Formulation: An investigation into perspectives of non-psychologists within a Child and Adolescent Mental Health Service

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Thesis submitted in partial fulfilment of the requirements of Staffordshire and Keele Universities for the jointly awarded degree of Doctorate in Clinical Psychology

August 2015

Table of contents

Candidate declaration	i
Contents (including figures and tables in italics)	.ii
List of appendices	iii
List of abbreviations	iv
Thesis abstract	.v

Contents

Paper 1: Formulation: Applications within a mental health setting.

Journal submission guidelines – British Journal of Psychology	1
Title	3
Abstract	3
Introduction	4
What it means to other professions	
Rationale for literature review	
Method	,,7
Search strategy	8
Screening process	
Results	12
Table 1: Results included in the critical review	13
Summary of papers	16
Table 2: CASP qualitative screening tool questions	
Table 3: CASP quantitative screening tool questions	
Analysis of papers	20
Discussion	32
Strengths and limitations	
Conclusion	34
References	

Paper 2: Formulation: An investigation into perspectives and experiences of non-clinical psychologists within a Child and Adolescent Mental Health Service

Abstract	40
Introduction	41
Aim of study	
Method	
Data analysis: Template Analysis	47
Results	
Theme 1: Level of understanding of the formulation	
Theme 2: Level of benefit of the use of the formulation	
Theme 3: Limitations of the formulation	
Theme 4: Role of a Clinical Psychologist	61
Discussion	
Limitations	
Clinical implications	70
Conclusion	71
Disclaimer	
References	73

Paper 3: Formulation: Letters of reflection and levels of understanding within a Child and Adolescent Mental Health service.

78
78
79
79
79
80
82
86
92
93

List of appendices

- Appendix 1: Electronic Search Strategy
- Appendix 2: Example of analysis to highlight themes/contributory codes
- Appendix 3: Review screening process
- Appendix 4: Preliminary review searches
- Appendix 5: Qualitative paper screening tool
- Appendix 6: Quantitative paper screening tool
- Appendix 7: Interview questions
- Appendix 8: Initial codes developed from themes in transcripts
- Appendix 9: Final template for main theme 'Clinical psychology role'
- Appendix 10: Excerpt from interview depicting development of codes
- Appendix 11: Interview structure/Schedule
- Appendix 12: Opt in form
- Appendix 13: Letter of invitation to MDT introducing project
- Appendix 14: Interview topic guide
- Appendix 15: Participant information sheet
- Appendix 16: Consent forms
- Appendix 17: Research contract
- Appendix 18: Letter of Insurance for study
- Appendix 19: Letter of Sponsorship
- Appendix 20: Approval letter from Keele University
- Appendix 21: Letter of approval from North Staffordshire NHS Trust

List of abbreviations

- CAMHS Child and Adolescent Mental Health Service
- NSF National Service Framework
- DOH Department of Health
- NWW New Ways of Working for everyone
- MDT Multidisciplinary Team
- HCPC Health and Care Professions Council
- DCP Division of Clinical Psychology
- NHS -- National Health Service
- TA Template Analysis
- HOC –Higher Order Codes
- LOC Lower Order Codes
- BPS British Psychological Society
- IPA –Interpretative Phenomenological Analysis
- CBT Cognitive Behavioural Therapy
- DSM Diagnostic and Statistical Manual of Mental Disorders
- GMC General Medical Council
- PRISMA Preferred Reporting Items for Systematic Reviews and Meta-Analyses
- CASP Critical Appraisal Skills Programme
- RCT Random Controlled Trial

Thesis Abstract

This thesis describes the process of exploring the understanding of nonpsychologists around the use of formulation, and alternative approaches to explaining a service user's mental health difficulties. This includes uncovering perspectives about the role of the clinical psychologist within the team. Formulation is seen as a key concept in mainstream psychotherapeutic approaches, but it is not widely understood whether psychiatry or mental health nurses use this approach in understanding a service user's difficulties, or whether they use diagnosis and classification as the mainstay methodology. Current literature suggests that the use of formulation in psychiatry is constrained to being a part of an overall medical summary, but that mental health nurses can use an approach similar to formulation, undertaking comprehensive assessments, and identifying difficulties through sharing alternative therapeutic interventions. Clinical psychologists report formulations informally within MDTs, helping increase staff cohesion, improve team dynamics, and improve relationships with service users. However, literature suggests that service users may feel more confident receiving a medical diagnosis as it provides a stronger justification and validation for their difficulties. To better understand the role that formulation takes within mental health working, a study was designed to explore these areas further.

Using a qualitative approach called Template Analysis (TA), which utilises hierarchical coding to extract key themes from the interview transcripts, the researcher was able to find four themes: '*level of understanding of formulation*', '*level of benefit of formulation within the team*', '*limitations of using formulation within the team*', and '*Role of clinical psychologist*'. The researcher used these themes and resultant codes to discuss levels of understanding of non-psychologists working within the teams, around formulation and the role of the clinical psychologist, and areas for development and future research.

Total world count: 19,503

(Excluding references and journal submission guidance)



The British Psychological Society

Journal Submission Guidelines – British Journal of Psychology

Disclaimer

Papers 1 and 2 has been written for publication in *The British Journal of Psychology*. General submission guidelines for the target journal have been followed, however for the purposes of thesis submission Ariel font size 12 and extended left hand margins have been used to adhere to University submission guidelines, and for ease of accessibility.

Relevant Author Guidelines

The Editorial Board of The British Journal of Psychology is prepared to consider for publication:

(a) reports of empirical studies likely to further our understanding of psychology

(b) critical reviews of the literature

(c) theoretical contributions Papers will be evaluated by the Editorial Board and referees in terms of scientific merit, readability, and interest to a general readership.

1. Length - Papers should normally be no more than 8000 words (excluding the abstract, reference list, tables and figures), although the Editor retains discretion to publish papers beyond this length in cases where the clear and concise expression of the scientific content requires greater length.

2. Manuscript requirements - typed in double spacing with wide margins. All sheets must be numbered. Manuscripts should be preceded by a title page that includes a full list of authors and their affiliations, as well as the corresponding author's contact details.

•3 Tables should be typed in double-spacing, each on a separate page with a selfexplanatory title. Tables should be comprehensible without reference to the text. They should be placed at the end of the manuscript with their approximate locations indicated in the text. •4 Figures can be included at the end of the document or attached as separate files, carefully labelled in initial capital/lower case lettering with symbols in a form consistent with text use. Captions listed on a separate sheet. The resolution of digital images must be at least 300 dpi.

•5 All articles should be preceded by an Abstract of between 100 and 200 words, giving a concise statement of the intention, results or conclusions of the article.

•6 For reference citations, please use APA style. Give all journal titles in full and provide DOI numbers where possible for journal articles.

•7 SI units must be used for all measurements, rounded off to practical values if appropriate, with the imperial equivalent in parentheses. In normal circumstances, effect size should be incorporated.

Paper 1: Literature Review

Title: Formulation: Applications within different mental health settings.

Abstract

Psychological formulation is a core competency within clinical psychology and has been defined as a hypothesis, based on psychological theory and evidence, in explaining a person's difficulties (British Psychological Society, 2011; Johnstone & Dallos, 2006). This paper critiques nine papers to explore understandings and applications of formulation from the perspectives of clinical psychologists, psychiatry, other mental health professionals, and service users.

Current literature suggests that the use of formulation in psychiatry is constrained to being a part of an overall medical summary, and that although mental health nursing is historically aligned with the medical model, nurses can use an approach similar to formulation, undertaking comprehensive assessments where reciprocity with the client is key, identifying difficulties through alternative therapeutic interventions such as psychodynamic therapy. Clinical psychologists report sharing formulations informally within MDTs, and that this helps increase staff cohesion, improve team dynamics, and improve relationships with service users. However, empirical evidence found, suggests that service users might feel more confident when receiving a medical diagnosis as it provides a stronger justification and validation for their difficulties, as formulation can feel 'too exposing' and places responsibility for the difficulties with the individual. Finally, a discussion of the research and clinical implications of these findings will be provided.

Keywords: Diagnosis, formulation, psychiatry, nursing, mental health, individual difficulties, explanation.

Word count: 7,658 (Excluding references)

Introduction

Definition of formulation

The clinical psychology formulation has been defined as a hypothesis, based on psychological theory and evidence, which provides an explanation of a client's problems (British Psychological Society, 2011; Johnstone & Dallos, 2006). Formulation plays a key role in a number of models used within clinical psychology. Different therapeutic modalities label formulation, and the process of sharing formulation, differently. For example, in psychoanalysis, sharing formulation in therapy is labelled an interpretation, whereas in Cognitive Analytic Theory (CAT) the term reformulation is used. To maintain consistency in this paper the term formulation will be used throughout, for all therapeutic modalities.

The essential features of the clinical psychology formulation include summarising the client's core difficulties in a hypothesis, and showing how they may relate to one another. It draws upon psychological theories and principles relating to the specific issues, aiming to explain, the development and maintenance of the service user's difficulties. These may include different processes such as systemic, psychodynamic, or cognitive-behavioural explanations to show how these may be affecting the client. The formulation can also indicate a plan of intervention that is based on such psychological processes already identified, and is open to revision and re-formulation (Johnstone & Dallos, 2006).

The Division of Clinical Psychology (DCP) report within their 'Core Purpose and Philosophy of the Profession', that formulation is one of the core competencies of a clinical psychologist, along with assessment, intervention, evaluation, audit and research, personal and professional skills, communication and teaching skills, service delivery skills and transferable skills (DCP, 2010, p.3). Mace (2007) developed a list of the core features of clinical psychology formulations that may be found within all therapeutic methodologies, including a summary of core difficulties, how these might relate to one another utilising psychological theory, and a basis for intervention with the client. This formulation can then be continually revisited for revision and re-formulation if required.

What formulation means to other professions

The DCP (2008) report that the profession of psychiatry primarily describes devising a hypothesis around clients' difficulties within a biological model, promoting a very different assumption, that the primary causal factor is biological dysfunction. This can then detract from the personal meaning of the difficult events, by explaining them as an underlying biological vulnerability that can lead to 'symptoms' rather than understandable responses to overwhelming life circumstances. It can also reduce the person's belief in their ability to recover from their difficulties (DCP, 2008).

It is widely known that psychiatrists and mental health nurses might use diagnosis as a tool for explaining a client's difficulties, and that the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-V) or International Statistical Classification of Diseases and Related Health Problems (ICD-10) is used to guide the diagnosis (APA, 2013). The diagnosis is described as a comparison of the information obtained from assessment, which is analysed to form a diagnosis. It is a 'statement of the patient's problem that includes both the adaptive and maladaptive health responses and contributing stressors' (Ladwig & Ackley, 2013, p.51).

Rationale for literature review

Darzi (2008) explains that for the first 40 years of the National Health Service (NHS), clinicians were accountable to service users by a broad and non-specific professional code, providing a setting where clinicians could exercise their skills with almost complete autonomy. However, the advent of managed care in the 1980s followed by the acknowledgement of the rights of service users in the 1990s led to the production of evidence based guidelines for an increasing number of client groups including mental health (Darzi, 2008).

Following the publication of 'The New NHS: Modern. Dependable' (Department of Health, 1997) and 'Quality in the New NHS' (DOH, 1998), the DOH set out to build a modern and dependable health service offering people prompt high quality treatment and care when and where they need it, and joint working with external agencies (e.g. social care) to improve health and reduce service inequalities. Within mental health,

this meant that clients with disability or mental health problems, who required the support of both health and social care systems would benefit from a more integrated approach than had previously been in place.

These changes required clinicians to strive to develop professionally, to acquire and retain clinical skills, access and use best evidence, work interdependently with other professionals, participate in planning for quality, and to evaluate and optimise processes of care. This was further developed in 2007 with the DOH publishing 'New Ways of Working for Everyone' (Care Services Improvement Partnership), to improve the mental health workforce in managing demand, and to promote a shared responsibility amongst team members. The General Medical Council (GMC) also supported and recognised the importance for consultant psychiatrists to work in teams within a model of distributed responsibility (Huxley, et al., 2010).

Vize, Humphries, Brandling, and Mistral (2008) report that this cultural shift in service provision required professionals to use their skills and experience as effectively as possible with service users. Collaboration and support within staff teams was therefore imperative, which means that each clinician must have an understanding of what other professions offer in order to provide the best service to the client. The field of mental health is one of competing understandings about how to provide services for those clients with mental health difficulties, with expert knowledge being partial and provisional and having no definitive proof to support one perspective over another (Morant, 2006). Crowe et al., (2008) suggest that having different values and perspectives is a strength within a multidisciplinary team. However, Fulford and Columbo (2004) argue that this strength is dependent upon recognition and respect for different approaches, which if not adhered to, can frustrate a collaborative approach to service provision and care. Within professional guidelines such as the Division of Clinical Psychology (DCP), there are recommendations to using formulation within multidisciplinary teamwork, stating that formulation can lead to multiple interventions, including therapy, training for staff and relatives, and dissemination of knowledge and skills through teaching or supervision (DCP, 2001, P.3).

Christofides, Johnstone, & Musa (2011) report that although there is limited published empirical research on the use of formulation within multidisciplinary teamwork, it is hard to ignore the body of theoretical literature that suggests formulation is beneficial to both client working, and to multidisciplinary team interventions. Formulation can have multiple benefits, including prioritising service user difficulties, planning intervention strategies, predicting responses to therapy - including potential obstacles - and providing background to why clients might be experiencing their difficulties (Butler, 1998). However, there has been limited investigation into the impact of formulations on clients, or their value as a resource to draw upon in accounting for client difficulties (Johnstone, 2006).

In light of the consensus that formulation skills are important, particularly within multidisciplinary teams, reviewing relevant literature might uncover evidence of how formulation could be applied within different professional and service user contexts. This review focuses on empirical research papers in order to provide a systematic approach to reviewing current evidence. By synthesising the research findings, and appraising the quality of the research, the current review aims to integrate results from different studies and assess the overall strength of evidence regarding the understanding and application of formulation, from the perspectives of clinical psychology, other mental health professions, and service users.

Method

Inclusion and exclusion criteria

Potentially relevant articles were collated and examined using the inclusion and exclusion criteria described below. Only peer-reviewed articles published since 'The New NHS: Modern. Dependable' (DOH, 1997) were included, as this was a definitive piece of legislation weighted towards the development of the modern MDT and the shared working strategies that have ensued. The peer review process is integral to scholarly research (Emanuel, Wendler, & Grady, 2000), and is a process designed to prevent dissemination of irrelevant findings, unwarranted claims, unacceptable interpretations, and personal views. Social work was not included in the search strategy as this area of work incorporates a wider social context for the client's issues, and not just mental health. Cultural formulation was also excluded as it refers to how cultural considerations may influence the diagnosis and treatment of a psychiatric illness and therefore is not relevant to this review.

Limiters

- Peer reviewed articles (to ensure quality and provenance).
- Articles published after publication of the New NHS: Modern. Dependable. (DOH, 1997) (Marked a significant change in mental health strategy towards MDT working).
 - Inclusion criteria: Relating to Psychology; Psychiatry; Mental Health Nursing; relating to diagnosis, formulation, nursing process; and subject of (or substantial contribution of) paper is regarding the nature, exploration, or definition of formulation, diagnosis, nursing process, and/or similarities / differences.
 - Exclusion criteria: Relating to social work, cultural formulation. Non-mental health. Non-English language.

Search strategy

Electronic literature searches were completed between August 6th 2014 and October 13th 2014, and again on June 29th 2015. These searches utilised the meta-search engines EBSCOhost and Web of Science to obtain results based on the aims of the review. The following electronic databases were then searched using specific search criteria (see below):

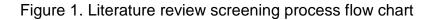
PsychINFO (1806 – present); MEDLINE (1950 – present); Alternative & Complementary Medicine Database (AMED, 1985 – present); Academic Search Complete (1987 – present), CINAHL Plus with Full Text (1981 – present).

