria

Part I: Mixed Methods Appraisal Tool (MMAT), version 2018

Category of study designs	Methodological quality criteria	Responses					
		Yes	No	Can't tell	Comments		
Screening questions	S1. Are there clear research questions?						
(for all types)	S2. Do the collected data allow to address the research questions?	8 1					
	Further appraisal may not be feasible or appropriate when the answer is 'No' or 'Can't tell' to one or both screening questions.						
1. Qualitative	1.1. Is the qualitative approach appropriate to answer the research question?	8 - 3		3 8			
	1.2. Are the qualitative data collection methods adequate to address the research question?	83 /					
	1.3. Are the findings adequately derived from the data?			0			
	1.4. Is the interpretation of results sufficiently substantiated by data?						
	1.5. Is there coherence between qualitative data sources, collection, analysis and interpretation?						
2. Quantitative	2.1. Is randomization appropriately performed?	0 3					
randomized controlled	2.2. Are the groups comparable at baseline?	8 8		a a			
trials	2.3. Are there complete outcome data?	10 0					
	2.4. Are outcome assessors blinded to the intervention provided?	6 .					
	2.5 Did the participants adhere to the assigned intervention?						
3. Quantitative non-	3.1. Are the participants representative of the target population?	0 3					
randomized	3.2. Are measurements appropriate regarding both the outcome and intervention (or exposure)?			8			
	3.3. Are there complete outcome data?	10					
	3.4. Are the confounders accounted for in the design and analysis?						
	3.5. During the study period, is the intervention administered (or exposure occurred) as intended?						
4. Quantitative	4.1. Is the sampling strategy relevant to address the research question?						
descriptive	4.2. Is the sample representative of the target population?	8 - 3	k	8			
	4.3. Are the measurements appropriate?	20					
	4.4. Is the risk of nonresponse bias low?						
	4.5. Is the statistical analysis appropriate to answer the research question?						
5. Mixed methods	5.1. Is there an adequate rationale for using a mixed methods design to address the research question?	0 1					
	5.2. Are the different components of the study effectively integrated to answer the research question?	8 3		8 8			
	5.3. Are the outputs of the integration of qualitative and quantitative components adequately interpreted?	E /					
	5.4. Are divergences and inconsistencies between quantitative and qualitative results adequately addressed?						
	5.5. Do the different components of the study adhere to the quality criteria of each tradition of the methods involved?						

Appendix C: All items provided by MoJ Data Sciences Hub for OPD screen revision

date of birth gender ethnicity_best ethnicgroup_best casetype pathway3 location provider.desc nps_crc cpa_equivalent prison ogrs3_2yr_delius rsr_score_delius mappa_cat_prob mappa level nationality long nationality.cd ogrs3_cat_description rosh_delius rosh_oasys rosh_combined breach ogp_2yrpct ovp 2yrpct sentence length in days

OASys sections and items

operational_length event_number

1.5 Number of court appearances at which convicted aged under 18 years OGRS 3

General offending% within 2 years of community sentence/discharge % V.H/H/M/L

- 2.2 Did the offence involve any of the following:
- a. Carrying or using a weapon
- b. Any violence or threat of violence/coercion
- c. Excessive use of violence/sadistic violence
- d. Arson
- e. Physical damage to property
- f. Sexual element
- 2.3 Did any of the following occur
- a. Were there any direct victim(s) e.g., contact targeting
- b. Were any of the victim(s) targeted because of racial motivation or hatred of others identifiable group
- c. Response to a specific victim (e.g., revenge, settling grudges)
- d. Physical violence towards partner
- e. Repeat victimisation of the same person
- f. Were the victims(s) stranger(s) to the offender
- 2.6 Does the offender recognise the impact and consequences of offending on victim

/community/wider society? Yes/No

2.7 Were there other offenders involved? Yes/No

2.9 Please tick each evidenced motivation a. Sexual motivation b. Financial motivation c. Addiction/perceived needs d. Emotional state of offender e. Racial motivation or hatred of other identifiable group f. Thrill seeking g. Other 2.10 Did any of the following act as disinhibitors a. Alcohol b. Pornography c. Non – compliance with medication d. Psychiatric problems e. Emotional state f. Drugs g. Traumatic life event (divorce, redundancy) 2.11 Does the offender accept responsibility for the current offence(s) Yes/No 2.13 Are current offence(s) an escalation in seriousness from previous offending? Yes/No 2.14 Are current offence(s) part of an established pattern of similar offending (optional) Yes/No Disclosed 2 Analysis of offence issues linked to risk of serious harm, risks to the individual and other risks. Yes/No 3.3 Currently of no fixed abode or in transient accommodation No/Some/Sig/Missing □ Disclosed 3.4 Suitability of accommodation No/Some/Sig □ Disclosed 3.5 Permanence of accommodation No/Some/Sig □ Disclosed 3.6 Suitability of location of accommodation No/Some/Sig □ Disclosed 3 Accommodation issues linked to risk of serious harm, risks to the individual & other risks Yes/No 3 Accommodation issues linked to offending behaviour Yes/No 4.2 Is the person unemployed, or will be unemployed on release No/Some/Sig □ Disclosed 4.3 Employment history No/Some/Sig □ Disclosed 4.4 Work related skills No/Some/Sig □ Disclosed 4.5 Attitudes to employment No/Some/Sig □ Disclosed 4.6 School attendance (optional) No/Some/Sig □ Disclosed 4.7 Has problems with reading, writing or numeracy Indicate problem areas below No/Some/Sig □ Disclosed Reading

Disclosed Writing

Disclosed Numeracy □ Disclosed 4.8 Has learning difficulties (optional) No/Some/Sig □ Disclosed 4.9 Any educational or formal professional / vocational qualifications (optional) No/Some/Sig □ Disclosed 4.10 Attitude to education / training (optional) No/Some/Sig □ Disclosed 4 Education / training / employability issues linked to risk of serious harm, risks to the individual & other risks Yes/No 4 Education / training / employability issues linked to offending behaviour Yes/No 5.2 What is the offenders financial situation (optional) No/Some/Sig □ Disclosed 5.3 Financial management No/Some/Sig □ Disclosed

