Formulation Research:
An evaluation of Offender Manager’s competencies in constructing case formulation

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‘Formulation provides a hypothesis about a person’s difficulties, which draws from psychological theory’ (Johnstone & Dallos, 2013, p. 5).

Case formulation is considered essential to risk assessment and risk management (Logan, Nathan & Brown, 2011).

Offender Personality Disorder Strategy emphasises importance of formulation led case management to develop pathways for offenders with personality difficulties who are at risk of serious harm to others (Department of Health, 2011).
Possible for probation staff to undertake formulation but with significant training (Völlm, 2014).

Importance of clear supervision arrangements (Brown & Völlm, 2013).

Providing OMs with training viewed positively but barriers to case formulation role (Brown & Völlm, 2016).

Role conflict
Power
Trust
Consistency of care
Minoudis et al. (2013)

Aim
- Examined quality of formulations pre and post training
- 8 hour training plus 4 team consultations (6 month follow-up)

Findings
- Probation officers scores did not significantly improve after training

Limitations
- Training duration and consultation experience insufficient
- Formulation checklist not sensitive to level of formulations produced by probation officers
- Length of experience not measured
Current study

Aim

- Further the Minoudis et al. (2013) study by comparing the quality of formulations produced by trained probation officers (SSOMs) and untrained staff (GOMs).

Participants

- Length of experience was recorded
- Sampled a range of more experienced to less experienced staff
- All had been involved with the project for over 6 months

Hypotheses

- The quality of formulations produced by SSOMs will be statistically significantly different to those generated by GOMs
- More experienced SSOMs will produce higher quality formulations than those who have recently trained
Method

36 OMs from Yorkshire & Humberside Region

18 Semi Specialist Offender Managers (SSOMs) | 18 General Offender Managers (GOMs)

Two vignettes (from Minoudis et al. 2013):

Mr Brown | Mr Smith
Vignettes

**Mr Brown**
- 31 years old
- Indecent Assault and Assault Occasioning Actual Bodily Harm
- Substance misuse
- Self-harm & suicidal ideation
- Neglect, sexual & emotional abuse
- Violence in the home
- Mother died age 10
- Taken into care
- Significant proportion of adulthood in custody
- Meet criteria for EUPD
- Antisocial traits

**Mr Smith**
- 47 years old
- Murder, stabbed victim 47 times
- ‘Frenzied attack’
- 4 years post tariff
- Popular with other inmates
- Excessive alcohol use
- Overbearing & easily angered
- Completed courses in custody
- Father criminal history & drinker
- Bullied & belittled through childhood
- No affection in family home
- Difficulties in school

(Minoudis et al. 2013)
Method

36 OMs from Yorkshire & Humberside Region

| 18 Semi Specialist Offender Managers (SSOMs) | 18 General Offender Managers (GOMs) |

Two vignettes (from Minoudis et al. 2013):

| Mr Brown | Mr Smith |

Given one hour to complete YHPDP formulation template
Formulation of presenting problems framework

Below is a case formulation of presenting problems for the named individual. Information may be taken solely from records and, as such, this formulation should not be considered an assessment. It should be used to guide practice but treated with caution following the passage of time or changes in circumstances. This document contains confidential information and it should not be distributed without the permission of the Offender Manager/author.

<table>
<thead>
<tr>
<th>Information</th>
</tr>
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<tbody>
<tr>
<td>Name of client:</td>
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<tr>
<td>Date of Birth:</td>
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<tr>
<td>Date of formulation:</td>
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<tr>
<td>Completed by:</td>
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<tr>
<td>Purpose of this formulation:</td>
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What we know

Context and sources of information:

Key presenting problems:

Strengths and protective factors:

Factors which predispose the individual to presenting with these problems including history and background information especially information about early attachments:

What does this tell us

What emotions, thoughts, beliefs and expectations does this person have about relationships which may be driving the problems?

What emotions, thoughts, beliefs and expectations does this person have about themselves which may be driving the problems?

How can the problems and presenting issues in this case be thought of as ways of coping with and managing these emotions, thoughts, beliefs and expectations?

What kinds of situations and encounters are likely to trigger these emotions, thoughts, beliefs and expectations and lead to the problems?

What kinds of situations and encounters are likely to reinforce these emotions, thoughts, beliefs and expectations and maintain the problems?

How might professionals/services/organisations respond to this individual in a way that reinforces problems?