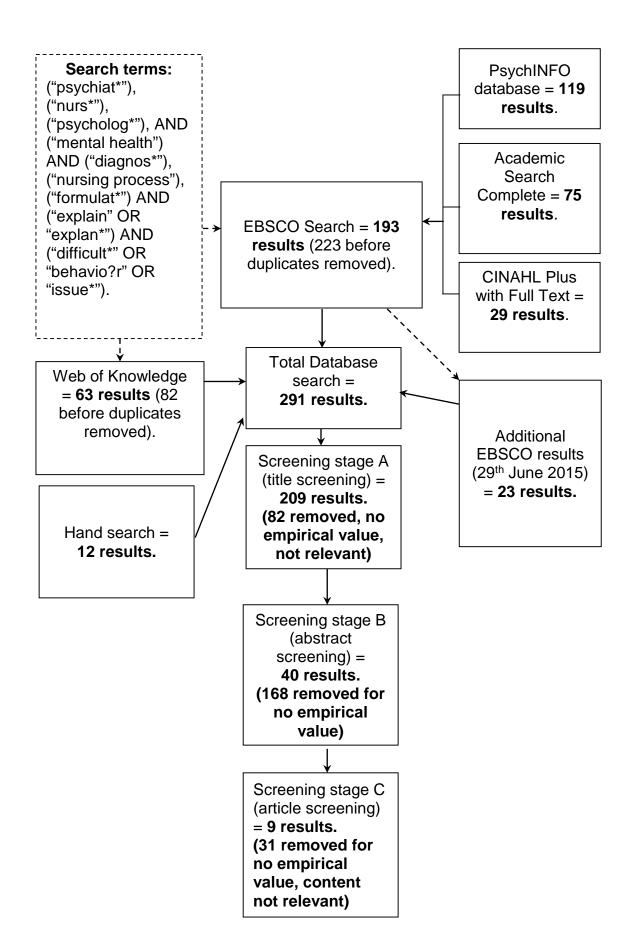
The following search terms were used in the electronic database searching between: August 6th 2014 and October 13th 2014, with a limiter that only peer-reviewed articles published since 'Mental Health: New Ways of Working for Everyone' (DOH, 2007) were to be used: ("psychiat*"), ("nurs*"), ("mental health" OR mental health [all text]) AND ("diagnos*"), AND ("formulat*") AND (planning OR "care plan*"), AND (process OR "method*" [all text}), AND ("explain*" OR "explan*"), AND (client OR patient* [all text] OR "service user*"), AND (difficult* OR behavio?r OR issue*[all text]).

There was a paucity of peer-reviewed empirical literature on this subject, and so a further search was carried out on 29th June 2015, with an extended date search range from 1997, marking Labour's first White Paper on health, The New NHS: Modern. Dependable. (DOH, 1997). The following search terms were used:

("psychiat*"), ("nurs*"), ("psycholog*"), AND ("mental health") AND ("diagnos*"), ("nursing process"), ("formulat*") AND ("explain" OR "explan*") AND ("difficult*" OR "behavio?r" OR "issue*"), NOT ("cultur*"), NOT ("social work*").

The search process can be seen in greater detail in appendices 3 and 4.





Screening process

By title (Stage A)

Following the removal of duplicate articles, a three-stage screening process was used to determine eligibility (Figure 1). This filtered initially by screening the title which from the initial 291 results, omitted 82 articles for being either focusing on physical symptoms not pertaining to mental health, addressing a completely different context such as cultural formulation, or not having empirical value based on scientific testing or practical experience.

By abstract (Stage B)

From the remaining 209 articles, 168 were again removed as there was no empirical value to the paper, and they followed either a narrative review, or were expert opinion papers.

By article (Stage C)

Reading through the remaining articles, a further 31 papers were omitted because they did not meet the criteria either through being empirically weak, or the content was not relevant to the question.

After the screening process, nine papers remained for critical review. There was a predominance of qualitative papers found during the process. Quantitative papers were also considered, but of these, only two quantitative and one mixed methods study were relevant to the question and retained for review (Eells, Kendjelic & Lucas, 1998; Berry, Barraclough, & Weardon, 2009; Carlyle, Crowe, & Deering, 2011). Each article was critically appraised and coded. The codes were used to develop themes that were employed to compare papers and identify new codes. This reiterative process continued and themes were augmented until the researcher was confident that a high level of rigour was achieved.

To ensure a methodological critique of the papers, identification, and subsequent reporting of the important factors in respect of the review aims, two sets of twelve standardised questions were used to review each article. One set (table 2) was developed to review qualitative research and was based on guidelines by the Critical Appraisal Skills Programme checklist for qualitative research (CASP, 2014) and Elliot, Fischer and Rennie (1999). The other set was used to review quantitative

research (see Table 3). This was based on the CASP for randomised control trials, the CASP for cohort studies, the Quality of Reporting of Meta-analyses group statement (QUOROM; Moher et al., 1999), and the Consolidated Standards of Reporting Trials group statement (CONSORT; Shultz, Altman, & Moher, 2010).

Hand searching

The search strategy focused broadly on the search terms given. However, the inclusion criteria utilised with the primary literature was not strictly adhered to, due to the inability to input the full range of specific search terms. The following items were searched: government reports; policy statements and issues papers; conference proceedings; theses and dissertations, and research reports. The following databases were used: Google scholar, OpenGrey, and BASE. This yielded 12 articles initially, but after processing these through the different stages, one additional article was included in the results (Berry, Barraclough, & Weardon, 2009).

RESULTS

A meta-summary approach was taken, (Thorne, Jensen, Kearney, Noblit & Sandelowski, 2004) in which the nine empirical papers found are described within three categories, identified by clustering together papers with similar topics (below). The strengths and limitations for the papers are also provided along with consideration of implications and future research. Of the nine results, six papers used qualitative methodologies, two papers used a quantitative study, and one paper was a mixed methods study (Table 1).

1: Formulation within clinical psychologypa	age 18
2: Formulation within psychiatrypa	age 21
3: Formulation within mental health nursing	ige 24

Authors, year and country	Particip ants	Setting	Purpose/aims	Methodology	Findings
Crowe, Carlyle & Farmer (2008), NZ,	Case study – 1	Mental Health Nursing	To investigate linking assessment and intervention in meaningful way using case formulation	Case study; Naturalistic enquiry	Mental health nursing historically aligned to medical model. Benefits of use of formulation in practice. Theme - Lacking knowledge and confidence to do so, due to inadequate training curriculums. Little research in this area.
Leeming, Boyle & Macdonald (2009), UK	22	CAMHS, Adult mental health, service user group	To explore psychological difficulties of participants and others' understandings of the nature and causes of their difficulties.	Thematic analysis	Themes looked at 'difficulties in using psychosocial explanations' and another theme – 'diagnosis as both salvation and damnation'. Importance in considering the purpose of formulations and other theoretical explanations of clients' difficulties and to ask for whom they are developed.
Summers (2006), UK	25	Psychiatry	To explore the benefits/limitations of using psychological formulations for patients with severe mental illness.	Semi-structured interviews; Grounded Theory approach.	Themes that formulation benefitted care planning, staff-patient relationships, staff satisfaction, team working – through increasing understanding of clients, creative thinking, meeting to develop formulations.

Table 1: Results included in the critical review.

Coombs, Curtis, & Crookes (2011), AUS	18	Mental health nursing	To explore the processes of assessment that might occur in mental health nursing practice.	Structured interviews. Grounded theory used to analyse codes and categorisation.	Three themes found - around engaging the client; explaining the problem and reconciling inconsistencies; on-going nature of assessment process.
Hood, Johnstone & Christofides (2012), UK	9	Psychology	To explore staff experiences of psychological formulation work in community-based Adult Mental Health teams.	Semi-structured interviews, thematic analysis	Themes that a formulation in teamwork increase staff cohesion; improve team dynamics; increase understanding of, and improved relationships with, service users; and creating new ways of thinking.
Christofides, Johnstone & Musa (2011), UK	10	Psychology	Investigate clinical psychologists' accounts of their use of psychological case formulation in MDT teamwork.	Semi-structured interviews, thematic analysis	Themes that looking at role of psychologists within team, and how they share formulation through informal means rather than explicitly.
Eells, Kendjelic & Lucas (1998) USA	56	Outpatient psychiatry clinic	To gather initial reliability data on the case formulation coding method (CFCCM); Examine whether the categories are sufficiently broad and inclusive; Assess comprehensiveness/ quality of set of representative written case formulations.	Naturalistic study. 56 intake reports randomly selected from pool of approx. 300, content analysed by using CFCCM; Kappa coefficients used for quality ratings.	A written case formulation may not accurately depict therapist's understanding of client. Use formulation primarily to summarise descriptive information rather than to offer a hypothesis about a client's difficulties.

Berry, Barraclough, & Weardon (2009), UK	30	Psychiatric rehab. Centres	A pilot study to investigate use of psychological formulations to modify psychiatric staff perceptions of service user's mental health problems.	30 staff measured before and after intervention using likert scales to determine capacity.	Staff reported an increase in understanding of service users' problems, increased confidence in their work, increased perception of control that service users held over own issues.
Carlyle, Crowe, & Deering (2011), NZ, mixed methods	48	Inpatient/ outpatient/ forensic	To identify conceptual models that underpins mental health nursing.	Self completed questionnaire. Quantitative analysis: Mann- Whitney U. Additional qualitative questions.	Themes around medical model domination, role of nursing in mental health, unused skills of mental health nurses, Effects on MDT care delivery. Not include a representative sample from mental health nursing.

Summary of papers

(A). Crowe, Carlyle and Farmer (2008) used a case study to argue that although mental health nursing is historically aligned to the medical model, the profession utilises formulation in practice to link assessment to practice in a meaningful manner for the client. This paper is a naturalistic inquiry within mental health nursing, and the authors are nurses and a psychotherapist working in New Zealand.

(**B**). Leeming, Boyle and MacDonald (2009) used a grounded theory qualitative approach to explore psychological difficulties of participants and others' understandings of the nature and causes of their difficulties. The authors carried out semi-structured interviews with 22 mental health service users aged between 18 and 89 years from a child and adolescent mental health service, two community mental health teams for older adults, and a user group which campaigned around issues of stigma. The paper also explored the purpose of formulations and other theoretical explanations of clients' difficulties. The authors are psychologists in the United Kingdom.

(**C**). Summers (2006) used a grounded theory qualitative approach, to analyse semistructured interviews with 25 members of staff working in a high-dependency psychiatric rehabilitation service. The author's aim was to understand the benefits and limitations of using psychological formulations for clients with severe mental illness. The author is a psychiatrist practising in the United Kingdom.

(**D**). Coombs, Curtis and Crookes (2011) are mental health nurses in Australia. They sought to identify the processes of assessment that occur in mental health nursing practice using a grounded theory approach, by interviewing 18 nurses (ranging from new graduates to practitioners with over 20 years experience), from inpatient and community mental health settings.

(E). Hood, Johnstone and Christofides (2012) investigated how non-clinical psychologists in community based adult mental health teams understood and experienced the use of formulation by clinical psychologists. Semi-structured interviews were carried out with staff (five mental health nurses, two social workers, one support worker, and one psychiatrist), working in a range of adult mental health positions (nursing, psychiatry, social work, and support work), and data was

analysed using a qualitative thematic analysis. The authors are clinical psychologists based in the United Kingdom.

(**F**). Christofides, Johnstone and Musa (2011) investigated clinical psychologists' accounts of their use of case formulation in multidisciplinary teamwork. The study was carried out using semi-structured interviews and thematic analysis with 10 clinical psychologists working in the community and inpatient adult mental health services in the United Kingdom. The authors are clinical psychologists in the United Kingdom.

(**G**). Eells, Kendjelic and Lucas (1998) carried out a naturalistic study set in an outpatient psychiatry clinic. The study aimed to gather initial reliability data on the case formulation coding method (CFCCM), to examine whether the categories were sufficiently broad and inclusive, and to assess comprehensiveness and quality of set of representative written case formulations. 56 intake reports were randomly selected from a pool of approximately 300, content was analysed by using the CFCCM, and Kappa coefficients were used for quality ratings. The authors are psychiatrists in the USA.

(H). Berry, Barraclough and Weardon (2009) completed a pilot study to evaluate the use of psychological formulations to modify staff perceptions (psychiatrists, mental health nurses, mental health support workers) of clients with psychosis within three psychiatric rehabilitation centres in Greater Manchester. The authors are clinical psychologists working in the UK.

(I). Carlyle, Crowe and Deering (2011) devised a mixed methods study (qualitative and quantitative) in which participants responded to a scenario (a young Maori woman diagnosed with bipolar disorder). They aimed to identify conceptual models that underpin mental health nursing. Using a self-report questionnaire, 48 nurses provided data on the role of mental health nursing and medical model domination when working with clients, which highlighted the under used therapeutic skills of mental health nurses, and the effects of this on multidisciplinary team care delivery. The authors are two doctors and a mental health nurse working in New Zealand.

17

Table 2: CASP Qualitative screening tool questions:

- 1. Was there a clear statement of the aims of the research?
- 2. Is a qualitative methodology appropriate?
- 3. Was bias considered?
- 4. Were ethical issues considered?
- 5. Was the recruitment of participants appropriate?
- 6. Was data collection conducted in an appropriate way?
- 7. Was the data analysis sufficiently rigorous?
- 8. Was there a clear statement of findings?
- 9. Was the presentation of data appropriate?
- 10.Were the clinical implications clear?
- 11.Had the study been considered in the context of existing literature?
- 12. How valuable is the research?

Papers	1	2	3	4	5	6	7	8	9	10	11	12
Α	0	0	0	0	0	0		0	0	0	0	0
В	0	0	0	0	0	0	0	0	0	0	0	0
С	0	0	0	0	0	0	0	0	0	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0	0
G	•	•	•	•	•	•	•	•	•	•	•	•
Н	•	•	•	•	•	•	•	•	•	•	•	•
I	0	0	0	0	0	0	0	0	0	0	0	0



Table 3: CASP Quantitative screening tool questions:

- 1. Was there a clear statement of the aims of the research?
- 2. Was the choice of quantitative methodology appropriate?
- 3. Were all variables clearly defined?
- 4. Was bias considered?
- 5. Were ethical issues considered?
- 6. Was the recruitment of participants appropriate?
- 7. Was data collection conducted in an appropriate way?
- 8. Was the data analysis sufficiently rigorous?
- 9. Was there a clear statement of results?
- 10. Was the presentation of results appropriate?
- 11. What were the clinical implications?
- 12. Had the study been considered in the context of existing literature?

Papers	1	2	3	4	5	6	7	8	9	10	11	12
Α	•	•	•	•	•	•	•	•	•	•	•	•
В	•	•	•	•	•	•	•	•	•	•	•	•
С	•	•	•	•	•	•	•	•	•	•	•	•
D	•	•	•	•	•	•	•	•	•	•	•	•
Ε	•	•	•	•	•	•	•	•	•	•	•	•
F	•	•	•	•	•	•	•	•	•	•	•	•
G	0	0	0	0	<mark>0</mark>	<mark>0</mark>	0	<mark>0</mark>	0	0	0	0
Н	0	0	0	0	<mark>0</mark>	0	0	<mark>0</mark>	0	0	0	0
I	<mark>0</mark>	<mark>0</mark>	<mark>0</mark>	<mark>0</mark>	<mark>0</mark>	<mark>0</mark>	0	0	0	0	0	0



Summary of papers

All papers provided a clear statement of aims, with methodologies and presentation of findings also being relevant and appropriate. Eells, Kendjelic and Lucas (1998) and Coombs, Curtis and Crookes (2011) were the strongest papers, meeting all screening criteria. Christofides, Johnstone and Musa (2011) met all criteria except whether data had been collected in an appropriate way. This is evidenced by participants opting to take part being likely to have been influenced by the status of the interviewer as a trainee clinical psychologist from a course known by participants to advocate formulation as a key skill. The weakest paper was Crowe, Carlyle and Farmer (2008), which was based on a single case study and failed to address bias, ethical issues, recruitment of participants, data collection, and analysis. This paper was worth including for the fact that there is a real paucity of empirical evidence on clinical formulation within mental health nursing. Hood, Johnstone and Christofides (2012) met many of the screening criteria, but failed to address ethical issues and recruitment. Furthermore, this study had limited numbers of participants and so theoretical saturation was not achieved, whereby sampling more data would not lead to relevant information. The Summers (2006) article also met many criteria but the paper failed to address recruitment and data collection, and it is unclear whether data analysis was conducted in a rigorous manner. The mixed methods study by Carlyle, Crowe and Deering (2011) was clearly presented and provides the reader with a comprehensive understanding of the research undertaken, but it is unclear whether the recruitment of participants was appropriate due to the failure to include a representative sample of nurses working within mental health. The authors argued that their research was compensated by recruitment across all services (not just mental health), including inpatient and outpatient services. A shortcoming for Berry, Barraclough and Weardon (2009) was reliability of data collection. This pilot study required participants to complete a questionnaire twice in a short space of time, and so the possibility of recall bias was high.