Peer group influences (e.g., offender easily led, gang member) Yes/No

5.4 illegal earnings are a source of income (optional) No/Some/Sig 🗆 Disclosed
5.5 Over reliance on family /friends/ others for financial support (optional) No/Some/Sig □ Disclosed
5.6 Severe impediment to budgeting (optional) No/Some/Sig □ Disclosed
5 Financial issues linked to risk of serious harm, risks to the individual & other risks Yes/No
5 Financial issues linked to offending behaviour Yes/No
6.1 Current relationship with close family members No/Some/Sig □ Disclosed
6.2 Family offender
6.3 Experience of childhood No/Some/Sig □ Disclosed
6.4 Current relationship with partner No/Some/Sig Disclosed
6.5 Partner offender
6.6 Previous experience of close relationships No/Some/Sig □ Disclosed
6.7 Evidence of domestic violence / partner abuse Yes/No
(If the user has selected 'Yes' the following two fields appear as part of 6.7)
a. Victim Yes/No
b. Perpetrator Yes/No
6.8 Current relationship status No/Some/Sig □ Disclosed
6.9 Parental Responsibilities Yes/No
6.10 - if yes to 6.9 Parental Responsibilities – are these a problem? (optional) Yes/No
6 Relationship issues linked to risk of serious harm, risks to the individual & other risks Yes/No
6 Relationship issues linked to offending behaviour Yes/No
o Relationship issues linked to offending sendviour resyrvo
7.1 Community integration
7.2 Regular activities encourage offending No/Some/Sig □ Disclosed
7.3 Easily influenced by criminal associates No/Some/Sig □ Disclosed
7.4 Manipulative / predatory lifestyle (optional) No/Some/Sig Disclosed
7.5 Recklessness and risk-taking behaviour Yes/No □ Disclosed
7 Lifestyle and associates issues linked to risk of serious harm, risks to the individual & other risks
Yes/No
7 Lifestyle and associates issues linked to offending behaviour Yes/No
8.1 Drugs ever misused (in custody and community) Yes/No
(If answer to 8.1 above is Yes complete this section.)
Drug
Current Usage None/Daily/Weekly/Monthly/Occasional
Currently injected
Previous usage
Previously injected
A Heroin None/Daily/Weekly/Monthly/Occasional
B Methadone (not prescribed) None/Daily/Weekly/Monthly/Occasional
C Other opiates None/Daily/Weekly/Monthly/Occasional
D Crack /Cocaine None/Daily/Weekly/Monthly/Occasional
E Cocaine Hydrochloride None/Daily/Weekly/Monthly/Occasional
F Misused prescribed drugs None/Daily/Weekly/Monthly/Occasional
G Benzodiazepines None/Daily/Weekly/Monthly/Occasional
H Amphetamines None/Daily/Weekly/Monthly/Occasional □ □ □
I Hallucinogens None/Daily/Weekly/Monthly/Occasional □
J Ecstasy None/Daily/Weekly/Monthly/Occasional □
K Cannabis None/Daily/Weekly/Monthly/Occasional □
L Solvents (inc. gases and glues) None/Daily/Weekly/Monthly/Occasional
M Steroids None/Daily/Weekly/Monthly/Occasional

N Other None/Daily/Weekly/Monthly/Occasional 8.4 Current Drug noted in 8.1 (Class A only) Disclosed 8.5 Level of use of main drug Less than Weekly / More than Weekly / Missing Disclosed 8.6 Ever injected drugs Yes/No Disclosed
8.7 Violent behaviour8.8 Motivation to tackle drug misuse No/Some/Sig/Missing □ Disclosed8.9 Drug use and obtaining drugs a major activity / occupation Problem?No/Some/Sig/Missing □ Disclosed
8 Drugs misuse issues linked to risk of serious harm, risks to the individual & other risks Yes/No 8 Drugs misuse issues linked to offending behaviour Yes/No
 9.1 Evidence of domestic violence / partner abuse No/Some/Sig □ Disclosed 9.2 Binge drinking or excessive use of alcohol in last 6 months No/Some/Sig □ Disclosed 9.3 Frequency and level of alcohol misuse in the past No/Some/Sig □ Disclosed
10.1 Difficulties coping No/Some/Sig □ Disclosed 10.2 Current psychological problems / depression No/Some/Sig □ Disclosed 10.3 Social isolation No/Some/Sig □ Disclosed
10.4 Offender's attitude to themselves No/Some/Sig □ Disclosed 10.5 Self-harm, attempted suicide, suicidal thoughts or feelings No/Some/Sig □ Disclosed 10.6 Current psychiatric problems No/Some/Sig □ Disclosed
10.7 Tick if any of the following were reported:a. Evidence of childhood behavioural problems (optional)b. History of severe head injuries, fits, periods of unconsciousness (optional)
c. History of psychiatric treatment (optional) d. Ever been on medication for mental health problems in the past (optional) e. Previously failed to co-operate with psychiatric treatment (optional) f. Ever been a patient in a Special Hearital or Regional Secure Heit (optional)
 f. Ever been a patient in a Special Hospital or Regional Secure Unit (optional) g. Current psychiatric treatment or treatment pending 10 Issues of emotional well-being linked to risk of serious harm, risks to the individual & other risks Yes/No
10 Issues of emotional well-being linked to offending behaviour Yes/No
11.1 Level of interpersonal skills No/Some/Sig □ Disclosed 11.2 Impulsivity No/Some/Sig □ Disclosed
11.3 Aggressive / controlling behaviour (optional) No/Some/Sig □ Disclosed 11.4 Temper control No/Some/Sig □ Disclosed 11.5 Ability to recognise problems No/Some/Sig □ Disclosed
11.6 Problem solving skills No/Some/Sig □ Disclosed 11.7 Awareness of consequences No/Some/Sig □ Disclosed
11.8 Achieves goals (optional) No/Some/Sig □ Disclosed 11.9 Understands other people's views No/Some/Sig □ Disclosed 11.10 Concrete / abstract thinking (optional) No/Some/Sig □ Disclosed
11 Thinking / behaviour issues linked to risk of serious harm, risks to the individual & other risks Yes/No

11 Thinking / behaviour issues linked to offending behaviour Yes/No

198

12.1 Pro-criminal attitudes No/Some/Sig 🗆 Disclosed
12.2 Discriminatory attitudes
12.3 Attitude towards staff (optional) No/Some/Sig □ Disclosed
12.4 Attitude towards supervision / licence No/Some/Sig □ Disclosed
12.5 Attitude towards community / society No/Some/Sig □ Disclosed
12.6 Does the offender understand their motivation for offending (optional) No/Some/Sig □
Disclosed
12.7 Completed programmes
12.8 Motivation (to address offending behaviour) Very Motivated/ Quite Motivated/ Not at All
Disclosed
12 Attitudes linked to risk of serious harm, risks to the individual & other risks Yes/No
12 Attitudes issues linked to offending behaviour Yes/No
12 Attitudes issues linked to offerfuling behaviour resylvo
13.1 General Health – Any physical or mental health conditions? Yes/No
13.2 Electronic monitoring – any adverse impact to others? Yes/No
13.2 Is there a fixed telephone line at the offender's address that is not used for any other facilities
such as answer phone, faxes, internet access (optional) Yes/No
13.2 Is there a permanent electricity supply at the offender's address (optional) Yes/No
13.3 Do any of the issues below affect availability or suitability for the proposed order \Box , electronic
monitoring \Box or programme \Box .
Alcohol misuse
Drugs misuse 🗆 🗆 🗆
Chaotic lifestyle 🗆 🗆
Religious or cultural requirements \square \square
Transport difficulties
Commitments: Employment $\Box \Box \Box$
Commitments: Education 🗆 🗆
Child care / carers 🗆 🗆
·
13.4 Understands the importance of completing programmes (optional) Yes/No
s3_score
s4 score
s6 score
s7_score
-
s8_score
s9_score
s11_score
s11_score_10item
s12_score
s3_criminogenic need
s4_criminogenic need
s6_criminogenic need
s7_criminogenic need
s8_criminogenic need
s9_criminogenic need
s11_criminogenic need
s12_criminogenic need
s2q6_reverse
actual_opdp_case
actual_opdp_case actual_opdp_override
actual_opup_override

oasys_pd_screen_score oasys_pd_ind_a_childhood oasys_pd_ind_b_mh oasys_pd_ind_c_sash oasys_pd_ind_d_disruptive