How to approach this case

The following recommendations and strategies should be used in conjunction with NPS guidance on the monitoring and management of risk and should be used to augment standard probation practice:

Formulation discussed/reviewed

Please indicate where the formulation has been discussed and reviewed. Please include dates and names of those involved in the review as well as areas that have been reformulated.
Formulation Checklist

- Applied the revised Formulation Quality Checklist (NOMS/NHS, 2015) to all formulations

- Checklist has been piloted as an audit tool and will be part of a self-audit process for all pathway services from April 2016
## Formulation Checklist

*(NOMS/NHS, 2015)*

<table>
<thead>
<tr>
<th>Standard</th>
<th>Rating</th>
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<tbody>
<tr>
<td>1. The formulation states clearly what it is seeking to explain (i.e., a relapse to substance misuse, harm to self or other's) and why (i.e., what is its purpose)</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>2. The formulation identifies its sources of information and includes an indication of their adequacy and consistency.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>3. The formulation accounts for the developmental history of the case or, if it is a risk formulation, the history of the relevant risk behaviour?</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>
| 4. The formulation provides a psychological explanation of the case or the problem/ risk, that is:  
- It will connect important pieces of information  
- (level 2 formulations) be based on an active collaboration with the service user and discuss the activation and maintenance of the service user's problem(s)  
- (level 3 formulations) the formulation makes explicit reference to relevant psychological theory or theories (optional, depending on the purpose of the formulation) | 1 2 3 4 5 |
| 5. The formulation creates hypotheses about action to facilitate change and therefore guides interventions and their prioritisation | 1 2 3 4 5 |
| 6. The formulation is easily understood and relevant to those for whom it is intended | 1 2 3 4 5 |
Analysis

- All formulations randomised and blind scored

- T-test comparison:
  - Between groups; SSOMs vs GOMs
  - Between cohorts of SSOMs; C1 vs C2

- Sample for inter-rater reliability between scorers. Strength of agreement ‘good’

- Sample also to be sent for comparison with outside raters – awaiting full results
Results: **SSOMs vs GOMs**

- **Statistically significant difference** between the formulation scores of the SSOMs and the GOMs:
  - Significant at the p<0.01 level (p=0.0022)
  - Similarly, also significant when broken down by vignette:
    - Mr Brown: p=0.0073
    - Mr Smith: p=0.0026
Results: *Cohort 1 vs Cohort 2*

- **Statistically significant difference** between formulation scores of two cohorts:
  - Significant at p<0.05 level (p=0.019)
Average Scores on Formulation Checklist

- SSOM C1: 25
- SSOM C2: 22
- GOM: 20
Comparison of Checklist Scores

Legend:
- SSOM
- GOM
Qualitative Information

‘The formulation provides a psychological explanation of the case’

“I am not worthy of care of any type. I am so defective/bad people ignore me or leave me. People cannot be trusted, they will let you down, lie or leave…he may refuse to do work because he fears being a failure… he may demand attention – listen to me, care for me”

“Violence has resulted in him being ‘popular’ and this is positive. He cannot change his behaviour. Becomes defensive when challenged – which often manifests as aggressive behaviour/ violent behaviour”
Qualitative Information

‘The formulation creates hypotheses about action to facilitate change’

“Be careful of splitting – he may idealise some staff and devalue others to get his needs met… Share formulation with him and all others working with him (with his consent) to avoid splitting. Devise a plan to help him cope with intense emotions e.g. emergency coping plan – DBT-mindfulness to help deal with stress”

“Multiagency approach. Address childhood experiences and substance misuse”
Discussion

- **Statistically significant difference** between GOMs and SSOMs, also affected by length of time in project

- **Supervision** may help to sustain formulation skills as studies indicate skill deficit 6 months post training

- The **NHS/ NOMS (2015) checklist appears more sensitive** to formulations produced in probation – Minoudis et al. may have found similar results if used the revised checklist

- As quotes suggest there are qualitative differences in approaches: **practical vs process**
Limitations

- Only 1 (possibly 2 if incl. approach) questions related to psychological understanding.

- SSOMs already interested in these issues and thinking psychologically.

- Difference between the training cohorts – impact of selection process.

- Trained OMs already familiar with formulation template – may be rehearsed in presenting formulation & approaches for a ‘typical’ anti-social/ borderline PD case.

- Researchers part of the project – importance of external raters.
Implications

- As we found ongoing supervision from psychology may help to sustain formulation skills, post six month training:
  - Provides support for ongoing partnership work
  - May alleviate some of the anxiety about ‘giving away’ psychological skills - study supports need for ongoing supervision for this process
  - Provides opportunities for thinking about further research…
Where Next?

Link to Staff Outcomes
- Greater confidence in risk management
- Staff burnout/resiliance
- Review Cohort 2 formulation skills in future

Link to SU Outcomes
- Recall rates
- Recidivism rates
- Relationship with OMs

Link to Service Outcomes
- Risk management through MAPPA
- Quality of OASys/PSR recording
Questions?


Department of Health (2011). *Offender Personality Disorder Pathway Strategy*

References II