Analysis of the papers

Category 1: Formulation within clinical psychology

This theme focuses on the clinical psychology formulation used and perceived by clinical psychologists, other MDT members, and service users. The relevant papers for this category are **B**, **E**, and **F**.

Leeming, Boyle, and Macdonald's (2009) study on client perspectives towards clinical psychology formulation found a paucity of empirical literature concerning the value of formulations for the client. The authors therefore conducted semi-structured interviews with 22 mental health service users ranging between 15 and 89 years of age, recruited from several mental health services. The study used thematic analysis to report several themes, but only two are discussed, that psychosocial explanations can seem too exposing of the client's personal issues, and that having a formulation could also mean assigning blame to others within the client's social circle. However, the authors also suggest that modern Western society encourages the client to bear responsibility for their own behaviour, which might make it difficult for them to understand how external influences such as other people, and/or social factors, might be implicated within their presentation. The findings also suggest that some participants felt receiving a psychiatric diagnosis offered a better explanation, stronger justification, and validation of their mental health issues. However, many felt that receiving a diagnosis implied something profoundly negative about them. The authors do not provide details on which or how many participants shared these views, and so this raises a question on validity of the findings, because there is insufficient detail for future researchers to attempt to replicate the study. Although the paper generally discusses the importance of formulations and theoretical explanations of client difficulties, it may have been useful to have sight of the other themes to add context to the overall study.

A strength of this research is that quotes were given by several participants to support the themes. Furthermore, controls around researcher bias were explicitly employed. These included field notes recording the researcher's own reflection and subjectivity. A consideration of self as a researcher and self in relation to the topic of research is a precondition for coping with bias (Zuber-Skerritt, 2003). Limitations were also clearly stated, for example, the study does not account for years of therapy experience, or type of formulation used. A concise argument within the context of existing literature was given for the potential relevance of themes around how clients engage with, use, and are affected by formulations. A potential weakness of the study was that there was no mention of analysis of data and so rigour could not be accounted for.

Christofides, Johnstone, and Musa (2011) provide a different perspective from within clinical psychology. The authors set clear aims for their research in investigating clinical psychologists' accounts of the use of psychological case formulation within multidisciplinary working. Following the procedure outlined by Braun and Clarke (2006), a thematic analysis was used to analyse data from ten clinical psychologists working within community and inpatient adult mental health. The qualitative methodology was clearly explained in the study, and was appropriate as it provided complex textual descriptions of how clinicians experience clinical formulation. This is beneficial due to the limited published research on this topic. A strength of the study was that the researchers provided transparency around possible bias and ethical issues that might affect their research. This included the fact that participants were interviewed by fellow clinical psychologists working within the same service.

The authors also reported that those participants that opted to take part had identified using formulation within their teams, and so responses might have been influenced by prior beliefs around the effects of formulation that the participants experienced. However, their rationale for using such participants is accepted owing to the participants having the most experience of using formulation with a MDT setting. The authors also acknowledged that there was no multidisciplinary or service user perspective found within their research, so previous empirical literature such as Leeming et al. (2009) could not be compared against in this review.

Procedural methodology was explained clearly, including the use of descriptive coding into preliminary themes, and recruitment ceased when saturation was reached. Furthermore, rigour was achieved by using four participants to examine the preliminary themes to check for accuracy of data representation.

Another strength of the research was that the authors clearly report their findings. Themes included there being a need for space within the working day to reflect, that discussing formulation in teams was beneficial when it involved a challenging client, and that it helped to focus the team towards a consistent intervention together. They also suggest that clinical psychologists do share formulation in an informal manner with the teams, but that this sometimes felt unclear and difficult to define. The authors also discuss formulation not being as effective in a more chaotic environment when staff were limited in time. Participants reported a better understanding of formulation when working with more psychologically experienced staff who shared their knowledge, and that this was of greater benefit to clients. Again, a strength of the research is that quotes were given by several participants to support the themes. The limitations of this article were concerned with its credibility in a wider clinical context due to the limited focus on one adult mental health team.

Providing a perspective from non-clinical psychology professionals, Hood, Johnstone, and Christofides (2012) examined how nine staff working within community mental health settings understood and experienced the use of formulation by clinical psychologists in their teams. Braun and Clarke (2013, p. 50) report that for small projects, 6–10 participants are recommended for interviews in order to achieve required depth of analysis for this type of study and sample saturation. The descriptions of obtaining ethical approval, preparing and conducting data collection (semi-structured interviews, using questions based on identified key areas around formulation knowledge), completing analysis (TA, using triangulated techniques), and achieving saturation, were all described in rigorous and replicable fashion following established guidelines (Braun & Clark, 2006; Elliot, Fischer & Rennie, 1999).

All themes were credible and supported by several narratives from participants, with the most important theme being that psychologists needed to be more open about their role and to make formulation more visible to the team in order to increase staff confidence and involvement. The authors recruited participants from the teams in which the clinical psychologists were interviewed in Christofides et al.'s (2011) paper. The study used relevant and current literature to provide context to the findings, and the researchers acknowledged that bias may have been introduced by their involvement in the interview process, demonstrating reflexive awareness. The authors provide quotes from several participants to support the themes, which adds validity to the study. The authors also comment that future research may wish to focus on quantitative methods to investigate a larger sample size, with greater statistical validity that can accurately represent a wider mental health service context.

From a clinical psychology perspective, these papers suggest that formulation is seen as integral to the work that clinical psychologists carry out within multidisciplinary teams, albeit in an informal manner, increasing staff cohesion, improving team dynamics, increasing the understanding of service users' difficulties, and creating new ways of thinking. From a client perspective, formulation may be more beneficial to the clinician in understanding a presentation, than to the client who might feel that their formulation is too exposing of issues.

Category 2: Formulation within psychiatry

Psychiatry is a medical field concerned with the diagnosis, treatment and prevention of mental health conditions. This category focuses on how formulation plays a part in psychiatry in helping provide an explanation of a person's difficulties and presenting issues, although the approach may differ from that used in clinical psychology. The relevant papers were **C**, **G**, and **H**.

Eells, Kendjelic, and Lucas (1998) explored how psychiatrists use case formulation skills in practice, by developing and using the Case Formulation Content Coding Method (CFCCM) which consists of four subcategories: (1) symptoms and problems, (2) precipitating stressors or events, (3) predisposing life events or stressors, and (4) an inferred mechanism that links the preceding categories. This CFCCM was applied to the formulation section of 56 intake evaluations of clients randomly selected from an outpatient psychiatric clinic. The 56 clients were a representative sample of those regularly seen in the clinic. The method section gave a good account of the process of eliciting data and how it was analysed; this demonstrated a good level of rigour.

Another strength for this naturalistic study is the clear explanation of findings. The use of descriptive tables (content elements of participant formulations, quality ratings for components of formulation, and consensus ratings of formulation content) was invaluable and allowed the reader to quickly examine multiple components of the study. The authors report that the formulations assessed were more descriptive than inferential with 95% of the formulations including descriptive information. However, rather than integrating the formulation into hypotheses about the causes, precipitants, and maintaining influences of an individual's problems, they were simpler in description, showing that only 37% hypothesised predisposing life events accounting for the individual's presenting problems, and 16% included a precipitating stressor. Only 43% inferred a psychological explanation, 2% inferred a biological mechanism, and 2% mentioned sociocultural factors. The coding manual showed good reliability (mean kappa = 0.86) across content and quality categories. This may be seen as a limitation in that the method of developing this type of formulation is simplistic and lacking integration with other factors.

Another strength is the authors' description of the formulation process within psychiatry, and how it underscores some important aspects of the conceptualisation process. For instance, it shows that using pre-set components is a type of a strategy for clinicians to use to develop formulation. By addressing each of the pre-set components, therapists can therefore cover essential content areas with the client. This study has good generalisability and possibility for replication in the future through the use of the standardised coding method.

Taking a different perspective, Summers (2006) explored the views of 25 staff members working within psychiatry (9 nurses, 11 support workers, 2 psychiatrists, 1 occupational therapist, 1 social worker, 1 art therapist) on the impact of introducing psychological formulations to a high dependency psychiatric rehabilitation service and their perceived efficacy. A possible weakness to the study might be that it focuses on only one psychiatric ward, a particular staff team, and a specific client group experiencing a severe mental illness. The semi-structured interviews were reported to have lasted up to 20 minutes. The author also recorded these in writing rather than audio or video, which raises questions over the validity of the participants' true and accurate accounts. The paper highlights that grounded theory (GT) was highly appropriate, and provides themes of: 'one of the productive things on the ward'; 'makes me more tolerant, more patient'; 'Increases empathy'; 'afterwards the problems seemed understandable, something we could start to address'. The author then describes the benefits of that psychological formulation when used within mental health.

Participant quotes from several participants were included to support the themes, which ordinarily would provide strength to the findings, but with the interviews being recorded in writing, the reader is uncertain as to whether the quotes are accurate and without researcher-bias. The study collected data from one inpatient unit, with inclusion criteria stating only that participants needed to be regular ward staff, and the author gives no further information on how the recruitment sample were selected. This paper does not specify how a formulation might be carried out, and so the reader cannot compare with the Eells et al. (1998) paper that suggested psychiatric formulations were more effective when descriptive and simple in construct, and were part of a larger medical hypothesis about causes, precipitants and maintaining factors of an individual's difficulties.

Another perspective within the field of psychiatry can be found in the Berry, Barraclough and Weardon (2009) pilot study that utilised a 10-point Likert scale to examine the effects of using formulations on client mental health issues and perceived control of symptoms on behalf of service users within three psychiatric rehabilitation units. Staff perceptions were that the use of psychological formulations improved the level of control by clients in relation to their problems and symptom management. Staff (comprising psychiatrists, registered mental health nurses, and support workers) also reported improved feelings towards service users.

A strength of utilising a Likert-type scale is that quantitative data is easier to analyse statistically. However there is a tendency for participants to provide the answers that they feel they should and importantly as the data is quantitative, it does not provide in depth answers to the questions (Norman, 2010). Furthermore, participants were required to complete the same questionnaire twice in the same working day (pre-formulation and postformulation), therefore raising questions over reliability and validity of data collection due to recall bias. This study might have benefitted from a mixed methods approach, with a qualitative element inserted to allow more indepth responses where necessary, as the fixed answers might have been too restrictive for the participant to answer accurately. However a strength of the design is the use of the larger 10-point scale, which can offer more variance than a smaller Likert scale, and can also offer a higher degree of measurement precision, and a better opportunity to replicate and detect changes (Wittink & Bayer, 2003). The study might have benefitted from the use of diverging stacked bar charts as a visual presentation of the differences found in the data, making it easier to compare the responses of participants in different categories, not shown in this paper (Heiberger & Robbins, 2014).

The limitations of generalisability were clearly stated, furthermore, a coherent argument in the context of existing literature was presented, for the potential relevance of psychological formulations to modify psychiatric staff perceptions of clients presenting with psychosis. The authors recommend

that further research should be carried out on the impact on staff perceptions of mental illness, and on the impact of relationships between staff and service users, recognising that the study needs to be replicated using more rigorous designs. They further suggest incorporating a baseline period of assessment or a control group, for example, a general forum for staff to discuss client interactions. The fact that the authors carried out a pilot study on a target population adds reliability and validity. This allows the researchers to evaluate feasibility, time, cost, and any adverse events, in an attempt to predict an appropriate sample size and improve upon the study design prior to performance of a full-scale research project and an increased likelihood of success in the main study (Teijlingen, Rennie, Hundley, & Graham, 2001).

Having reviewed the papers on formulation within psychiatry, the findings suggest that clinicians within psychiatry use formulation primarily to summarise descriptive information rather than to offer a hypothesis about a client's difficulties. Furthermore, the findings indicate that using formulation benefits care planning, staff-client relationships, staff, team working, provided an increased understanding of clients and their issues, and an increased confidence in their work due to having the ability to understand the wider issues affecting the client.

Category 3: Formulation within mental health nursing

Mental health nursing currently represents the largest health profession in statutory mental health services. The Health and Social Care Information Centre report that as of 2014 there were 44,059 mental health nurses registered within the UK. The papers relevant to this theme (**A**, **D**, and **I**) discuss how mental health nursing, while not explicitly using the term 'formulation', does have a structured way of identifying and explaining a client's needs and problems, such that there appears to be an implicit process of formulating problems (following assessment and before deciding upon interventions).

Using a case study example to show that there is a need in practice to link the assessment to nursing interventions in a meaningful way, Crowe, Carlyle and Farmer (2008) report that there are problems for mental health nurses in following psychiatric diagnoses as outcomes for their nursing assessments and diagnoses. They argue that applying a specific medical model with clients fails to consider external social issues that may also be affecting the client's presentation. This paper proposes that instead, a clinical formulation can offer a suitable alternative. A case example is provided illustrating how the same case can be interpreted in different ways, and the implications this has for the nursing interventions provided. The authors succinctly explain their interpretation of psychiatric, cognitive behavioural, interpersonal, and psychodynamic formulations, and how mental health nurses utilise these in practice. They also suggest that there is little evidence to support psychiatry being the most authoritative voice in mental health, and that one of the most positive attributes of mental health care is that different models work in juxtaposition.

The authors cite lack of knowledge and confidence, or failings in nursing educational programmes as reasons behind mental health nurses not using a broader approach to care. This is a generalised case study, and as such, there is no empirical data to be tested or reported upon, and so its position on the hierarchy of evidence is relatively low. The study utilises current literature well, and provides a comprehensive explanation of each approach to the reader.

Carlyle, Crowe, and Deering (2011) attempted to identify conceptual models that might underpin mental health nursing care in clinical settings. A strength of the study is that 48 mental health nurses were recruited from a wide range of mental health services, including acute inpatient, forensic, community mental health, alcoholic and drug, rehabilitation, child and adolescent mental health, acute psychiatric difficulties, and eating disorders. The authors also provide a comprehensive breakdown of those participants and their levels of experience. Thirty-four participants were female (70.8%), and participants had a range of experience: Four nurses (8.3%) were in their first year of practice; six had worked between one and five years (12.5%); and the remainder for over five years (79.2%). Of these nurses, 45.8% had over 20 years of experience.

Data collection was based on a short client scenario around experiencing low mood, utilising a self-completed questionnaire that contained six quantitative questions via a rating scale, and analysed using a Mann Whitney U non-parametric test as the data breached normality, to explore potential patterns of difference between the participants. A further qualitative section allowed participants to add any further information to the questions provided, and content analysis was used to observe the presence of certain words/concepts, which were then coded into manageable categories and examined for themes (Mcleod, 2007).

Limited sample interview questions and data collection methodology were provided, and ethical approval was described to an extent, but not in a rigorous and replicable fashion. It may have been beneficial to have the inclusion/exclusion criteria for participants as purposive sampling was used to specifically collect data from nursing staff working within outpatient/inpatient settings. Furthermore, it was difficult to ascertain if sufficient interpretation had been used in the analysis, or to be confident of successfully reproducing the research. Nakagawa et al. (2007) determined that it is standard practice to report an effect size for an inferential test, but the authors only disclose standard deviation and mean. Therefore, the reader cannot tell whether the sample size for the study has adequate power to detect statistical significance. In reporting the results of the Mann-Whitney test, it is important to provide a measure of the central tendencies of the groups being tested, the value of U, the sample sizes, and the significance level (Corder & Foreman, 2014). Although non-parametric tests are limited in what the findings can suggest, the added omission of these statistics also hinders the reader in being able to deduce whether the study is representative of the group being tested.

Research findings showed that the conceptual formulation models should include social background, presenting issues, and proposed treatments. The only statistically significant result related to participants working in outpatient settings nominating an interpersonal model of care and significantly more likely to do so in respect of influences such as physical health, or social support, contributing to the client's improvement (P=0.01). The authors acknowledge that there are limitations to the study, which include obtaining a representative sample of nurses currently working within the mental health service. However, they do suggest that the participants are a representative sample of nurses or current mental health experience.

There was good use of current literature to support findings. The authors report that although participants used a psychodynamic framework for understanding causes of mental health problems, they described presenting problems and nursing interventions in terms of supporting a medical model of care.