Appendix D: OASys items comprising proxy indicators

OPDP indicator & explanation	Name in dataset	Component items
Childhood difficulties	'oasys_pd_ind_a_childh	Score 1 or 2 on childhood
	ood'	experience (OASys question 6.3)
[Refers to childhood abuse		or a tick on childhood problems
experiences (physical, sexual,		(part of question 10.7)
emotional abuse and neglect)		(part of question 10.7)
and/or childhood behavioural		
problems.]		
Mental health difficulties	'oasys_pd_ind_b_mh'	Score 1 or 2 on current
	,	psychological problems (10.2)
[Checking these items requires		or current psychiatric problems
presence of mental health		(10.6)
problems that are persistent		or a tick on current or pending
over time (include previous		psychological treatment (another
diagnosis of personality		part of 10.7)
disorder). Isolated incidents		part or 10.77
related to adjustment problems		
(e.g. arriving in prison at the		
beginning of a long sentence)		
would not be scored here]		
Self-harm or suicide attempts	'oasys_pd_ind_c_sash'	Suicide or self-harm concerns
		(OASys risk of serious harm
[Check the history of self-		screening questions R3.1 and
harm/suicide attempts.		R3.2)
Checking these items requires		
presence of self-harm/suicide		
attempts to be persistent over		
time. Isolated incidents related		
to adjustment problems (e.g.		
arriving in prison at the		
beginning of a long sentence)		
would not be scored here]	/ 1 1 1 1	
Challenging behaviour	'oasys_pd_ind_d_disrup	Assaulted staff either currently
	tive'	-
1 -		R1.3)
1 .		_
		behaviour (R4.2)
· · · · · · · · · · · · · · · · · · ·		
1 .		
[Challenging behaviour must be persistent and/or pervasive and may include litigiousness (e.g. making frequent written complaints), adjudications for violence (to staff or inmates), frequent periods in segregation, dirty protests in custody, breaches or recalls (or other failures while under supervision), very persistent offending, dismissal from treatment programmes, discharge from mental health services (where this is linked to disruptive behaviour).]	tive'	or previously (RoSH screening R1.3) or concerns about disruptive behaviour (R4.2)

Appendix E: What is Segmentation?

Using outputs from the segmentation dataset

What is segmentation?

'Segmentation' is the name given to a detailed representation of the HMPPS caseload on a given date (on this occasion, 30 June 2017). Caseload details from Nomis and Ndelius are combined with criminal history data from the Police National Computer (PNC) and offence and criminogenic need details from the Offender Assessment System (OASys). This process creates the segmentation dataset. This dataset is used to profile and analyse the caseload, according to the Risk - Need – Responsivity (RNR) principles of targeting and tailoring services for offenders that focus on issues relevant to their offending behaviour.

Which offenders are included?

The process of producing the segmentation dataset starts with all those who are in a prison or young offender's institute and/or managed by the NPS or CRC-run probation services. Those aged under 18 are excluded.

To produce risk measures (e.g., the OGRS, OVP and RSR scores), criminal records must be located on the Ministry of Justice PNC extract, and so a small proportion whose cases cannot be matched are excluded from most segmentation analyses.

To produce need (e.g., accommodation, drug misuse), responsivity (e.g., learning difficulty) and professional judgment risk of serious harm (RoSH) measures, and risk measures that incorporate needs (e.g., OVP), an OASys assessment is needed. A significant minority of offenders do not have an OASys, and filters are sometimes imposed on how recently the last OASys was completed.

Depending on the segmentation product that you are using, further offenders may have been filtered out.

When an offender in custody is subject to probation management, then it is possible to include them as probation cases, but most analyses refer to either 'custody' or 'community' cases depending on where the offender is located on the segmentation date.

What are some caveats and limitations to be aware of with segmentation?

Need, responsivity and RoSH data are not available for a significant minority of offenders, and no attempt is made to estimate the prevalence of these issues among non-OASys offenders. There are at least two non-OASys subpopulations: those receiving low-tariff sentences (e.g., standalone unpaid work) will tend to have lower risk and fewer needs, while those receiving short custodial sentences tend to have higher risk and more needs. An Interim Prioritisation guidance note was issued in 2015 to encourage consistent OASys targeting, and remains in force.

Segmentation offers a 'period' rather than 'cohort' view: it is based on the caseload on a given day, rather than a cohort of offenders experiencing an event (e.g., entering custody, starting community management) over a given period. It is possible to estimate results for 'flows' based on those for the 'stock', allowing for differences between subpopulations — most obviously sentence length — but this is not a routine service and a standard methodology has not yet been defined.

The Basic Custody Screening Tool is not yet part of segmentation. It offers universal prisoner coverage on a range of questions, some of which (e.g., veteran status) are not included in OASys.

Where both BCST and OASys cover a topic, senior practitioners accord OASys a higher status due to its use of practitioner judgement, and there is no probation equivalent for BCST.

Cohort profiles produced using the segmentation dataset will sometimes be obviously at odds with operational practice. For example, profiles of the CRC caseload will include a small number of offenders with RSR scores above 6.9%, which would contravene the Case Allocation System. Possible explanations include: practitioner error; different data being available when practitioners and MoJ analysts calculated the score (e.g., due to the PNC being updated) and, in the case of RSR, different versions of the algorithm being used.

The segmentation dataset is produced through large-scale dataset matching through automated processes, using name, gender, date of birth and system IDs. These processes are considered accurate, but a small number of errors are probable in such an exercise, in addition to the failures to match records already mentioned.

What is segmentation presently used for?

The immediate purpose is to inform the commissioning of offender services. Through Offender Reform and Commissioning Group, commissioners receive Tableau tools that allow them to understand the risks, needs and responsivity of offenders in each prison, and in the community by NPS Division and Community Rehabilitation Company (i.e., CRC cases at CPA level). Past generations of these tools were produced in Excel and are available to Hub users, though their use of Excel VBA means they are not accessible in Office365.