Coombs, Curtis and Crookes (2011) conducted semi-structured interviews with 18 nurses working in inpatient and community mental health settings, with the aim of trying to understand the content and process of a comprehensive mental health nursing assessment. The authors wanted to provide an insight into contemporary practice and guidance for research and training activities, which could usefully be aimed at supporting understanding and improvements in mental health nursing practice. The descriptions of obtaining ethical approval, preparing and conducting data collection, completing analysis (grounded theory), and achieving saturation, were all described in rigorous and replicable fashion following established guidelines (Braun & Clark, 2006; Elliot, Fischer & Rennie, 1999). Presentation of data was appropriate to the method, although a diagram presenting the data (such as a pie or bar chart) visually may have given the reader an immediate cue to the results. One important quality criterion was how verbatim quotations were identified as having a key role here. The authors were able to support the framework with the inclusion of excerpts from transcripts, which helped to clarify links between data, interpretation

31

and conclusions. This in turn suggested validity, reliability, credibility and auditability of the study.

The limitations of generalisability were clearly stated, and existing literature was used to support relevance of the theme to devise a coherent policy on content and use of nursing assessment to tackle the inconsistencies between nursing practice and policy. Examining the effects of this on future nursing education and training was also suggested for further study. Limitations of the study were discussed clearly, recognising the possibility of introduction bias with purposive sampling, and that self-reporting may be prone to influence from factors such as a desire to please rather than providing a true and accurate account of the participant's beliefs. Findings suggest that a comprehensive nursing assessment should include an overarching review of client background, 'putting the client at ease' throughout the process (one participant discussed making their clients a cup of tea on first assessment to show equality and highlight the need for reciprocity within the relationship). The results also suggest a collaborative relationship to tackle any inconsistencies in the client history, and that this is an on-going process throughout their work together.

Having reviewed the papers on formulation from a mental health nursing perspective, mental health nurses although historically aligned to the medical model and constrained by the rigidity of the categorisation and standardised coding, do use an approach similar to formulation in practice. The authors argue that mental health nurses report undertaking a comprehensive assessment in practice that includes holistic or alternative therapeutic interventions (e.g. psychodynamic therapy). Establishing reciprocity in the therapeutic relationship and identifying inconsistencies in the client's personal history are both important, showing that the process is an on-going negotiated activity between client and nurse.

Discussion

Having reviewed empirical literature on formulation from three different professional perspectives, some common themes have emerged which have relevance to using formulation within multi-disciplinary teams.

1. Confidence

Christofides et al. (2011, p.431) describe the need to work more closely with the team and share psychological thinking to 'reduce the mystery' of the clinical psychology role, and that 'traditionally psychologists have been in a room somewhere doing some kind of hocus-pocus.' Hood et al. (2012, p. 111) report that some participants could not formulate without help and support, as it was perceived as 'a complex process requiring a high level of skill, knowledge and experience'. Indeed, in Carlyle et al. (2011) the authors argue that modern day mental health nurses appear to be caught between the constraints of the medical model, and lacking in confidence and training to carry out more holistic formulations with their clients.

2. Inconsistencies

Coombs et al. (2011) argue that there is a pressing need to reconcile inconsistent information when working with clients. They report that without true and accurate information of a client's presentation, incorporating comprehensive background and social factors, the process will fail. They also suggest that the assessment, which incorporates initial contact to discharge, is an on-going process that is collaborative with the client. Furthermore, there does not appear to be a definitive explanation of the content and process of a mental health assessment and therefore it is unknown how many of these nursing assessments are effective given that there is little evidence on these assessments' methodology (Coombs, et al., 2011).

Leeming et al. (2009, p.7) contend that such inconsistencies between client and clinician can leave the two parties feeling very differently about collaborating on a formulation. Formulation might be of value to clinicians in informing their practice with the client, but the client might be left feeling under pressure to account for their behaviour and emotions, with one participant stating: 'they're very personal...and very embarrassing'.

Berry et al. (2009) suggest that clinicians and clients need to have an equal understanding of what a formulation can provide. The authors state that there is a need for staff to have a better understanding of client difficulties, and recognise that further research is needed into the impact on relationships between staff and clients. They further suggest that using formulation across teams would help reduce inconsistencies towards explaining a person's mental health problems.

3. Is formulation an alternative to diagnosis?

Crowe et al. (2008, p. 806) suggest that a clinical formulation can provide a 'useful adjunct to psychiatric diagnosis'. This is supported by Hood et al., (2012), who argue that there is an underlying frustration towards the medical context of mental health. The authors argue that the biomedical model dominates the understanding and subsequent treatment of clients, using diagnoses and medication, rather than considering alternative approaches such as formulation. Leeming et al., (2009, p8) report that service users might view diagnosis and formulation as very separate entities. The authors support this with participant quotes:

'I was relieved to get a diagnosis...because it made me feel less of a lesser person...that there's a reason for my difficulties', whilst citing psychosocial explanations as much more 'tentative' in comparison. The pilot study carried out by Berry et al. (2009) reported significant changes in staff perception towards service users with psychosis when using psychological formulations, suggesting benefits such as enhanced understanding of the service user's difficulties, their needs, and perceptions for change.

Strengths and limitations of the review

This review was completed in a systematic and replicable way. The checklist from guidelines based on the Critical Appraisal Skills Programme

checklist for qualitative research (CASP, 2014) and Elliot, Fischer and Rennie (1999) helped review the articles, but unfortunately there are a limited number of papers available on this topic area, as highlighted by the DCP (2011). Furthermore, the absence of a second reviewer for quality assessment may limit the credibility of the results. Excluding non-English literature, and carrying out a hand-search which does not replicate the electronic database search strategy, may also result in missed empirical literature that may have added further value to this review. A strength of the qualitative papers was that generally, themes were substantiated by participants' quotes (Christofides et al., 2011; Hood et al., 2012; Leeming et al., 2009; Summers, 2006; Coombs et al., 2012). This helped with validity and reliability of the study, and added valuable context to the study itself. Clear rationales were provided, which particularly identified that limited research had been conducted in the area of psychological formulation for acute inpatient wards (Berry et al., 2008; Eells et al., 1998; Christofides et al. 2011; Hood et al. 2012). A clear recruitment strategy was also provided in all but one paper (Crowe et al., 2008) showing how eligible participants were recruited.

Conclusion

A total of nine articles were included within the review. It was expected that there would be a larger number of relevant papers, but initial screening in accordance with the inclusion and exclusion criteria provides confidence that the articles included within this review are appropriate in meeting the aims of the review. The papers are representative of different understandings and applications of formulation within a range of mental health settings, taking into account service user perspectives. The review highlights a lack of consistency within the mental health professions, and future researchers may wish to explore inconsistencies in mental health teaching curricula, and reasons for different levels of knowledge within and between the different professions. Current literature suggests that those working within psychiatry are allied to the medical model. The use of formulation in psychiatry is structured via conceptualised models for the clinician to follow, and the formulation is more descriptive and simpler in explanation of the client's difficulties. This is in contrast to clinical psychologists working within an adult mental health team who reported sharing information informally, which helped to focus the team towards a consistent intervention together. However, the literature in this review also suggests that there are key benefits for staff in using formulation, in increasing staff cohesion and getting a better understanding of client issues. Current literature also suggests that mental health nurses use a formulating process to help provide a wider social perspective on issues potentially affecting a client, and seek to empower the client to engage reciprocally throughout the process. From a service user perspective, the empirical evidence found in this review shows that clients might feel more confident when receiving a medical diagnosis as it provides a stronger justification and validation for their difficulties, but that receiving a diagnosis may also imply something profoundly negative about the individual.

The papers in this review focus predominantly on adult mental health services, and questions are raised as to whether the findings of these studies are applicable across different mental health services. With this in mind, paper 2 will explore perspectives and experiences of non-clinical psychologists working within a Child and Adolescent Mental Health Service in relation to the psychology formulation.

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Paper 2: Formulation: An investigation into perspectives and experiences of non-Clinical Psychologists within a Child and Adolescent Mental Health Service.

Abstract

Formulation is recognised as one of the core skills of a clinical psychologist. This study explores non-psychology team members' understanding of formulation within a child and adolescent multidisciplinary team mental health setting. Twelve mental health professionals from three separate Child and Adolescent Mental Health multidisciplinary teams participated in semistructured interviews. The methodology was a qualitative design called Template Analysis, using hierarchical coding to find themes within the data.

The study focused on levels of understanding of what a formulation involves, benefits and/or limitations of using a formulation, and of the role of the clinical psychologist.

Findings suggest that formulation was not fully understood across different professional groups, although there was a good understanding by some participants of this approach. There was a lack of confidence in using formulation owing to poor knowledge sharing and limited training from more senior clinicians. Those able to provide information stated that the formulation was collaborative, flexible, but time consuming. Psychologists were seen to bring leadership and specialist knowledge, but there was concern about the service being psychology led, and that psychologists may not be as cost effective when compared with other professions. It is hoped that the findings will contribute to the development of clearer communication and increased knowledge sharing within the teams.

Keywords: Formulation; Clinical Psychology; Template Analysis; Qualitative research

Word count: 7,713 (Excluding references)

Introduction

In 1999, the 'National Service Framework for Mental Health' (NSF) published quality standards for mental health promotion within primary and secondary care. The NSF laid out aims that the Department of Health (DOH) wanted to achieve, which included combatting discrimination against individuals and groups with mental health problems, making it easier for those who may have a mental health difficulty to access services, and create a range of mental health services to prevent or anticipate crises where possible (DOH 1999).

In 2004, Professor Louis Appleby, National Clinical Director for Mental Health, published a personal reflection on the NSF (DOH, 2004), suggesting that although standards remained appropriate, there were identified service gaps when working with people with mental health problems. He suggested improving access to psychological therapies, providing specialist mental health services, and modernising the mental health workforce. Included in this was the aim to promote a flexible multidisciplinary model where distributed responsibility was shared amongst team members.

This personal reflection was developed into the 'New Ways of Working for Everyone' (NWW) report (Care Services Improvement Partnership, 2007), which suggested new ways that professionals should work within teams. For example, it was identified that in children's services, there was a mismatch between service user needs and what is available, and difficulties with transition from child mental health services to adult services (Richards & Vostanis, 2004).

Since its implementation, multidisciplinary teams (MDTs) within mental health have increasingly taken responsibility for provision and approach of services to service users. Collaborative working is promoted and supported to make best use of clinical time, and better provision of consistent standards to achieve higher service user satisfaction. Within this provision to service users, is the promotion of individual and group therapy, and application of clinical formulation to enable a better understanding of the service user's difficulties (Mace, 2007). A clinical formulation is most commonly used by clinical psychologists working within mental health MDTs, and is assumed to be a core component of clinical practice (Kinderman, 2001).

Johnstone & Dallos (2013) describe clinical psychology formulation as a method for understanding how an individual's difficulties arise and are maintained in the system that surrounds them. This included taking into consideration the wider perspective of cultural and societal norms. A formulation tries to specify and understand the thoughts, emotions and behaviours evoked in/from an individual, and those who interact with them. This can then be targeted in therapy, providing an idiosyncratic, creative, integrative approach, which is grounded in theory and evidence.

However, a clear account of exactly what formulation means across professions other than clinical psychology is lacking. For example, there are several psychiatric approaches that use the term 'formulation', but these are not the same as the psychological approach. Sims & Curran (2001) report that 'psychiatric formulation' is a concise review of the case and a balanced appraisal of the psychiatric assessment, firmly based on the facts of the case rather than on speculation. It encapsulates the aetiology, as well as the precipitants, predisposing and perpetuating factors, and prognosis, while also being clear, concise and clinically useful. The psychiatric formulation is not universally recognised still, largely because there has been no standard, agreed-upon format for conceptualizing a formulation, and seldom has it been written or required as part of a case record or documentation.

Other professionals within the team, for example, mental health nurses, therapists and social workers, might also use formulations in their approach to service user work (Crowe & Carlyle, 2008). The use of formulation within teams is recommended in several clinical guidelines such as the Health and Care Professions Council (2009), the Clinical Psychology Leadership Framework (Division of Clinical Psychology, 2010), and the Royal College of

Psychiatrists (2010), perhaps suggesting the need for greater understanding and sharing of formulation across the professions.

The Division of Clinical Psychology (DCP 2001) recommends using a formulation-based approach in MDTs, and state that following psychological assessment, formulation can lead to a range of evidence-based therapeutic interventions, and dissemination of psychological knowledge and skills through teaching or supervision. More recently, the DCP has stated that clinical psychologists should lead on the development of formulations, and that these should be shared across teams to incorporate them into care planning (DCP 2011).

The current role of clinical psychologists within the National Health Service (NHS) includes working within MDTs as therapists, supervisors, consultants, and trainers, with the aim of utilising their specialist knowledge and skills (Lavender & Paxton, 2004). Dudley, Kuyken and Padesky (2011) state that although psychology views formulation as an essential component of effective therapy, it has proven difficult to demonstrate that formulation has had a direct clinical impact within a multidisciplinary setting.

There is limited published research on the use of formulation within MDTs, and the DCP (2011) report that there is a lack of evidence concerning how a formulation might play an effective role within MDTs. Christofides, Johnstone, and Musa (2012) explored the views of clinical psychologists within adult community mental health teams. They found that psychologists shared hypotheses through informal means, such as 'chipping in' ideas during team discussion rather than explicitly stating a formulation, or through training and case presentations. The authors argued that this informal way of working was valuable and improved the quality of clinical services provided by being accessible to other professionals. However, it may not assist other professionals in understanding the more formal elements and applications of the formulation process. A smaller body of research has explored the formulation from the perspective of non-psychologists. Hood, Johnstone, and Christofides (2013), for example, found that non-clinical psychologists described formulation in teamwork as providing staff cohesion, improving team dynamics, increased understanding and improved relationships with service users, and created new ways of thinking.

Despite this emerging research, there remains a degree of uncertainty and inconsistency around the use of formulation in mental health practice generally, together with confusion over its definition and key elements (Mellsop & Clapham Howard, 2012).

Aim of study

The aim of this study was to explore non-clinical psychologists' perspectives and experiences of formulation, as it is practised and shared within child and adolescent mental health MDTs, adding to the work carried out by Christofides et al., (2011) and Hood et al., (2012). Integral to this aim was to uncover their understanding of the role of the clinical psychologist within the team, as formulation is seen as a specialist methodology used within clinical psychology (BPS, 2009; DCP, 2011). A secondary aim of the study, therefore, was to explore non-clinical psychology professionals' views on the role of the clinical psychologist working in teams within a Child and Adolescent Mental Health Service (CAMHS).

These generic aims were translated into the following focused research questions, which would in turn guide the interview schedule.

Research questions

- What do non-clinical psychology professionals working in multidisciplinary mental health teams understand by the term "formulation"?
- Is formulation part of the clinical work of other professionals in the multidisciplinary team, and if so, how?
- What do non-psychology professionals working in multidisciplinary mental health teams understand about the role of the clinical psychologist?

Ethical approval

The sponsor Institution provided both peer review approval and sponsor indemnity. Subsequently, the host NHS trust provided research and development approval.

<u>Method</u>

Participants

Twelve non-clinical psychology professionals from three CAMHS mental health MDTs were recruited for this study, which utilised Template Analysis (TA) to examine the data. The number of participants recruited is deemed appropriate for TA data saturation (King, 2012), and is, for example, comparable in design to a TA study that successfully explored experiences of parents of children with life-limiting conditions (Rodriguez & King, 2009). Table 1 shows the participant demographic data.

The participants presently carry out a range of individual and collaborative therapeutic work with service users, including assessment, provision and regulation of medication, therapeutic interventions, carer support, school advice and support, and leadership within the service. There was no age range, gender, or health requirement to participate in the study, and the only exclusion criterion was that the participant could not be a psychologist. There was no inducement or direct benefits to engage with the study. Participants had worked in these teams between two and a half and 20 years (mean length in current team 10 and a half years) and had been qualified from between six to 30 years (mean 18 years and two months).

Table 1: Participant demographic data

Role	Gender	Experience
		(years)
Consultant Psychiatrist	Female	11
Consultant Psychiatrist	Male	20
Mental Health Nurse	Female	12
Mental Health Nurse	Female	20
Mental Health Nurse	Female	15
Mental Health Nurse	Female	10
Mental Health Nurse	Female	30
Therapist	Female	5
Therapist	Female	20
Therapist	Female	14
Social Worker	Female	13
Social Worker	Female	2.5

The researcher had no association with the mental health professionals included in this study.

Procedure

Initially the researcher contacted the service lead to request permission to attend four MDT meetings to canvass for participants. Following this, the researcher sent two further email requests to team managers requesting participants, and eventually 12 participants from different professional backgrounds were recruited. At each MDT meeting, the researcher provided a participant information sheet to non-clinical psychology professionals explaining the aims and rationale for the research, the format of the interview process, collection and storage of data, risk, benefits, and how the information might be used. This included confidentiality guidelines. All participants were provided with an Interview topic guide explaining the rationale and format of the interview process, and informed consent was discussed and collected from each participant before the interview. Following the interview, participants were debriefed, and rights to withdrawal of data explained. All the data was gathered by way of audio recording for later transcription, and together with its analysis, was electronically stored, and locked in secure facilities when not in use.

The Data Protection Act (1988) and Acceptable Use Policy for the North Staffordshire Clinical Commissioning Group on Information Governance (2013) were adhered to when utilising the email facility, and all subsequent data collection, to ensure anonymity for any identifiable individual in the report of the research or any publications arising from it.

Semi-structured interviews were carried out at the participants' work base, asking participants to describe the team(s) in which they work, their understanding of formulation within the team context, and their reflections on carrying out interventions and whether the formulation has been integrated into the intervention used.

As research in this area continues to be at an exploratory stage with a paucity of literature on the subject, a qualitative interview method was seen as the best approach to explore and illuminate any issues of interest, with the aim of placing minimal artificial constraints on participants to allow for unexpected data and multiple perspectives (Hayes, 1997).

Data analysis: Template Analysis (TA)

Template analysis (TA) is a highly flexible approach that could be adjusted to the needs of this study. Therefore, taking an approach supported by humanistic theories (Rogers, 1961; Maslow, 1943), of existential assumptions that phenomenology is central and that people have personal agency or free will to make choices in life, allows the study to seek subjectivity in the data and explore individual beliefs and understanding of the topic area. The researcher wanted to employ a phenomenological and experiential approach towards the reflexivity and nature of the researcher-participant relationship, and any other reflexive relationships within the teams. This approach originates from more structured research procedures such as Grounded Theory and Interpretative Phenomenological Analysis (IPA), but it is not as prescriptive or wedded to the realist methodology of Grounded Theory, and is more flexible than IPA (King, 2004). As suggested by King (2012), to ensure that TA is an effective method for data analysis, it is important to collate data from groups containing a range of range of participants on a topic of shared interest.

TA often begins with the researcher identifying relevant 'a priori' codes that the researcher believes might be pertinent to the research. These are summarised through the continual analysis of the data, into themes identified as important to the study. A code is a label attached to a section of text to index it as relating to a theme or issue in the data that the researcher has identified as important to his or her interpretation (King, 2012). These themes are then developed into a coding 'template' and organised hierarchically. Codes can be descriptive, requiring little or no analysis of what the participant means, or they can be interpretative, and defined from the researcher's perspective. The template begins with broad themes and 'higher-order codes' (HOC) that are seen as similar units, grouped together, and the data is then developed through continual analysis into specific 'lower-order codes' (LOC), or units with different meaning. The 'a priori' codes may or may not be relevant when the final template is revealed (King, 2004).

'A priori' codes

The researcher identified three 'a priori' codes believed to be integral to the data, based on:

- Medical model vs. Psychology
- Professional rivalry
- Knowledge

The researcher, having worked on placement within a CAMHS MDT, believed that these 'a priori' codes were relevant to the experiences within that particular team, having been witness to examples of all of these codes within team meetings. A priori codes can be modified or dropped if they are subsequently not found useful in the actual data examined (King. 2012). Once the 'a priori' themes were defined, the data was re-examined, highlighting areas that may be significant to this study. Although these 'a priori' codes were present, they were not all evaluated as HOCs. Both 'knowledge' and 'professional rivalry' were placed within the final template as HOCs, but 'Medical model vs. Psychology' was only evaluated as a LOC and modified as such (see appendices 9 and 10).

Developing the template

Where data corresponded to 'a priori' themes, they were coded as such. Related codes with only small amounts of data were merged into a single code. Sections of text from the transcripts were then organised and defined according to themes considered important to this study. The themes were then characterised to include the relevant material and organised into an initial template, which was developed after reading through and coding the first three transcripts of the study. Four themes were identified within these transcripts: '*level of understanding of formulation*', '*level of benefit of formulation within the team*', '*limitations of using formulation within the*

team', and '*role of clinical psychologist*'. From the themes, the researcher was able to identify both HOCs and LOCs relevant to the transcripts. These codes were then arranged into hierarchical data, beginning with the HOCs. The three participants that had been interviewed were then asked to ratify their transcripts for content accuracy and themes recommended by the researcher. This initial template was then applied to the remaining transcripts, and modified if new themes emerged. King (2012) reports that once the final version is established, and all transcripts have been coded to it, the template provides the basis for interpretation of the data set and the researcher can write up the findings of the study.

Table 2 shows how the 'a priori' codes were compared to the data to develop further codes. Only the 'a priori' code 'Knowledge' was found to be applicable. New codes such as 'Structure', and 'Flexibility' were found and added to the template.

Table 2: Coding example from therapist participant interview (P5)

I "Have you come across the clinical psychology formulation in your everyday practice within this team?"

R "Yea, yea, it gives a structure (LOC) and it's flexible (HOC) and so if it starts to not fit it all in and you're thinking this doesn't work, then I think that gives you the confidence (LOC) to kind of think actually what we're dealing with here isn't what I think, maybe it's something else. It just gives you that space (LOC) to query it rather than plugging along. If it does work or fit with their presentation, then that formulation can be changed (LOC). I think it completely guides (LOC) the work and I suppose what I'm thinking while I'm talking is I've got a client which I'm working with, and I've just done masses of work about formulation with her and I think it has really guided (LOC) her. It's also giving that client the opportunity (LOC) to kind of understand (LOC) and know what we're doing and why we're doing it, but also what she needs to do in order to beat it. I think for me that was probably the big positive about formulation and how I would use it, is that I think it needs to be owned (LOC) by the client rather than me saying this is my formulation. "

Codes: (HOC Higher-Order Code; LOC Lower-Order Code)

Knowledge (including 'understanding', 'guidance', 'opportunity') –'a priori' code and HOC

Structure (including 'guides', 'confidence') – new LOC code

Flexibility (including 'changed', 'owned', 'space') - new HOC code

ble 3 shows an example of how the template was coded from the data. This includes the development of LOCs such as 'assessment confusion', and 'rigidity', from HOCs such as 'lack of understanding'.

1. Level of understanding of the formulation (Main theme)		
1.1. Lack of understanding (HOC)		
1.1.1 Assessment confusion (LOC)		
1.1.2 Assessment requirement (LOC)		
1.1.2.1 Tick box forms (LOC)		
1.1.3 Rigidity (LOC)		
1.2 Lack of confidence (HOC)		
1.2.1 Lack of knowledge (LOC)		
1.2.2 Training needs (LOC)		
1.3 <i>Knowledge</i> ('a priori' code) <i>(HOC)</i>		
1.3.1 Infrequent training (LOC)		
1.3.2 Reduced MDT meetings for case discussion (LOC)		
1.3.2.1 Lack of unity (LOC)		
1.3.2.2 Poor morale (LOC)		
1.3.3 Lack of opportunity to learn (LOC)		
1.4 intervention (HOC)		
1.4.1. Medical skills required for emergencies (LOC)		
1.4.2 Nursing plan, diagnosis (LOC)		
1.4.2.1 Family requires label (LOC)		
1.4.3 Social working solution-focused goals (LOC)		
1.4.3.1 getting to know the 'patient' (LOC)		
1.4.3.2 Driven by social policy (LOC)		
1.4.4 Verbal formulations (LOC)		

Table 3: Example of coding hierarchy used for main theme 1

Revising the template

Once the initial template was constructed, the researcher examined each transcript and identified sections of text that were relevant to the different study aims. In the course of this, the initial template changed by way of either inserting new codes, deleting codes that were no longer relevant to the theme, or where the researcher found the code was either too narrowly defined or too broadly defined to be useful. It is through these changes that the final template was developed. An example of this can be found in appendix 9 (relating to the theme – 'Role of clinical psychologist'), and how this was refined into the theme found in the final template. The comparison between the tables emphasises how codes emerged through initial coding of the data, and that through continual scrutiny of the transcripts, several codes were amended or replaced.

<u>Results</u>

Table 4 (below), depicts the full and final version of the template relating to 'level of understanding of formulation and the role of the clinical psychologist'.

Table 4: The final template: level of understanding of formulation and the role of the clinical psychologist

1. Level of understanding of the formulation (Main theme)		
1.1. Lack of understanding (HOC)		
1.1.1 Assessment confusion (LOC)		
1.1.2 Assessment requirement (LOC)		
1.1.2.1 Tick box forms (LOC)		
1.1.3 Rigidity (LOC)		
1.2 Confidence (HOC)		
1.2.1 Lack of knowledge (LOC)		
1.2.2 Training needs (LOC)		
1.3 Knowledge (a priori) (HOC)		
1.3.1 Infrequent training (LOC)		
1.3.2 Reduced MDT meetings for case discussion (LOC)		
1.3.2.1 Lack of unity (LOC)		
1.3.2.2 Poor morale (LOC)		
1.3.3 Lack of opportunity to learn (LOC)		

1.4 intervention (HOC)		
1.4.1. Medical skills required for emergencies (LOC)		
1.4.2 Nursing plan, diagnosis (LOC)		
1.4.2.1 Family requires label (LOC)		
1.4.3 Social working solution-focused goals (LOC)		
1.4.3.1 getting to know the 'patient' (LOC)		
1.4.3.2 Driven by social policy (LOC)		
1.4.4 Verbal formulations (LOC)		
2. Level of benefit of the formulation (Main theme)		
2.1 Collaborative with service user (HOC)		
2.1.1 Empowering (LOC)		
2.1.2 Control (LOC)		
2.1.3 Structure includes aetiology, social, familial		
constructs (LOC)		
2.2 Flexibility (HOC)		
2.2.1 Ability to change/revisit (LOC)		
2.3 Solution-focused/goal setting (HOC)		
2.3.1 Seeking collaborative outcomes (LOC)		
3. Limitations of the formulation (Main theme)		
3.1 Time restrictions (HOC)		
3.1.1 Risk assessment (LOC)		
3.2 Lack of resources (HOC)		
3.2.1 Type of knowledge base required (LOC)		
3.2.2 Lack of comprehensive training (LOC)		
3.3 Lack of confidence (HOC)		
3.3.1 Poor knowledge sharing (LOC)		
3.3.2 Fall back to what you know (LOC)		
3.3.3 Resistance to change (LOC)		
3.3.4 Promoting learning (LOC)		
3.3.5 Lack of clear guidance from managers (LOC)		
4. Role of Clinical Psychologist (Main theme)		
4.1 Role unclear (HOC)		
4.1.1 Hierarchy (LOC)		
4.1.2 Expectations: generic vs. specialist skills (LOC)		
4.2 Cost effectiveness (HOC)		
4.2.1 Contradiction (LOC)		
4.2.1.1 limitations in complex casework (LOC)		
4.2.1.2 Willingness to work collaboratively (LOC)		
4.2.1.3 Rigidity of methods (LOC)		
4.2.3 Higher education and broad Knowledge base (LOC)		
4.3 Professional rivalry (a priori) (HOC)		
4.3.1 Imbalance in team (LOC)		
4.3.2 Tension between Medical model and Psychology (a		
priori) (LOC)		
4.3.3 Psychology heavy (LOC)		
4.3.4 Misunderstanding of role (LOC)		
4.3.5 Resentment (LOC)		
4.3.6 Feeling undervalued (LOC)		

4.4 Perceived benefits (HOC)		
4.4.1 Leadership (LOC)		
4.4.2 Supervision (LOC)		
4.4.4 Consultation, guidance and advice (LOC)		
4.4.5 Flexibility around type of work (LOC)		
4.4.6 Specialist knowledge around psychological issues		
(LOC)		
4.4.7 Collaborative working (LOC)		

Main themes

As already mentioned, four main themes were established and developed from the transcripts (highlighted in blue on the final template –Table 4). The following excerpts illustrate the narrative that was appraised to develop the final template. Table 5 classifies the profession-relevant codes to each participant number.

Table 5: Profession-relevant participant codes

P1 – Psychiatrist	P2 – Therapist
P3 – Mental health Nurse	P4 – Therapist
P5 - Therapist	P6 – Mental Health Nurse
P7- Mental Health Nurse	P8 – Mental Health Nurse
P9 – Mental Health Nurse	P10 – Social Worker
P11 - Psychiatrist	P12 – Social Worker

Theme 1: Level of Understanding of the formulation

All participants (P) felt that there was a lack of knowledge and understanding of what a formulation involved. Several participants guessed that it would include a service user's aetiology, risk assessment, personal history, and social and familial factors, but some participants could not explain what a formulation was: "I'm not sure what you mean exactly by a formulation...I'm interested in how you distinguish clinical psychology from a psychiatry, or a multidisciplinary and CAMHS type formulation..." (P11).

The misunderstanding over what a formulation entails can be found in the choice of words used by some of the participants:

"too rigid" (P12), "clinical and ordered", "got to tick the box" (P9), "I wouldn't want to be doing it in a tick box type of way" (P5), "sometimes I just see it as a very sort of tick box process rather than being more generically focused" (P9). There was also a belief that psychologists formulate "*in a hierarchical expert led way, which can be quite negative for people*" (P2).

However, some participants were able to provide comprehensive answers and an understanding based on their own skills and knowledge:

"Formulation to me would be an opinion about factors contributing to aetiology and maintenance of a young person's difficulties..." (P1).

"I think we might have touched on it...we would look at the kind of predisposing, precipitating, and maintaining factors...it was set out in that kind of model of formulation." (P7).

"I don't really exactly know what it is, but I suspect it's where you're looking at historical symptoms for what you've developed, and why it's developed, how it's been maintained, and what kind of treatment you can use." (P5).

While this participant claimed not to know what formulation was, he or she did in fact demonstrate a generally good understanding, albeit not expressed in psychological language.

However, some participants' answers highlighted a lack of clarity over formulation being integral to the initial service user assessment:

57

"Their formulations are generally formulations that we do, you know, when we all do our assessments, we all come to a conclusion and formulate what we need to do with the patients, clients." (P4).

"The assessment has a part in it for us to formulate, and it looks at background factors for us to take into account" (P9).

Some participants believed that although they might not have a full understanding about formulation, they still carried out a similar process when working with service users, albeit without clearly stating this in a written format:

"Other members of the multidisciplinary team don't necessarily use formulations in quite that way, I think they probably all have them in their mind but it's unusual for them to commit them to paper." (P11).

"When we did in-house training a couple of years ago on formulation, other people sat there saying, well, we do that anyway, and they absolutely were, verbally, and through clinical letters and files." (P7).

It was evident that non-psychology professionals were working collaboratively with the service user, but perhaps utilising skillsets that they had developed through different training and experiences to those of clinical psychologists. Furthermore, there was a belief that although the formulation has an important part to play within the team, knowledge sharing of what it entails and how it is carried out was minimal throughout the service, and this was seen as key to why other professionals were not engaging with it:

"You don't get that kind of openness that I think would really help, it would help my understanding of how clinical psychologists see things..." (P3).

"One of the psychologists in the team has got a formulation template...it looks at internal factors, things that are maintaining, it's really helpful, and I don't think there's a lot of sharing in the team of that." (P3). "What would be helpful is for clinical psychologists to help with the access and understanding of formulation within the team, because there is a lot of reluctance to engage with it at present." (P12).

Participants expressed that there was limited confidence in applying a formulation in practice, and that this was in part due to lack of knowledge, and in part due to the belief that formulation was too scientific and inaccessible:

"Prior to my course it felt inaccessible, very scientific, and available only to psychiatrists and psychologists, I didn't have any knowledge about it prior to this." (P12).

However, psychologists were seen to share knowledge in specific situations such as supervision with colleagues:

"I have supervision with a clinical psychologist and often they will help me do formulations around patients that I'm working with. I find that really useful and really helpful." (P8).