Segmentation has also been used to inform many strategic, policy and operational delivery projects. These include: ministerial briefing packs on female and older offenders; understanding the RNR of certain groups (e.g., intimate partner violence perpetrators) to better design services for them; consideration of sentencing, early release and recall policy/practice for particular offender groups, and profiling eligibility for offending behaviour programmes and other services targeted on RNR.

Philip Howard, Data Science Hub

Last updated 11 October 2017

Appendix F: OASys Section score calculation and criminogenic needs thresholds

Criminogenic need	Scored questions	Scale range	Cut-off
Accommodation	3.3, 3.4, 3.5, 3.6	0-8	2+
Education, training and employment	4.2, 4.3, 4.4, 4.5	0-8	3+
Relationships	6.1, 6.3, 6.6	0-6	2+
Lifestyle & associates	7.2, 7.3, 7.5	0-6	2+
Drug misuse	8.4, 8.5, 8.6, 8.8, 8.9	0-10	2+
Alcohol misuse	9.1, 9.2, 9.3, 9.5	0-8	4+
Thinking & behaviour	11.5, 11.6, 11.7, 11.9	0-8	4+
Attitudes	12.1, 12.4, 12.5, 12.8	0-8	2+

Detailed content of items scored for criminogenic needs calculations – all items are scored 0, 1, or 2 indicating no, some or significant problems, respectively.

Accommodation

- 3.3, Currently of no fixed abode or in transient accommodation
- 3.4, Suitability of accommodation
- 3.5, Permanence of accommodation
- 3.6, Suitability of location of accommodation

Education, Training and Employment

- 4.2, Is the person unemployed, or will be unemployed on release
- 4.3, Employment history
- 4.4, Work related skills
- 4.5, Attitudes to employment

Relationships

- 6.1, Current relationship with close family members
- 6.3, Experience of childhood
- 6.6, Previous experience of close relationships

Lifestyle & associates

- 7.2, Regular activities encourage offending
- 7.3, Easily influenced by criminal associates
- 7.5, Recklessness and risk-taking behaviour

Drug misuse

- 8.4, Current Drug noted in 8.1 (Class A only)
- 8.5, Level of use of main drug
- 8.6, Ever injected drugs
- 8.8, Motivation to tackle drug misuse
- 8.9, Drug use and obtaining drugs a major activity / occupation

Alcohol misuse

- 9.1, Evidence of domestic violence / partner abuse If a problem describe level and frequency of alcohol consumption at present time
- 9.2, Binge drinking or excessive use of alcohol in last 6 months
- 9.3, Frequency and level of alcohol misuse in the past
- 9.5, Motivation to tackle alcohol misuse (if applicable)

Thinking & behaviour

- 11.5, Ability to recognise problems
- 11.6, Problem solving skills
- 11.7, Awareness of consequences
- 11.9, Understands other people's views

Attitudes

- 12.1, Pro-criminal attitudes
- 12.4, Attitude towards supervision / licence
- 12.5, Attitude towards community / society
- 12.8, Motivation (to address offending behaviour)

Appendix G: R output detailing Random Effects modelling

```
> #Does (geographic) region create nonindependence in the outcome "screened-in"?
> regeffect<-(glm(opddatabase~region, family="binomial", data=NPSfullwomen))
> summary(regeffect)
glm(formula = opddatabase ~ region, family = "binomial", data = NPSfullwomen)
Deviance Residuals:
 Min 10 Median
                3Q Max
-1.364 -1.184 1.001 1.115 1.362
Coefficients:
           Estimate Std. Error z value Pr(>|z|)
(Intercept)
               regionMidlands
regionNorth East
                  regionNorth West
                   regionSouth East and Eastern 0.04543 0.13339 0.341 0.733445
regionSouth West and Central 0.64387 0.13585 4.740 2.14e-06 ***
regionWales
                 Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
(Dispersion parameter for binomial family taken to be 1)
 Null deviance: 5015.2 on 3617 degrees of freedom
Residual deviance: 4941.9 on 3611 degrees of freedom
AIC: 4955.9
Number of Fisher Scoring iterations: 4
> #Does ethnicity create nonindependence in the outcome "screened-in"?
> ethneffect<-glm(opddatabase~ethnicgroup, family="binomial", data=NPSfullwomen)
> summary(ethneffect)
Call:
glm(formula = opddatabase ~ ethnicgroup, family = "binomial",
 data = NPSfullwomen)
Deviance Residuals:
 Min 10 Median
                 3Q Max
-1.341 -1.218 1.023 1.137 1.637
Coefficients:
        Estimate Std. Error z value Pr(>|z|)
            (Intercept)
ethnicgroupBlack
               -0.2335
                       0.2276 -1.026 0.30499
                ethnicgroupMixed
ethnicgroupOther -0.4633  0.4410 -1.051  0.29344
ethnicgroupWhite
                0.4797 0.1926 2.490 0.01277 *
```

```
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
(Dispersion parameter for binomial family taken to be 1)
 Null deviance: 5015.2 on 3617 degrees of freedom
Residual deviance: 4959.0 on 3612 degrees of freedom
AIC: 4971
Number of Fisher Scoring iterations: 4
> #Does offence type create nonindependence in the outcome "screened-in"?
> offeffect<-(glm(opddatabase~offencetype, family="binomial", data=NPSfullwomen))
> summary(offeffect)
Call:
glm(formula = opddatabase ~ offencetype, family = "binomial",
 data = NPSfullwomen)
Deviance Residuals:
 Min
        10 Median
                       3Q
                            Max
-1.5228 -1.2108 0.8676 1.1444 1.4115
Coefficients:
            Estimate Std. Error z value Pr(>|z|)
                  -0.21484 0.12219 -1.758 0.0787.
(Intercept)
offencetypecriminal damage 0.99794 0.17909 5.572 2.51e-08 ***
offencetypeother
                     -0.32050 0.16280 -1.969 0.0490 *
offencetypepublic order -0.02483 0.22838 -0.109 0.9134
                     0.08242 0.17757 0.464 0.6425
offencetypesexual
offencetypeviolent
                      Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
(Dispersion parameter for binomial family taken to be 1)
 Null deviance: 5015.2 on 3617 degrees of freedom
Residual deviance: 4942.1 on 3612 degrees of freedom
AIC: 4954.1
Number of Fisher Scoring iterations: 4
> #Does sentence type create nonindependence in the outcome "screened-in"?
> senteffect<-(glm(opddatabase~Sentgroup, family="binomial", data=NPSfullwomen))
> summary(senteffect)
Call:
glm(formula = opddatabase ~ Sentgroup, family = "binomial", data = NPSfullwomen)
Deviance Residuals:
        1Q Median
                       3Q
                            Max
-1.7077 -1.0991 0.7278 1.0678 1.4715
```

Coefficients:

Estimate Std. Error z value Pr(>|z|) (Intercept) 0.1054 0.3249 0.324 0.74572SentgroupPrison<10yrs -0.5056 0.3349 -1.510 0.13110 SentgroupPrisontoLife 0.5113 0.3391 1.508 0.13161 SentgroupProbation12mnths+ 0.1580 0.3301 0.479 0.63209 SentgroupRecall SentgroupSSO Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1 (Dispersion parameter for binomial family taken to be 1) Null deviance: 5015.2 on 3617 degrees of freedom Residual deviance: 4797.3 on 3611 degrees of freedom AIC: 4811.3 Number of Fisher Scoring iterations: 4 > anova(regeffect,ethneffect,offeffect,senteffect,test="Chisq") Analysis of Deviance Table Model 1: opddatabase ∼ region Model 2: opddatabase ∼ ethnicgroup Model 3: opddatabase ∼ offencetype Model 4: opddatabase ~ Sentgroup Resid. Df Resid. Dev Df Deviance Pr(>Chi)

3611 4941.9 1

2 3612 4959.0 -1 -17.133 3.484e-05 ***

3 3612 4942.1 0 16.935

3611 4797.3 1 144.787 < 2.2e-16 *** 4

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Appendix H: Women's OPD screening survey

Women's OPD screening survey

To determine an appropriate process for identifying women for the OPD Pathway, it is necessary to examine the current screening process. As a lead practitioner in the OPDP, your insights into this process would be very helpful.

The following brief survey asks for your views on the OPD screening tool in relation to women and you insuring the right women are identified once CRC and NPS remerge as a unified organisation. Thank you very much for your participation.	ur priorities f
nank you very much for your participation.	
Required	
In your experience, what are the key factors that determine whether or not a woman be on the Women's OPD pathway? Please rank in order of importance. *	ought to
Women struggling with emotional regulation difficulties	
Women presenting a risk of harm to others	
Women at risk of harming themselves/attempting suicide	
Women with substance misuse issues	
Women with relationship problems	
Women with difficulties coping	
Women with extremely traumatic histories (e.g., 4 or more ACEs)	
Women who are prolific reoffenders	
If relevant key factors are not listed in question 1 above, please suggest alternatives listed in question 1 above, please suggest alternative listed in question 1 above suggest alternative listed in question 1 above suggest alternative listed in question 1 above s	below.

	our experience, how well do you think the current OPD screening tool (10 OASys items s 4 indicators) performs? *
0	I think the screen identifies too many women
0	I think the screen identifies too few women
0	I think the screen identifies the right women for the OPD programme
	at sections of the screen do you (or your team) tend to rely on more when screening men into the Pathway – 10 items or 4 indicators? *
0	We mostly screen women in through the 10 PD items
0	We mostly screen women in through the 4 additional indicator items
0	We screen as many women in through the 10 PD items as the 4 indicator items
T	his content is neither created nor endorsed by Microsoft. The data you submit will be sent to the form owner

Microsoft Forms

Appendix I: Survey output – Q2 suggested alternative factors to consider when determining whether or not a woman ought to be on the Women's OPD pathway

Participant	Suggested alternative key factors						
2	Is the woman's offending linked to PD or similar issues?						
	Is there additional value in being on the OPD Pathway?						
	Is the woman being on the Pathway valuable to the OM , in terms of understanding						
	her difficulties and services available to her?						
	Medium risk women continue to be screened in						
10	Those who have been involved/have a history of contact with mental health						
	services						
	Those who have had lots of psychological or psychiatric assessments completed on						
	them						
13	Women who are avoidant and tend to either not approach services for support or						
	disengage quickly from services.						
	Women who are frequent flyers to A&E services and Crisis teams.						
	Women living chaotic and risky lifestyles; working girls, Rough sleepers, etc.						
16	You could also consider women who are at risk of having their children removed						
	from their care, women at risk of exploitation / harm from others, women who						
	engage in sex work.						
18	Women who experience difficulties with inter-personal relationships in a wide						
	context (not just with intimate relationships, but relationships with professionals,						
	neighbours, colleagues etc)						

Appendix J: Alternative OASys items suggested for consideration in revised W-OPD screening tool

Source	Locati	Item details
	on	
TG suggestion	2.2a	Carrying or using a weapon
Current	2.2b	Any violence or threat of violence/coercion
Current	2.2c	Excessive use of violence/sadistic violence
TG suggestion	2.2d	Arson
OPD strategy	2.2f	Sexual element
TG suggestion	2.3a	Were there any direct victim(s) e.g., contact targeting
TG suggestion	2.3b	Were any of the victim(s) targeted because of racial motivation or hatred of other identifiable group
TG suggestion	2.3c	Response to a specific victim (e.g., revenge, settling grudges)
OPD strategy	2.3d	Physical violence towards partner
TG suggestion	2.3f	Were the victims(s) stranger(s) to the offender
TG suggestion	2.7a	Peer group influences (e.g., offender easily led, gang member)
OPD strategy	2.9a	Sexual motivation
TG suggestion	2.9c	Addiction/perceived needs
DSM	2.9d	Emotional state of offender
TG suggestion	2.9e	Racial motivation or hatred of other identifiable group
DSM	2.9f	Thrill seeking
TG suggestion	2.10a	Alcohol (disinhibitor)
TG suggestion	2.10d	Psychiatric problems (disinhibitor)
DSM	2.10e	Emotional state (disinhibitor)
TG suggestion	2.10f	Drugs (disinhibitor)
DSM	2.10g	Traumatic life event (divorce, redundancy) (disinhibitor)
DSM	2.11	Does the offender accept responsibility for the current offence(s)
TG suggestion	2.13	Are current offence(s) an escalation in seriousness from previous offending?
OPD strategy	2.14	Are current offence(s) part of an established pattern of similar offending (optional)
TG suggestion	3.6	Suitability of location of accommodation
TG suggestion	4.3	Employment history
DSM	4.5	Attitudes to employment
Current	5.5	Over reliance on family /friends/ others for financial support (optional)
Survey	6.1	Current relationship with close family members
Survey	6.3	Experience of childhood
DSM	6.4	Current relationship with partner
DSM	6.6	Previous experience of close relationships
TG suggestion	6.7a	Evidence of domestic violence / partner abuse victim
DSM	6.7	Evidence of domestic violence / partner abuse perpetrator
DSM	7.2	Regular activities encourage offending
TG suggestion	7.3	Easily influenced by criminal associates
Current	7.4	Manipulative / predatory lifestyle (optional)
Current	7.5	Recklessness and risk-taking behaviour