Furthermore, there was a belief that other clinicians within the teams would benefit if clinical psychologists were to share their knowledge more extensively about formulation:

"I think as a team, it would really help to see how people do things differently, whether that's because psychologists don't see the importance of sharing or the importance of gauging what other people think about their ideas..." (P3).

When participants were asked if the team would have regular team meetings to discuss cases and share information from alternative professional perspectives, one participant commented: "We used to. I think the perspective has now changed within our team. I think we have perhaps reduced the amount of sharing within the team. I think it's very important that we all used to bring back cases for discussion and share formulations, and I think that's a really helpful part of multidisciplinary working". (P11).

Another perspective given highlighted a need for stronger managerial leadership in promoting knowledge sharing and training within the teams:

"It's not in people's day to day practice documenting it, making it really clear across the board...so I guess it's part of the team leader's role but maybe utilising clinical psychologists to really keep that message going." (P7).

Theme 2: Level of benefit of the use of a formulation

Participants were clear that there was a definite role for the formulation within the MDT. There were variations to when a formulation would be utilised. This may be accounted for by the different training received throughout the participant's career, but all participants found benefits in using a formulation that was both flexible and collaborative:

"There's certainly a role for it, because I think you need to have that in order to be able to provide the best approach." (P6).

"Obviously over time it can be changed and re-jigged, gives more clarity from the beginning of your work." (P4).

Within the coding, the researcher found that there was an understanding that a client's background and social support were important when working with a service user, and there was a belief that formulation was a collaborative piece of work that ultimately provided a tangible explanation for possible reasons behind their presentation:

"I think the young person and family often benefit from having it sort of presented as a clear idea, it's almost like a bit of a light bulb moment when it's shared with the family, and it's their formulation as well, it's very much a joint thing." (P9).

"For me the big positive is how you use formulation, I think it needs to be owned by the client. I don't think it would be the same if I just sat back, formulated, and didn't share it with the client..." (P12).

One participant also highlighted how carrying out a formulation helped to build rapport with the service user:

"It's part of a relationship that's beginning to build." (P5).

Further benefits focused upon how the formulation can encompass the wider social and familial aspects of the service user's life, which in turn helps the service user and carers to make sense of their difficulties:

"You sit down, get the picture and you have the child in front of you, you can have the parents, or foster carers, or grandparents. You can even bring in brothers and sisters if that is relevant...you need the whole picture, which is far better way of working... We want the problem to make sense to everybody, which is why you need a formulation." (P7).

Theme 3: Limitations of the formulation

Several participants contended that carrying out a formulation in the early stages of working with service users could have limited value should they have more immediate medical issues to address. Any type of formulation would have to come later when these had been undertaken. They suggest that carrying out a formulation is a time-consuming process and this might not be possible in some circumstances: "One drawback is that it can take a bit of time to get a clinical formulation, and sometimes we haven't got the luxury of time, you need to deal with the crisis at the moment, get them safe, make decisions, and the formulation comes later on." (P7).

"In this team there's a massive element which is medical...which if you don't look into the risk, you have the potential of losing a child to illness." (P3).

With the implementation of NWW (2007) and the drive towards working in a more psychological way, and more specifically developing a formulation, there was some resistance to this approach:

"Some of the nurses see their opinion as, I've not been trained to use formulation, you can train them, but some might feel criticised, undermined maybe." (P7).

From analysis of the data, the codes 'confidence' (HOC), 'lack of knowledge' (LOC), and 'training needs' (LOC) were developed. Participants described using formulation skills in an informal way, but feeling that the work felt unclear, particularly as there was a lack of knowledge and confidence in applying these skills:

"We've not had the training, and so don't know how to apply it or have the confidence to." (P7).

"I wouldn't say I formulated in a clear way, I would have an idea of what I was working with and how I was going to work with it...I just have working ideas." (P12).

Theme 4: Role of a clinical psychologist

There were different perspectives concerning the role that the clinical psychologist plays within the MDT. Some believed that the current trend within the National Health Service (NHS) was for the psychologist to provide a more generic role, whilst others described psychologists as holding

specialist positions, and having the assumption that they are trained to a higher level in certain areas:

"I guess I always see them as a more senior member of the team, because they are academically trained to a higher level, they have done a doctorate, they've done research, and they will probably have read more widely around difficulties." (P7).

"They've got a lot of in-depth knowledge, so we do look to them to get information, feedback and support. Generally they either lead a team, or they will be very specialist." (P4).

Some participants felt that psychologists were highly trained, but that they were willing to take on a wide range of work, and worked from a broad knowledge base. This was evident in some of the descriptions given to them such as having "a wide knowledge spectrum" (P10), "deeper understanding of development and behaviour" (P7), "lots of in-depth knowledge" (P4), "wide range of experience" (P1), and having "a broad perspective" (P2).

"The psychologists I've worked with don't seem to be afraid to get their hands dirty. They may have studied for a long period of time, they may be a Doctor, but if parenting is what is required, and we need to see mom at 9am on Monday morning for the next six weeks, they'll do that as happily as sort of doing more complex CBT or whatever." (P10).

"Psychologists are people who can fit two or three different roles within a team, they kind of have to be flexible." (P10).

A wider issue pertaining to professional rivalry was identified. This had initially been one of the 'a priori' codes:

"I think historically there has always been a rivalry between psychiatry and psychology, with what's the most superior approach." (P3).

"I don't think there are limitations to having a clinical psychologist, there are tensions sometimes between the medical model and social psychological model." (P2).

"There's a kind of rivalry between nursing and psychology, and sometimes psychiatry and psychology, particularly in this service." (P7).

Some participants held the belief that by virtue of the service being psychology-led this has put pressure on other professionals not psychologically trained to adhere to that particular methodology:

"I think in some ways (the service) historically was very much nurse-led, psychiatry and nurse-led. At present it's very much psychology-led." (P9).

"Some of the nurses see their opinion as, I've not been trained to use formulation, you can train them, but some might feel criticised, undermined maybe, and resistant to change" (P7).

"I think it's a bad thing, because it probably puts the role of clinical psychology above others, which I think has caused some controversy." (P12).

Additionally, some participants expressed concerns that psychologists were an expensive resource for the role they played within the team compared to other professionals:

"I think they are incredibly expensive, incredibly expensive for what you get really, whereas I think other professionals offer greater value." (P3).

"You've got people on higher bands with less experience. Coming from a nursing background, that wouldn't happen. As you'd get your experience, you'd get promoted, you'd do the relevant course, training, whatever, and get promoted. You wouldn't go into being a ward manager six months after qualifying..so there's a bit of friction sometimes." (P9).

"My sort of knowledge of mental health is superior to some of the bands in the team, the clinical psychologists, banded on a tier, doing jobs that they aren't skilled enough to do in that area." (P3).

However, some participants report that they view psychologists as leaders, and are able to provide support and specialist knowledge:

"I certainly see them as senior team members who are able to take on more complex cases." (P7).

"A lot of the nursing guidelines at the moment are focused on CBT, and personally I find I get a lot of help and support from psychologists." (P8).

There was also an expectation from some participants, that clinical psychologists would adopt a certain amount of responsibility, and that they were viewed as experienced by the very nature of being a clinical psychologist:

"They are expected to be leaders of certain projects, than somebody from a lower band, with less experience. Somebody from a lower band with less experience would seek their advice and support, and that would be an expectation." (P7).

It was felt among some professionals that the current recruitment strategy was weighted towards psychology at the expense of other professions, thus causing an imbalance to the service. Some felt that there were too many psychologists, and that this was an added reason for increased resentment within the teams:

"I think the impression I get with this team, is that clinical psychology is regarded as quite an important part of the team. I think that has caused some issues with recruitment recently, with other therapists being undervalued." (P12).

"It's really important to have psychologists, but I think it's really important that when we talk about MDT's, they are multidisciplinary. It's become very psychology heavy. Sometimes there's a limited number of other professionals, for instance, mental health nurses, they get squeezed out a little bit...I think that's a negative." (P2).

Several participants expressed concern that there was the potential to lose a multidisciplinary approach for service user care:

"With the team being top heavy with psychologists, I don't think that's useful. I think you can get blinkered, you lose sight of other ways of looking at problems or viewing things. This goes against what we are trying to accomplish." (P3).

"Sometimes it can feel that I have to justify what you're doing to fit with a psychology model, even though we are supposed to have different skills." (P8).

Discussion

The aim of this study was to explore non-clinical psychology team members' understanding of formulation within a MDT mental health setting, and their understanding of the role of the clinical psychologist within the teams. The findings show a number of themes relevant to professionals engaged in clinical work within mental health multidisciplinary settings. Interpretation of the experiences described by participants demonstrates how formulation provides several benefits. These include comprehensive information gathering during the assessment stage, collaborative working and empowering the service user, and providing flexibility to revisit and change the content of the formulation where necessary. The DOH (2014) suggest that all health professionals should have an understanding of mental health conditions, including an awareness of the links between service users' mental and physical health, to ensure that service users receive appropriate

support. All participants agreed that this is the case within their teams, but that there is some discrepancy as to how this is carried out individually.

Some participants felt that although relevant to the service user's difficulties, developing a formulation was time consuming, and sometimes not practical when more immediate medical risks were present. This also highlighted the varied skills that other professionals brought to the service. For example, mental health nurses were able to provide emergency medical care where necessary. Others believed that carrying out a formulation required specific knowledge, and that they had not received comprehensive training to do this confidently. This argument is supported by the Mental Health Foundation (2013), who suggest that there is a pressing need for more interprofessional education and training on mental health, that staff across different disciplines should have regular opportunities to exchange expertise and information, and that people who use mental health services should be involved in the training process.

There was a belief that a lack of leadership around knowledge sharing, and a strong drive to working more psychologically with service users, to the detriment of other mental health approaches, had potentially created some intransigence to change. Observing the world from the participant's viewpoint fits with humanistic theory (Rogers, 1961). This principle holds that without viewing the world from the participant's individual position, the researcher would only be able to understand the participant from external frames of reference, and therefore be unable to understand actions and behaviours as clearly (Rogers, 1961). Humanistic psychology considers personal psychological growth and fulfilment to be a basic human motive. For non-psychology professionals that have been valued for their specific abilities in the past to now have an overarching expectation to change their style of working, this might have a detrimental effect on that participant's self-esteem. As Rogers (1961) explained, for a person to grow towards selfactualisation, they need an environment that provides openness and selfdisclosure, acceptance for what they bring to their environment, and empathy. Without these, relationships and healthy personalities will not develop, and participants' feelings of self-efficacy and will suffer (Austin, 1998).

Consistent with NWW (DOH, 2007), the adoption of a psychological approach to mental health care has significant implications for mental health MDTs and the non-psychology professionals working within these teams. The BPS (2009) report that Mental Health Nurses are now expected to develop increasing competencies in any intervention that emphasises psychological or social factors rather than biological factors. This allows for the inclusion of psychological interventions and health education, as well as interventions with a focus on social aspects, such as social support. Social workers, occupational therapists, and other mental health professionals are also expected to redefine their roles in line with this approach.

Another study theme suggests that psychologists bring flexibility and leadership to the team, and provide supervision to other staff. The importance of strong leadership in effective integrated care has been proven by specific research in relation to mental health teams, with the evidence showing that successful teams were dependent upon how team members across the various disciplines were treated (Alimo-Metcalfe et al, 2007). Psychologists have seen their roles develop and strengthen as clinical leaders in psychological therapies over the last few years, drawing upon a scientific evidence base for their work. Indeed, the BPS (2009) provides guidelines for psychologists working within MDTs that include contributing to the improved effectiveness of services through process consultancy at systems level, peer consultation and supervision, leadership, and the promotion of effective roles for users and carers (Onyett, 2007).

A further theme focused on the abilities of the clinical psychologist within the team. Some participants stated that the psychologist had limited abilities when working with clients with complex needs, and that their methods were too rigid for complex casework due to focusing only on psychological interventions. There was also concern about the cost effectiveness of the psychologist when compared with skills of other professionals within the team, and that this may be causing fractures within the MDTs.

In general, there appears to be some misinterpretation around formulation and of the role of the clinical psychologist but also, in some cases, some insightful awareness of what formulation might entail. Whilst it may not be generally true within mental health services, in this particular study, participants commented on a lack of dissemination by psychologists of their skills and capabilities. Perhaps being more open to share explanations around clinical formulations would be beneficial in promoting psychology further within this particular service. This is endorsed by guidance from the Care Services Improvement Partnership (2006),suggesting that psychologists take the lead on developing individual formulations in order to benefit service users and the wider community. The BPS (2009) report that psychologists provide clinical leadership within MDTs, particularly in developing improved care pathways, and promoting health and well-being.

Conducive to stimulating the positive elements of a psychological approach, psychologists have a commitment to be seen as approachable, and to continue to advocate themselves as integral members of the mental health MDT (Cassedy, 2010). This is supported by the 'Children and Young People's Mental Health and Well-Being Taskforce' (DOH, 2014), set up to make children and young people's mental health and emotional well-being a priority, as many children and young people with mental health and emotional difficulties are still not receiving timely, high quality, accessible or evidence-based support (DOH, 2014). Indeed, the correlation between well-being and positive psychology has been proven by many social scientists to be strong and positive (McNulty & Fincham, 2012).

A justification for examining non-psychologists' understanding of the role of clinical psychologists within the MDT is that the role of the clinical psychologist is integral to mainstream therapies such as CBT and psychodynamic therapy (Johnstone & Dallos, 2013). The skills that a psychologist possesses are developed through psychological theory backed with scientific research, and applied to helping people solve personal, family, group, work or organisational problems (BPS, 2006). The DCP (2011) contend that psychologists should lead on the development of

69

individual formulations based on need and functional outcome, and that these formulations should become universally incorporated into care planning. It is therefore imperative that other professionals understand the role of the psychologist, and the benefits that this might bring to the overall functioning of the team.

The BPS (2009) declare that service users would benefit from care planning based on a clear and shared understanding of their predisposing, precipitating, maintaining and protective factors which lead to or mitigate distress. Kinderman and Tai (2007) suggest that using an approach that considers the person and their environment, and addresses both physical and psychological needs is key to successful intervention with the client. Other professions also view formulation to be a key component of the clinical practice of a psychologist, and this is accentuated within the current study. It is also seen as integral to the competencies of a psychologist, required by their statutory regulator the Health and Care Professions Council (HCPC, 2009). Therefore, clinical psychology may be viewed as holding a pivotal role in providing cohesiveness to the MDT and service, and also in providing flexibility, specialist knowledge, and empowerment to the client through the use of collaborative formulation of the client's difficulties during the therapeutic process.

Limitations of the study

There are several limitations to this study. There could be a positive bias on how participants reported understanding formulation and the role of the clinical psychologist. Participants that opted to take part in the study would have had knowledge of the researcher's background as a trainee clinical psychologist, and so their responses to questions concerning the role of the clinical psychologist might have been influenced by this fact. Whilst every effort was taken to carry out the interviews in an inclusive non-judgemental and confidential manner, it cannot be assumed that given these considerations, all participants gave a full reflection of their experiences. Participants all worked within the same service and geographical area, and so this may also give a limited view, and the similarities or differences to methods of working in other specialisms or geographical areas outside of this CAMHS are not known. The participants are mostly female, and it might be useful to interview more male clinicians to see if the viewpoints differ in their experiences within the service. It is also acknowledged that there was no service user perspective within the data collection.

The data is interpretative to the researcher. Coding from extracts may remove fragments of the text from its context, resulting in some loss of meaning to the data. This may lend bias to the final template as not all data is viewed in the same way. Another limitation is that potential themes may be missed or undeveloped if they do not fit the template. When constructing an analytical template it is difficult to know where to stop the process of development. This process of modifying and refining definitions of codes could go on almost ad infinitum, in looking to produce an 'ideal' template. Therefore, the decision about when a template is satisfactory is always going to be subjectively interpretative to that particular researcher.

It might be advantageous to carry out a different qualitative methodology such as Interpretative Phenomenological Analysis (IPA) in order to carry out a deeper coding of the data. IPA analyses individual cases in greater depth, looking at both the language used and any themes within the data, which in turn may produce richer explanations from the findings (Cassell & Symon 2014). Furthermore, although TA allows for coding of chunks of data that can save time in the research, this can also remove fragments of the text from its context, and may result in some loss of meaning to the data.