DSM 10.1 Difficulties coping	
DSM 10.2 Current psychological problems / depression	
DSM 10.3 Social isolation	
DSM 10.4 Offender's attitude to themselves	
Indicator proxy 10.5 Self-harm, attempted suicide, suicidal thoughts or feelings	
Current 10.7a Evidence of childhood behavioural problems (optional)	
TG suggestion 10.7b History of severe head injuries, fits, periods of unconsciousn	ess
(optional)	
Indicator proxy 10.7d Ever been on medication for mental health problems in the	oast
(optional) DSM 11.1 Level of interpersonal skills	
·	
Current 11.2 Impulsivity	
Current 11.3 Aggressive / controlling behaviour (optional)	
DSM 11.4 Temper control	
DSM 11.7 Awareness of consequences	
DSM 11.8 Achieves goals (optional)	
DSM 11.9 Understands other people's views	
DSM 11.10. Concrete / abstract thinking (optional)	
DSM 12.1 Pro-criminal attitudes	
Survey 12.3 Attitude towards staff (optional)	
DSM 12.5 Attitude towards community / society	
TG suggestion 12.8 Motivation (to address offending)	
Highly correlated 2 risk Analysis of offence issues linked to risk of serious harm, risks	to
with OPD status the individual and other risks.	
TG suggestion 3 risk Accommodation issues linked to risk of serious harm, risks to individual & other risks	the
Highly correlated 6 risk Relationship issues linked to risk of serious harm, risks to the	<u>)</u>
with OPD status individual & other risks	
TG suggestion 7 risk Lifestyle and associates issues linked to risk of serious harm, to the individual & other risks	risks
Highly correlated 10 risk Issues of emotional well-being linked to risk of serious harm	risks
with OPD status to the individual & other risks	
Highly correlated 11 risk Thinking / behaviour issues linked to risk of serious harm, ris	ks to
with OPD status the individual & other risks	
TG suggestion 3 Accommodation issues linked to offending behaviour	
behav.	
TG suggestion 4 Education / training / employability issues linked to offending	g
behav. behaviour TG suggestion 6 Relationship issues linked to offending behaviour	
TG suggestion 6 Relationship issues linked to offending behaviour behav.	
TG suggestion 10 Issues of emotional well-being linked to offending behaviour	
behav.	

Appendix K: Model building process with notes

Model #	Difference-led models	AIC	Notes
Int only		10034	
REs only		6761.6	
ModelTF1	s2linkrisk+s11linkrisks	6111.5	
ModelTF2	s2linkrisk+s11linkrisks+s10linkrisks	5883.7	
ModelTF3	s2linkrisk+s11linkrisks+s10linkrisks+bis6q3	5696.8	
ModelTF4	s2linkrisk+s11linkrisks+s10linkrisks+bis6q3+bis10q5	5565	
ModelTF5	s2linkrisk+s11linkrisks+s10linkrisks+bis6q3+bis10q5+s6linkrisks	5547.5	
ModelTF6	s2linkrisk+s11linkrisks+s10linkrisks+bis6q3+bis10q5+s6linkrisks+s10linkbehave	5547.3	10linkbehave not significant
ModelTF7	s2linkrisk+s11linkrisks+s10linkrisks+bis6q3+bis10q5+s6linkrisks+pd10s11q3	5514.5	
ModelTF8	s2linkrisk+s11linkrisks+s10linkrisks+bis6q3+bis10q5+s6linkrisks+pd10s11q3+bis10q2	5510.8	bis10q2 much weaker than other items
ModelTF9	s2linkrisk+s11linkrisks+s10linkrisks+bis6q3+bis10q5+s6linkrisks+pd10s11q3+bis10q2 +s7linkrisks	5494	
ModelTF10	s2linkrisk+s11linkrisks+s10linkrisks+bis6q3+bis10q5+s6linkrisks+pd10s11q3+bis10q2 +s7linkrisks+bis11q4	5493.9	11.4 not significant
ModelTF11	s2linkrisk+s11linkrisks+s10linkrisks+bis6q3+bis10q5+s6linkrisks+pd10s11q3+bis10q2 +s7linkrisks+bis10q1	5486.6	10.1 has an estimate of -0.45989*** while the intercept is -5.65946. Correlation of fixed effects checked for insights re: 10.2 links
ModelTF12	s2linkrisk+s11linkrisks+s10linkrisks+bis6q3+bis10q5+s6linkrisks+pd10s11q3+bis10q2 +s7linkrisks+bis10q1+bis10q4	5484.8	10.4 not significant
ModelTF13	s2linkrisk+s11linkrisks+s10linkrisks+bis6q3+bis10q5+s6linkrisks+pd10s11q3+bis10q2 +s7linkrisks+bis10q1+bis6q1	5480.8	6.1 less significant than others but still significant (estimate=.220)
ModelTF14	s2linkrisk+s11linkrisks+s10linkrisks+bis6q3+bis10q5+s6linkrisks+pd10s11q3+bis10q2 +s7linkrisks+bis10q1+bis6q1+s6linkbehave	5479	6 risk and 6 behave not significant
ModelTF15	s2linkrisk+s11linkrisks+s10linkrisks+bis6q3+bis10q5+pd10s11q3+bis10q2+s7linkrisks+bis10q1+bis6q1+bis6q6	5490.1	6.6 not significant

ModelTF16	s2linkrisk+s11linkrisks+s10linkrisks+bis6q3+bis10q5+pd10s11q3+bis10q2+s7linkrisks +bis10q1+bis6q1+bis4q3	5482.1	add back in 6 link risks
ModelTF17	s2linkrisk+s11linkrisks+s10linkrisks+bis6q3+bis10q5+s6linkrisks+pd10s11q3+bis10q2 +s7linkrisks+bis10q1+bis6q1+bis4q3	5472.1	6.1 almost non-significant (estimate=0.190*)
ModelTF18	s2linkrisk+s11linkrisks+s10linkrisks+bis6q3+bis10q5+s6linkrisks+pd10s11q3+bis10q2 +s7linkrisks+bis10q1+bis6q1+bis4q3+s10q7medic	5418.5	10.2 and 6.1 dropped to *
ModelTF19	s2linkrisk+s11linkrisks+s10linkrisks+bis6q3+bis10q5+s6linkrisks+pd10s11q3+bis10q2 +s7linkrisks+bis10q1+bis6q1+bis4q3+s10q7medic+s2q2b	5386.4	10.2 and 6.1 still low at *
ModelTF20	s2linkrisk+s11linkrisks+s10linkrisks+bis6q3+bis10q5+s6linkrisks+pd10s11q3+bis10q2 +s7linkrisks+bis10q1+bis6q1+bis4q3+s10q7medic+s2q2b+s2q2d	5345.7	10.2 and 6.1 still low at *
ModelTF21	s2linkrisk+s11linkrisks+s10linkrisks+bis6q3+bis10q5+s6linkrisks+pd10s11q3+bis10q2 +s7linkrisks+bis10q1+bis6q1+bis4q3+s10q7medic+s2q2b+s2q2d+s10q7child	5313.1	10.2, 6.1 and 4.3 low at *
MandalTE22	s2linkrisk+s11linkrisks+s10linkrisks+bis6q3+bis10q5+s6linkrisks+pd10s11q3+bis10q2 +s7linkrisks+bis10q1+bis6q1+bis4q3+s10q7medic+s2q2b+s2q2d+s10q7child+bis11q	F242.2	14.0 and similiar at
ModelTF22	9 s2linkrisk+s11linkrisks+s10linkrisks+bis6q3+bis10q5+s6linkrisks+pd10s11q3+bis10q2	5313.3	11.9 not significant
ModelTF23	+s7linkrisks+bis10q1+bis6q1+bis4q3+s10q7medic+s2q2b+s2q2d+s10q7child+bis11q	5315.1	11.8 not significant
ModelTF24	s2linkrisk+s11linkrisks+s10linkrisks+bis6q3+bis10q5+s6linkrisks+pd10s11q3+bis10q2 +s7linkrisks+bis10q1+bis6q1+bis4q3+s10q7medic+s2q2b+s2q2d+s10q7child+s3linkri sks	5301.7	
WIOUEITF24	s2linkrisk+s11linkrisks+s10linkrisks+bis6q3+bis10q5+s6linkrisks+pd10s11q3+bis10q2 +s7linkrisks+bis10q1+bis6q1+bis4q3+s10q7medic+s2q2b+s2q2d+s10q7child+s3linkri	5501.7	
ModelTF25	sks+pd9s11q2	5300.1	11.2 not significant
ModelTF26	s2linkrisk+s11linkrisks+s10linkrisks+bis6q3+bis10q5+s6linkrisks+pd10s11q3+bis10q2 +s7linkrisks+bis10q1+bis6q1+bis4q3+s10q7medic+s2q2b+s2q2d+s10q7child+s3linkri sks+bis11q10	5301.9	11.10 not significant; 6.1 lower estimate and <2 z-score
ModelTF27	s2linkrisk+s11linkrisks+s10linkrisks+bis6q3+bis10q5+s6linkrisks+pd10s11q3+bis10q2 +s7linkrisks+bis10q1+bis6q1+bis4q3+s10q7medic+s2q2b+s2q2d+s10q7child+s3linkri sks+bis12q3	5296.3	6.1 not significant

	s2linkrisk+s11linkrisks+s10linkrisks+bis6q3+bis10q5+s6linkrisks+pd10s11q3+bis10q2		
	+s7linkrisks+bis10q1+bis4q3+s10q7medic+s2q2b+s2q2d+s10q7child+s3linkrisks+bis1		
ModelTF28	2q3+s2q9d	5289.9	
	s2linkrisk+s11linkrisks+s10linkrisks+bis6q3+bis10q5+s6linkrisks+pd10s11q3+bis10q2		
	+s7linkrisks+bis10q1+bis4q3+s10q7medic+s2q2b+s2q2d+s10q7child+s3linkrisks+bis1		
ModelTF29	2q3+s2q9d+bis10q3	5291.3	10.3 not significant
	s2linkrisk+s11linkrisks+s10linkrisks+bis6q3+bis10q5+s6linkrisks+pd10s11q3+bis10q2		
	+s7linkrisks+bis10q1+bis4q3+s10q7medic+s2q2b+s2q2d+s10q7child+s3linkrisks+bis1		
ModelTF30	2q3+s2q9d+bis11q1	5290.6	11.1 not significant
	s2linkrisk+s11linkrisks+s10linkrisks+bis6q3+bis10q5+s6linkrisks+pd10s11q3+bis10q2		
	+s7linkrisks+bis10q1+bis4q3+s10q7medic+s2q2b+s2q2d+s10q7child+s3linkrisks+bis1		
ModelTF31	2q3+s2q9d+s2q2a	5216.7	6 link risks, 11.3, 4.3 and 2.9d low at *
	s2linkrisk+s11linkrisks+s10linkrisks+bis6q3+bis10q5+s6linkrisks+pd10s11q3+bis10q2		
	+s7linkrisks+bis10q1+bis4q3+s10q7medic+s2q2b+s2q2d+s10q7child+s3linkrisks+bis1		
ModelTF32	2q3+s2q9d+s2q2a+pd6s7q4	5204.9	11.3 and 4.3 not significant
	s2linkrisk+s11linkrisks+s10linkrisks+bis6q3+bis10q5+s6linkrisks+bis10q2+s7linkrisks+		
	bis10q1+s10q7medic+s2q2b+s2q2d+s10q7child+s3linkrisks+bis12q3+s2q9d+s2q2a+		
ModelTF33	pd6s7q4+s2q10d	5207.1	2.10d not significant
	s2linkrisk+s11linkrisks+s10linkrisks+bis6q3+bis10q5+s6linkrisks+bis10q2+s7linkrisks+		
	bis10q1+s10q7medic+s2q2b+s2q2d+s10q7child+s3linkrisks+bis12q3+s2q9d+s2q2a+		
ModelTF34	pd6s7q4+bis12q5	5210.6	12.5 not significant
	s2linkrisk+s11linkrisks+s10linkrisks+bis6q3+bis10q5+s6linkrisks+bis10q2+s7linkrisks+		
	bis10q1+s10q7medic+s2q2b+s2q2d+s10q7child+s3linkrisks+bis12q3+s2q9d+s2q2a+		
ModelTF35	pd6s7q4+s2q2c	5166.6	6 link risks and 2.9d low at *
	s2linkrisk+s11linkrisks+s10linkrisks+bis6q3+bis10q5+s6linkrisks+bis10q2+s7linkrisks+		
	bis10q1+s10q7medic+s2q2b+s2q2d+s10q7child+s3linkrisks+bis12q3+s2q9d+s2q2a+		
ModelTF36	pd6s7q4+s2q2c+s6q7perp	5159.7	6 link risks and 2.9d not significant
	s2linkrisk+s11linkrisks+s10linkrisks+bis6q3+bis10q5+bis10q2+s7linkrisks+bis10q1+s1		
	0q7medic+s2q2b+s2q2d+s10q7child+s3linkrisks+bis12q3+s2q2a+pd6s7q4+s2q2c+s6		model 36 with non-significant items
ModelTF36a	q7perp	5161.5	removed
	s2linkrisk+s11linkrisks+s10linkrisks+bis6q3+bis10q5+bis10q2+s7linkrisks+bis10q1+s1		
	0q7medic+s2q2b+s2q2d+s10q7child+s3linkrisks+bis12q3+s2q2a+pd6s7q4+s2q2c+s6		
ModelTF37	q7perp+pd7s7q5	5161	7.5 not significant
			