The study's generalisability is limited by the fact that the accounts are specific to 12 members from three separate teams. However, the participants recruited are comparable participant numbers with a study carried out using the same methodology. Rodriguez and King (2009) explored experiences of parents of children with life-limiting conditions. They recruited ten participants, conducted semi-structured interviews, and utilised

Template analysis to explore the data. Although attempts were made to collect greater and equal numbers of participant data from each non-psychology profession, this was not possible due to time constraints for the completion of the study.

Clinical Implications

The findings of this study are reflective of experiences in three CAMHS MDTs. It is expected that some themes may be transferable to other mental health team settings. However, it should be made clear that community-based mental health teams operate differently in different parts of the country, depending on the policies of the local NHS mental health trust and local commissioning organisations that spend the NHS budget and plan services in a particular area.

However, there is evidence to show that access to psychological therapies can be easier for some social groups than others. Future research is required to identify whether these findings can be represented with, for example, black and ethnic minorities groups, where talking treatments are less likely to be offered, and instead substituted by medication and coercive treatments instead (Raleigh, Polato, Bremner, Dhillon & Deery, 2008).

It is suggested that clinical psychologists working in mental health MDTs might be advantaged in considering how to use the themes reported in this study. In being explicit around working practice, including the use of formulation, knowledge sharing, and consistent leadership, non-psychology professionals within the team might gain a clearer understanding and confidence around formulation, and the benefits that the clinical psychologist might bring. It would be useful to explore the effects of delivering formulation training in MDTs, and whether there is any change in approaches used by other professionals in their work with service users.

In relation to weekly team meetings in the particular service explored, this raises the question of whether the lack of this forum might have created

divisiveness, fragmenting previous collaborative working relationships, and a reduction in knowledge sharing. Clearly, if teams are going to work effectively, co-ordinating their efforts to achieve team objectives through meetings to share information, learn new perspectives, and make decisions collectively is of paramount importance (Borrill, Shapiro & Rees, 2000).

Conclusion

In the context of NWW (DOH 2007) and DCP (2011) guidance, the aim of the study was to investigate non-psychology team members' perspectives and experiences of formulation within a mental health MDT setting. In utilising a flexible qualitative methodology such as TA, this has helped examine the participants' subjective levels of understanding of formulation and the role of the clinical psychologist.

Results indicate that despite some pockets of knowledge and awareness, there remains some misunderstanding about formulation and a lack of knowledge sharing within the teams. Although non-clinical psychologists are not specifically trained to use formulation in their work, with the current overarching psychological perspective being dominant within this particular service, there appears to be a lack of confidence in using this approach within the MDTs. Participants report that this is partly due to the lack of team meetings within the service at present. Recommendations are that clinical psychologists working within multidisciplinary mental health teams could help improve the cohesiveness of the team by sharing of formulations. The reintroduction of MDT meetings might also promote a better understanding of the benefits of using formulation in practice.

It is hoped that the findings from this study will highlight the need for increased accountability from senior clinicians to provide direction and support to team members in using formulation. It is also hoped that there is better communication between the different professional groups that make up the MDT, through more regular meetings, and that further training is given on this collaborative evidence-based approach to explaining a client's difficulties. It would be beneficial for future research to focus on levels of understanding around formulation by service users and people from black and ethnic minorities in order to continue to provide the best service possible.

Disclaimer

This study was sponsored by Keele University, and conducted within three NHS sites following Research Governance approval. The findings and discussions are those of the author, and may not reflect the views of either institution.

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Symon, G. & Cassell, C. (2014). Qualitative organizational research – Core methods and current challenges. *Corporate Communications: An International Journal, 19*(1), p.119-122. doi:10.1108/ccij-06-2013-0039 Paper 3: Formulation: Letters of reflection and levels of understanding within a Child and Adolescent Mental Health service.

Abstract

This paper provides a reflective account from a novice researcher completing a doctoral level thesis. It will reflect on the important processes that emerged between the researcher and participants, including ethical issues and methodological limitations. Reflections will concern the clinical implications of conducting this research and how this will progress post qualification. Due to the reflective element in this chapter, it will be written in the first person narrative.

The empirical research explored the experiences of non-psychology professionals working in MDTs within a Child and Adolescent Mental Health Service (CAMHS). The study sought to gauge levels of understanding around the use of formulation and understanding of the role of the clinical psychologist within the teams. Data was analysed using a qualitative technique called Template Analysis (TA), which is a qualitative design using hierarchical coding to find themes within the data.

A reflective journal was regularly used throughout the different research processes and these entries have helped in the writing of this paper.

Keywords: Formulation; Clinical Psychology; Template Analysis; Qualitative research

Word count: 4,132 (Excluding references)

Submission details

This paper is for the purposes of reflecting about the research process from the researcher's perspective, and is written to complement papers 1 and 2 in displaying to the reader the personal journey experienced. It is therefore not written with publication in mind.

Reasons behind the research

My research interest in the clinical psychology formulation became piqued during my first placement, and I was intrigued to find out what it was that set us apart from other multi-disciplinary professionals. When attending team meetings, where on-going client work and referrals were discussed between the different professionals, I became aware of how knowledgeable the different professionals were, and how they had different ways of conceptualising client difficulties.

I believe that accessing psychology as a second career has given me a unique insight into the beliefs from within and outside of the profession. From within the profession, I have witnessed the belief that the clinical psychologist's in depth training around formulation is a skill that sets the profession apart from the other professionals within the team. Having interviewed the other professionals, and having worked within multidisciplinary teams over the last two years in different mental health settings, it became clear that the psychologist's skill around formulation was not widely understood within the team.

Epistemological stance

The intention of the empirical paper was to explore what the participants understood and experienced, and so the research design followed a constructivist phenomenological approach, concerned with how the world appears to a particular person based on their personal views and experience. During the research, I took the view that one of the ways to access beliefs and experiences is through individual semi-structured interviews, allowing new ideas to be brought up during the interview as a result of what the interviewee says (Smith, Jarman & Osbourne, 1999, Kvale, 1996). I was aware that these could bring my own personal and cultural assumptions and anticipations to the research, which in turn might lead to pre-conceived constructs being formed about the participants.

However, existential phenomenology helps to overcome some of these issues, by bracketing our own constructions (to hold constant or control our biases or prejudices to allow us to be objective) of meaning around the event to access the participant's intentionality and meaning. Furthermore, because we are intrinsically linked to our social world, the element of objectivity and neutrality is unachievable (Reeves et al., 2008). However, utilising the process of bracketing allowed me to revisit the experience in a different way and gain new insights to the information being provided (Crotty, 1988, Moustakas, 1994).

I was influenced by both existential phenomenology and personal construct theory (PCT), and acknowledge that the interviews were a collaborative effort with the participant (Denzin & Lincoln, 2000). The existential person is not merely a passive or reactive subject to environmental influences, but a purposeful individual who has inner experiences and is able to interpret the meaning of their existence and relationships with others within a social world (Valle & King, 1978). Central to the theory of PCT, is the concept that people make sense of something by bringing their own beliefs and interpretations gained from their previous experiences. This is how an individual anticipates, understands, and organises events (Kelly, 1991).

Structure of reflective paper

Bolton (2001) states that reflective practice can enable us to study our own decision-making processes, by being constructively critical of our relationships with our colleagues, analysing hesitations and skill and knowledge gaps, facing problematic and painful episodes and identify learning needs. Reflection is a significant part of attaining knowledge and understanding, to reflect on experiences that could be positive or negative allowing for self-criticism (Bulman & Schutz, 2013). At the core of reflective practice is the self. In the multi-professional context, this can refer to the individual practitioner's role or, collectively, to a team where the team

dynamics and their interactions within the practice context are the subject of the reflection (Fleming, 2009).

As this research has focused on formulation, I have decided to write two letters to express my reflection on the research process. One school of psychotherapy that highlights the use of letter writing is Cognitive Analytic Therapy (CAT). The use of a written reformulation letter can form the basis for the remaining therapy sessions (Baird et al., 2009). The first letter is to the different professionals that were kind enough to provide their time for my research. Reflecting on the process of multi-professional team working is a key element of practice development (Rycroft- Malone et al., 2009). Key areas for reflection include team dynamics, the management of differences and conflicts, and the issues in planning and delivery of plans for client care (Barr, 2009).

The second letter is to myself as a future clinician, emphasising what I need to acknowledge from my journey through this research. I hope to reflect on the research process and the impact that it has had and will continue to have on my personal and professional development. It will reflect upon my experiences, values, interests, social identity and beliefs.

Therapeutic letters are often used in the development of a formulation with a client across different therapeutic modalities (DCP, 2011). Ryle (2004) states that letters and diagrammatic formulations can be used as psychological tools for clients to use for self-reflection, retelling to the client their story with assistance from the therapist so that the story is reformed to highlight issues that may be causing difficulties. Rampling (1980) suggests that letters to clients can contribute to the aims of therapy, providing issues such as transference (a phenomenon characterised by unconscious redirection of feelings from one person to another) are considered carefully.

Freedman and Combs (2012), suggest that letters can help to provide greater information of a client's life story, and help them stay immersed in it. Letters can also provide further ideas that may not have been found within the therapeutic session, because of the reflective stance that they are written from (Reissman & Speedy, 2007). Steinberg (2000) states that a letter has both visual and physical qualities separate from conversation, and that by writing out emotions, attitudes, and feelings, this can help the client accept their difficulties more easily. This technique is based on the belief that writing about memories, problems, feelings and concerns can help to relieve stress and heal psychological wounds.

Letter 1: An open letter to the participants

Dear multidisciplinary team member,

This research has taken place during a time when there are a number of large- scale changes taking place within the NHS. I have been impressed by your knowledge, enthusiasm and interest in your work. Within your team make-up, I was interested to find an array of different professionals, all with the same aim in mind, to provide a quality service to the clients and families that you work with. Coming from diverse professional backgrounds, and a wide range of experience in mental health, it has been a privilege to be able to get a glimpse of your working life, and how you cope with the increasing demands and challenges. For some of you, formulation is not necessarily a method that you ascribe to, but you all understand that a process exists between assessment and intervention with a client.

I was keen to understand several specific areas of knowledge during our conversations, in addition to what your experiences were of a formulation. I wanted to gauge your understanding about the role of clinical psychology, and what you believed were the strengths and limitations of having a psychologist within the team. Some of you spoke about the recent changes within the service, and how psychology was becoming more prominent within the teams. This seemed to be a challenging time for you as professionals, as you explained that the demands of multidisciplinary working meant that there was a blurring of the lines between individual roles and responsibilities. There was also professional rivalry that underlined

some comments. This included querying the cost effectiveness of the psychologist compared with other professional roles within the team.

I was curious as to the methods that you use in explaining a client's difficulties to them. I asked you about this process and whether you had a name for this within your profession, and whether you believed there was a role for the formulation within your own professional work, and within the multidisciplinary setting. If you were to use a formulation, would there be any drawbacks to your own professional approach to client work? I was also keen to understand your viewpoint on what was positive and what was negative with this way of explaining a client's difficulties to them.

I was also interested in how you worked with clients and families, to explain what might be creating and compounding their difficulties. Because some of you used different methods, I wanted to know whether there were any common threads with how a clinical psychologist might produce a formulation and how you as professionals explained mental health difficulties to a service user, or did you work entirely from the 'medical model'? Did this approach alienate you from clinical psychologists within your teams, or were you able to find common ground when working with a service user?

For those professionals who did use formulation in their work, I was keen to understand whether the process was similar or different to that of a clinical psychologist. I wondered where you had learnt about formulation, and whether this had helped you understand the role of the clinical psychologist better.

I was eager to understand how my invitation to be interviewed was received by those of you that did not, or were unclear about using formulation within your working practice, and your motivation for agreeing to be a part of the research. During our conversations, some of you expressed a belief that you were unsure of what a formulation was or where and when it fitted into the therapeutic process. I was also curious as to whether any of you had noticed any changes in how you practised. I would like to know whether your answers to my questions would have been different had I sent the questions to you before our meeting.

After listening to your views on client work and your understanding of what a psychologist brings to your teams, I have reflected on my own working practice throughout my training. I have become more aware of how I have presented myself to the different teams that I have been on placement with, and whether the non-psychologists have understood my role, and why I was working within their team. I am also more appreciative of how my understanding and knowledge of a formulation has changed since my first placement, and how the different professionals have helped me to learn and develop as a clinician.

Lastly, I would like to thank all of you for your honesty during the interview process. It has enabled me to adopt a questioning stance towards the role of the formulation and indeed the understanding of what a psychologist is perceived as bringing to their teams. Your views and feelings have opened my eyes to the considerable variation in understanding of what a clinical psychology formulation is, and whether it has a role within the multidisciplinary team. Furthermore, it is clear that each of you has a personal narrative about the process following an assessment and before intervention. Each of you has a different approach to ensure that you explain with the service user, what it is that may be causing their difficulties. This has encouraged me to continue to try new approaches in explaining difficulties to clients, be inquisitive, and look at their issues from different stances. I hope to develop into a well-rounded clinician and will take this experience with me as I embark on a new career in mental health, and for this I am indebted to you.

Kind regards

Andrew Adams

Writing this letter prompted me to challenge a number of misconceptions about the make-up of MDTs, and the different non-psychology roles within. During my time as a trainee, I was fortunate to meet and collaborate with different professionals, and now understand that there are many highly skilled clinicians that make up the MDT from professions other than psychology or psychiatry.

The ability to be flexible and open to new ideas is a crucial part of a psychologist's development. However, this flexibility is not exclusive and I have seen other non-psychology professionals that show great flexibility in their working practice. Other professions have key skills to bring to the table, and allow a more diverse, and wide ranging approach to working with a client, understanding their needs, and achieving better results.

Conversely, these interviews are a reminder of how powerful our position can be, and how it is imperative to acknowledge this and not abuse our privileged position within the team. To move forward as a team, it is important to share what we do as a profession, and what skills we have that the other team members can draw from. In juxtaposition to this, is the importance of remembering to ask for help from the different professionals when formulating, to get a wider perspective on a client's difficulties. During my time within different teams, I have noticed that the most successful psychologists have managed to adhere to these principles and have integrated well with other professions.

Letter 2: A letter for the future

To Andrew Adams - clinical psychologist,

I write this letter to highlight some key learning points from undertaking this thesis, so that you can benefit from my learning. Throughout the research, I kept a journal of my experiences, and of my emotional responses at that time. I hope to share some of the salient points, so that you can continue to

improve your professional skills and ability to work effectively under pressure during your career. I also hope that you continue to develop your reflective skills, and utilise these effectively within your professional and personal life.

Emotional development

As I embarked upon preparing the research proposal and ethical approval, I quickly became aware of the scale of the task. From an emotional viewpoint, I initially felt overwhelmed by the task, and wrote the following in my journal:

"I feel completely out of my depth. I have no idea where to begin, and this experience has made me doubt my abilities".

Having limited experience in embarking on such a project, I initially felt overwhelmed by the magnitude of the task. I also experienced impatience and frustration during the research. Because of the reliance on others, such as research and ethics boards, government departments, and participants, I was sometimes left with times when I was unable to achieve what I had planned. This was possibly a reflection of my anxiety levels and confidence in my own ability.

Hays (2009) describes self-efficacy as an individual's belief about their abilities to complete a certain task. It was clear that initially, the belief in my ability was low. I also noted in my journal that this had affected my motivation levels, and increased my stress levels towards the task in hand. I became aware of a fear of failure and was avoiding the task. Brownlow and Reasinger (2000) describe these emotions as being prominent in academic procrastination. During this time, I utilised clinical supervision to reflect upon these issues, and I found support in my clinical supervisor to identify their origins. Both supervision and practising mindfulness and relaxation techniques, were invaluable tools of support during this time, and helped provide motivation to begin my research process, providing a stable base to fall back on when I recognised the need for additional emotional support.

I found that I could maintain lower stress levels by being organised, and so I followed the S.M.A.R.T criteria, to ensure that tasks were clear and unambiguous (Specific), that I was able to record my progress (Measurable), set realistic and attainable goals (Achievable and Realistic), within the time constraints set (Timescale) in order to be successful (Doran, 1981). This has been an invaluable tool, as it has increased confidence in having the ability to carry out doctoral level research. I would strongly advise that you utilise this methodology for any future research or large-scale project.