	s2linkrisk+s11linkrisks+s10linkrisks+bis6q3+bis10q5+bis10q2+s7linkrisks+bis10q1+s1		
	0q7medic+s2q2b+s2q2d+s10q7child+s3linkrisks+bis12q3+s2q2a+pd6s7q4+s2q2c+s6		
ModelTF38	q7perp+s2q10e	5162.1	2.10e not significant
	s2linkrisk+s11linkrisks+s10linkrisks+bis6q3+bis10q5+bis10q2+s7linkrisks+bis10q1+s1		
	0q7medic+s2q2b+s2q2d+s10q7child+s3linkrisks+bis12q3+s2q2a+pd6s7q4+s2q2c+s6		
ModelTF39	q7perp+s10q7headinj	5161	10.7headinj not significant
	s2linkrisk+s11linkrisks+s10linkrisks+bis6q3+bis10q5+bis10q2+s10q7medic+s2q2b+s2		
ModelTF40	q2d+s10q7child+s3linkrisks+bis12q3+s2q2a+pd6s7q4+s2q2c+s6q7perp	5174.5	removed weakest items from 36a
ModeltTF40	s2linkrisk+s11linkrisks+s10linkrisks+bis6q3+bis10q5+s10q7medic+s2q2b+s2q2d+s10		
а	q7child+s3linkrisks+bis12q3+s2q2a+pd6s7q4+s2q2c+s6q7perp	5178.7	removed weakest item from 40

Appendix L: Additional analyses to inform threshold setting on revised W-OPD screening tool

REDACTED

Appendix M: OPD Pathway Consultation Monitoring

As part of the process of this consultation, we would like to keep track of progress made as a result of OPD activity. To do this, we would like you to state your goals for this meeting. We would also appreciate feedback on this consultation so we will follow up with you over the phone in the coming months. Thank you for your input.

Please only complete sections	1 and 2.						
Date of meeting:	LDU:	_ Please tick:	First consult	Review 🗌			
Specialist/Psych.:	OM name:	Off	ender name:				
Section 1: Pre-consultation							
1. What are your goals for this you manage this case.	1. What are your goals for this consultation? Please describe what you hope to get out of this meeting and what might help						
you manage this case.							
Section 2: Post-consultation							
2. What actions have you gene	rated from this consultation	on?					
Section 3: Follow-up phone ca	<u></u>						
3. What were the key benefits	of this meeting?						
4. Were the actions generated	followed up?						
5. Was there anything you wer	e unsatisfied with or do yo	ou have any as yet u	nmet needs from this con	sultation?			
6. How have you used the note	es/formulation from this m	neeting i.e., MAPPA	meeting, PSR writing etc.?	?			
7. Is there anything you would	change about the consulta	ation to make it mo	re useful for you?				
8. Finally, using the scale 0 (de	finitely not) to 4 (yes, defir	nitely) please answe	r the following:				

0 – Definitely not; 1 – Probably not; 2 – Neutral; 3 – Probably; 4 – Yes, definitely					
Would you say you're likely to seek another PD consultation on this individual?					4
Has this consultation helped you determine what interventions are needed with this offender?	0	1	2	3	4
Was the consultation useful in informing how you manage this offender?	0	1	2	3	4
Was the information from this meeting generalisable to other cases that you manage?	0	1	2	3	4
Has the consultation had a positive impact on engagement with this person?	0	1	2	3	4
Are you likely to recommend PD consultations to colleagues?	0	1	2	3	4

Appendix N: Content analysis thematic codebook

Name	Sources	References	Created On	Created By	Modified On
Availability of PD team	1	9	31/07/2018 11:27	AOM	20/08/2018 13:13
Building working relationship	1	88	30/07/2018 09:36	AOM	20/08/2018 13:26
Challenging presentation	1	44	17/08/2018 11:45	AOM	20/08/2018 13:45
Changing views	1	16	30/07/2018 16:05	AOM	20/08/2018 12:10
Communication	1	11	16/08/2018 13:37	AOM	20/08/2018 13:30
Diagnosis	1	26	30/07/2018 09:08	AOM	20/08/2018 12:53
Engagement	1	51	27/07/2018 17:21	AOM	20/08/2018 13:44
Formulation	1	25	30/07/2018 14:34	AOM	16/08/2018 13:51
Improve offender's psychological wellbeing	1	49	31/07/2018 10:36	AOM	20/08/2018 13:54
Interventions	1	22	17/08/2018 11:15	AOM	20/08/2018 13:40
Management advice (renamed to structuring supevision)	1	182	30/07/2018 08:33	AOM	20/08/2018 13:22
Offender's interpersonal behaviour	1	75	30/07/2018 10:11	AOM	20/08/2018 13:45
Oral hearing	1	16	31/07/2018 09:41	AOM	20/08/2018 11:17
Personal effect	1	35	30/07/2018 09:24	AOM	20/08/2018 13:20
Planning for release	1	23	31/07/2018 15:27	AOM	20/08/2018 13:25
Practical advice	1	38	27/07/2018 17:30	AOM	20/08/2018 13:29
Psych theory	0	0	17/08/2018 09:47	AOM	17/08/2018 09:47
CAT	1	15	27/07/2018 17:25	AOM	16/08/2018 12:54
DBT	1	3	02/08/2018 15:20	AOM	02/08/2018 17:49
GLM	1	3	27/07/2018 17:09	AOM	02/08/2018 17:03
MBT	1	20	27/07/2018 17:22	AOM	14/08/2018 12:31
Motivational Interviewing	1	4	06/08/2018 09:12	AOM	14/08/2018 17:36
Schema	1	3	06/08/2018 10:23	AOM	17/08/2018 15:47
Supportive Authority	1	14	27/07/2018 17:10	AOM	16/08/2018 13:47
Psychological understanding	1	94	27/07/2018 17:06	AOM	20/08/2018 13:46
Reassurance	1	27	27/07/2018 16:24	AOM	20/08/2018 13:52
Referrals discussed	1	34	30/07/2018 10:00	AOM	17/08/2018 12:04
Reflective space	1	24	27/07/2018 16:12	AOM	20/08/2018 13:52
Risk	1	69	30/07/2018 10:04	AOM	17/08/2018 16:59
Role of family and relationships	1	38	02/08/2018 16:17	AOM	20/08/2018 13:21
Self-harm	1	9	30/07/2018 15:27	AOM	20/08/2018 10:57
Sharing information and work	1	63	30/07/2018 15:04	AOM	20/08/2018 13:12
Substances	1	15	30/07/2018 11:32	AOM	17/08/2018 17:12
Transparency	1	13	30/07/2018 09:34	AOM	20/08/2018 12:32
Triggers	1	11	16/08/2018 13:43	AOM	20/08/2018 12:14
Understanding offender perspective	1	118	30/07/2018 10:30	AOM	20/08/2018 12:38