From an emotional position, having started the research I noticed that my anxieties subsided. I became more confident in the process and my abilities to complete the different stages. I followed the BPS (2009) guidance on completing ethically and methodologically sound research. This involved making 'appropriate' and 'sound' independent decisions. This was a positive process, but I noted in my journal the following: "Feeling more confident in my abilities but worried that I will become too focused on getting everything right". This is a personality trait that became prominent when I was put under pressure in a previous career, and resulted in a poor work/life balance. Owing to this, I was determined to maintain a healthy work/life balance throughout the research. Again, utilising the S.M.A.R.T criteria has allowed realistic and achievable goals to be set, on a daily, weekly, and monthly level, which in turn has maintained my confidence levels.

If I were to impart advice to take into your career, it would be to be mindful of these traits, and to manage them effectively in order to protect work/life balance and potential for burnout. During this process, the use of supervision and reflective practice groups has helped me to understand the origins of these perfectionist traits and to manage them effectively (Reid, Flowers & Larkin, 2005).

Methodological limitations

When seeking participants, I found that the challenge was to get busy staff members to engage with a project that had no direct bearing on their own work. There were also potential ethical issues in the collation of data, as it was stipulated that the team leaders were to be notified before any staff were to engage in the research interview process, as they would be providing interviews within their daily working schedule. However, this potentially led to research bias, as the participant anonymity was affected by the fact that their supervisor knew they were taking part in my study. Furthermore, if the team leader had given up their time to be interviewed, this may have resulted in some participants feeling obliged to participate in the study also.

I remained vigilant in holding onto the ethical responsibilities of informed consent, right to withdraw, confidentiality, following the guidelines set by the British Psychological Society (BPS, 2009). However, I experienced some difficulties in providing a full debrief to some participants, as they were keen to get back to work as soon as the audio recording had finished. Whilst all participants were debriefed to some level, I recognise this as an ethical dilemma, which may exacerbate in the current National Health Service (NHS).

From the data collected, it has become apparent that several professions within this CAMH service misunderstand the topic of formulation. This limitation might be alleviated by providing some literature before the interview on what a clinical psychologist describes as a formulation. However, this would need to be balanced against any potential for bias to the data owing to the priming effect. Priming refers to a increased sensitivity to certain stimuli due to prior experience (Gulan & Valerjev, 2010). Furthermore, the participant data also highlights the need for clinical psychologists within this particular CAMH service to share their knowledge with other professionals more freely.

I have also been reflecting on the experience of audio recording the interviews. Whilst realising that this can be a difficult process to engage with, and can provoke anxieties in both the participant and interviewer, the data has proven to be rich in dialogue. However, what has become apparent when transcribing the interviews is the non-verbal communication that juxtaposed the different language used with each participant. This in itself is a rich form of communication, but is lost when not recorded during the interview (Ekman, 1965).

This might be a limitation to the study, and although I always interviewed the participant at their location, in a familiar environment, I became aware of several participants feeling anxious when engaging in the audio recording process. Sometimes body language can indicate how a person is feeling, even though their dialogue is describing a different emotion (Palmer & Simmons, 1995). In considering the impact that this experience has had on my approach to clinical psychology, I am particularly aware of how I now check and confirm conversations with clients before continuing with our work together.

A key theme throughout the research was the belief of many participants, that MDTs had become too psychology focused and that other professionals did not have as much influence within the teams. There was a clear divide between professionals that had worked within the medical model, and those working more holistically. This was a difficult dynamic to manage as a trainee clinical psychologist, and I was aware of some transference during several interviews. Some professionals became emotive during their interview when discussing such topics as psychology-heavy perspectives within the service, and how this may have marginalised other professionals. I found this particularly draining as I tried to maintain an inquisitive and unbiased viewpoint on the dialogue being spoken.

The literature review focused on mental health professionals and service users' perspectives and understanding of formulation. This was mostly a straightforward task, but again was something that I began with trepidation. The most important lesson that I learnt was to use the support available. Again, utilising the S.M.A.R.T criteria allowed me to meet achievable timescales and maintain confidence levels. The findings of both the literature review and empirical study are both clinically relevant. It is important to consider different professionals attitudes towards psychology, to understand the team dynamics and individual skills available within each team. It is clear that each profession utilises methodologies to explain a client's mental health issues and difficulties, and each one has a part to play in providing a good and sound service to the public.

Implications for you as a psychologist

As a researcher with a psychology background, I found the data collection process a frustrating one at times. This was largely based on the information from participants stating that they were unsure of what a formulation was. I hope that in my future practice, I will work to ensure that my colleagues always have a clear understanding of what skills I have, and what I can offer the team.

I would also want to show humility and recognise other professional views. I would want to acknowledge that there are other ways to look at a client's difficulties, and most importantly, recognise the knowledge and skills available from other professionals, and their varied methodological and epistemological viewpoints. Gerber (1994, p.290) talks about 'a willingness to risk abandoning previous truths and sit with not knowing I think this is a central theme for development as a clinical psychologist, and allows both personal and professional growth to be achieved. Glimm (2003) states that the concept of clients and therapists as 'fellow travellers' is to reduce this distinction between 'them' and 'us'. This is something that you need to take with you into your professional career.

Kind regards,

Andrew The Researcher In writing this letter to myself as a clinical psychologist, it is evident that the research has raised some key points that will have a positive impact on my professional career. It has raised questions on why psychology is still misunderstood within MDTs, and what we as professionals can do to change this.

When I began my studies in psychology, my understanding of and approach to the clinical psychology formulation was limited. Having had a breadth of training experience and continual development over several therapeutic models, this understanding has developed, and my knowledge base has grown. However, I am continually challenged by clients' difficulties, and recognise that I am at the beginning of another journey to develop these skills further. I still struggle with knowing which formulation to use and which model to base it on, and recognise that in the modern NHS, we as psychologists are expected to have wide-ranging skills and abilities to meet the demands of the public. I am also aware of the necessity to share skills with other professional groups in order to show transparency and demonstrate proactive team working and collaboration with others, to support the belief that the whole of the team is greater than the sum of individual efforts (Ellemers, De Gilder, & Haslam, 2004).

Conclusions

I chose to research the topic of formulation, having worked within a CAMHS multidisciplinary team during my first placement. My introduction to formulation was a difficult one due to the client having complex needs. My learning experience was steep, and I recall thinking that I had a lot to learn about how to formulate with a client. At this same time, I watched other non-psychology professionals provide their own reasoning and explanations for what might be causing issues and difficulties with clients coming into the service. I felt privileged to be working with different professionals, all of whom had essential skills to bring to the team. When interviewing the participants for my study, I was again struck by the experience and

knowledge of the different professionals, and will take this experience with me into my career.

The process of conducting empirical research has overall been a positive experience. I have felt overwhelmed and experienced low self-efficacy in the early stages, but this has led to personal development. I have been able to reflect on my ability to cope in stressful situations. I have also identified and contained personality traits such as perfectionism and through this have been able to achieve a healthy work/life balance, throughout the process. Reflections on my journey through this research have enabled me to identify that the use of supervision, self-reflection and practices such as mindfulness and relaxation have been integral to my professional and personal development.

The experiences from each research process (proposal, ethics, data collection, literature review, empirical research, reflective paper) have enabled me to develop new skills and coping strategies. They will continue to benefit both my personal and professional life, but more importantly help me to hopefully develop a positive role within a multidisciplinary team as a qualified psychologist.

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Appendix 1

Electronic Search Strategy

Search Engine	Search Terms	Number of Articles	
EBSCOhost: 193 (1 st search); 23 (2 nd search)	psychiatr* (S1)	1,542,421	
Academic Search Complete: 75	nurs* (S2)	2, 024,096	
PsycINFO: 119	"mental health" OR mental	1,039,302	
CINAHL Plus with Full Text: 29	health [all text] (S3)		
	diagnos* (S4)	4,075,013	
	"formulat*" (S5)	512,769	
	planning OR "care plan*"		
	(S6)	2,116,413	
	process OR "method *" [all text]		
	(S7)	15,232,349	
	"explain" OR "explan*" (s8)		
	client or patient* [all text] OR	1,965,631	
	"service user*" (s9)	(9,511,112)	

difficult* OR behavio?r OR issue* (s10)	8,367,554
NOT (psychologist*) OR (psychology) (s11) NOT BRACKETED WHEN SEARCHED	4,321,780

		0.040.075
Web Of Knowledge: 63	(s1) TOPIC: (psychiat*)	2,840,675
	(s2) TOPIC: (nurs*)	1,095,530
	(s3) TOPIC: (mental health) OR TOPIC: (mental health work)	594,532
	(s4) TOPIC: (diagnos*) OR TOPIC: (formulat*) OR TOPIC: (plan*)	26,413,718
	(s5) TOPIC: (process) OR TOPIC: (method*)	58,839,278
	(s6) TOPIC: (explain) OR TOPIC: (explan*)	3,665,206
	(s7) TOPIC: (client*) OR TOPIC: (service user*) OR TOPIC: (patient*)	18,975,741
	(s8) TOPIC: (difficult*) OR TOPIC: (behavio?r) OR TOPIC: (issue*)	5,505,529

(s9) TOPIC: (psychol*)	2,119,531
#8 AND #7 AND #6 AND #5	140
AND #4 AND #3 AND #1	143
#8 AND #7 AND #6 AND #5	
AND #4 AND #3 AND #2	23
#8 AND #7 AND #6 AND #5	27
AND #4 NOT #9	

"Title of paper"	Methodological standpoint	Type of care provided	Alternative use of information provided	Theme of article	Recommendations of study
Theme	Symptoms directed, objectifying illness to provide label. Utilising diagnosis and classification through DSM V and ICD 10	Psychiatric classification of symptoms, to achieve intervention strategy	Development of alternative to classification – psychotherapeutic diagnosis to incorporate broader aetiology of client	Describes classification system and DSM V. Compares to previous DSM criteria to show move away from subjective use of classification information when preparing diagnosis	That there is a need for use of psychotherapeutic intervention within diagnosis , to incorporate wider information about client's problems
Contributing codes	(Symptoms, label, diagnosis, classification)	(Classification, symptoms)	(Classification, diagnosis)	(classification, diagnosis)	(diagnosis)

Appendix 2: Example of analysis to highlight themes/contributory codes

Appendix 3: Review screening process

Initial Literature review question:

Formulation: Perspectives on explaining a client's difficulties within a mental health setting?

Definitions:

Formulation: Johnstone & Dallos (2013) describe clinical formulation as a method for understanding how an individual's difficulties arise and are maintained in the system that surrounds them, as well as the wider environment of cultural and societal norms. A formulation tries to specify and understand the thoughts, emotions and behaviours evoked in/from an individual, and those who interact with them.

Key words: Diagnosis, formulation, psychiatry, nursing, mental health, individual difficulties, explanation.

Literature search criteria:

All search result numbers exclude non-peer reviewed articles, and exclude duplicates; all searches applied related words. All search terms were in unspecified domains (title, abstract, keywords) unless otherwise specified.

Searches:

The document highlights three searches, with details on how, why, and what resulted. Although several searches were completed before and between each of the searches outlined here, these searches show a change in search term and/or criteria that were considered necessary to build upon the previous search strategy.

Screening process guide, used in all searches:

Stage A: Filtering lists of search results initially by title using the following key:

1 = Yes (from the information in the title, this has potential to meet

the inclusion criteria, and evades the exclusion criteria).

2 = Maybe (it is unclear if it meets the inclusion criteria, or if it

meets exclusion criteria). It requires further investigation (of abstract).

3 = No (it is clear that it either does not meet the inclusion criteria, and/or meets exclusion criteria).

Stage B: Following completion of stage A, the abstract of each number 1 and 2 was screened to give a further code:

1 = Yes (from the information in the abstract, this has potential to meet the inclusion criteria, and evades the exclusion criteria).

2 = Maybe (it is unclear if it meets the inclusion criteria, or if it meets exclusion criteria). It requires further investigation (of full paper).

3 = No (it is clear that it either does not meet the inclusion criteria, and/or meets exclusion criteria).

Stage C: Following completion of Stage B, all papers designated 1 or 2 were read in entirety to give a final code:

1 = Yes the paper meets the inclusion criteria, and evades the exclusion criteria.

3 = No, the paper does not meet the inclusion criteria, and/or meets exclusion criteria.

Appendix 4: Preliminary review searches

Search 1 (Between August 6th and October 13th 2014)

Purpose:	The initial search was to determine the factors relevant in the research question.
Terms:	("psychiat*"), ("nurs*"), ("mental health" OR mental health [all text]) AND ("diagnos*"), AND ("formulat*").
Search Results:	447
Process:	Screening stage A was carried out by researcher (88% overlap in 1 and 2). Screening stage B and C conducted by researcher.
Inclusion:	A) Relating to psychiatry.
	B) Relating to Mental Health Nursing.
	C) Related to mental health
	D) Related to formulation, diagnosis
Exclusion:	1) Not as above.
Results:	2 papers met inclusion criteria.
Comments:	After more detailed consideration, the inclusion criteria needed to be redesigned as there was a need to incorporate (planning OR "care plan*"), AND (process OR "method*" [all text}), to attempt to capture literature that showed methods the nursing profession might carry out, and appropriate descriptive words that would capture this more accurately.

Search 2 (Between August 6th and October 13th 2014) (Between August 6th and October 13th 2014)

Purpose:	Because the focus of the study was on how psychiatrists and mental health nurses explain a service user's difficulties within a mental health setting, the search criteria was amended to reflect the question more accurately, (and to reduce the number of results for greater reliability).
Terms:	("psychiat*"), ("nurs*"), ("mental health" OR mental health [all text]) AND ("diagnos*"), AND ("formulat*") AND (planning OR "care plan*"), AND (process OR "method*" [all text}), AND ("explain*" OR "explan*"), AND (client OR patient* [all text] OR "service user*"), AND (difficult* OR behavio?r OR issue*[all text]).
Process:	Screening stage A, conducted by PI and research supervisor (94% overlap in 1s and 2) Screening stage B and C was carried out by researcher.

Inclusion:	A) Relates to psychology
	B) Relating to psychiatry
	C) Relates to Mental Health Nursing
	D) Relates to formulation, diagnosis, care
	plan/process/method
	E) Relates to client/patient/service user
	F) relates to explain AND difficulty/behaviour/issue
Exclusion:	1) Not as above.
	2) Social work
11 7 2	 3 (223 before duplicates removed) 9 Psychinfo, 5 Academic search complete, 9 CINAHL plus with Full Text 2 results Web of knowledge (63 after removal of duplicates) 1 Grey literature

10 papers (including 2 from search 1)

Comments: Having re-run the searches several times between these dates with these criteria, the researcher reached saturation in finding the same articles each time, and stopped the search on 13th October 2014).

Search 3 (Carried out on 29th June 2015)

Purpose: Search 2 provided the same results as search 1, with eight additional papers which had previously been excluded on the basis that mental health nursing uses different terminology to explain a service user's difficulties within a mental health setting. The researcher and supervisor were aware that the search limiter of 2007 was possibly excluding better evidential articles for critique, and so another search

was carried out using similar search terms, but extending

the search to 1997.

Terms: ("psychiat*"), ("nurs*"), ("psycholog*"), AND ("mental health") AND ("diagnos*"), ("nursing process"), ("formulat*") AND ("explain" OR "explan*") AND ("difficult*" OR "behavio?r" OR "issue*") NOT ("cultur*"), NOT ("social work*").

Search results: 23

Process: Screening stage A and B carried out by researcher and supervisor, Stage C carried out by researcher. Due to the overlap with searches 1 and 2, the papers had predominantly already been through screening stage A by the researcher.

Inclusion criteria: Relating to secure settings; relating to Psychology; Psychiatry; Mental Health Nursing; Diagnosis, formulation, nursing process; and subject of (or substantial contribution of) paper is regarding the nature, exploration, or definition of formulation, diagnosis, nursing process, and/or similarities / differences. Peer reviewed articles written in English. Articles found in the UK, Ireland, Australia, New Zealand. Articles written after publication of the New NHS: Modern. Dependable. (DOH, 1997)

- Exclusion criteria: Not as per inclusion criteria; and relating to social work, cultural formulation.
- Results: 7 papers (including all from Search 2 and Search 1)

7 papers were discounted from original searches 1 and 2 owing to lack of quality against hierarchy of evidence, and replaced with the 7 papers found through search 3.

Appendix 5: Qualitative paper screening tool

1. What were the aims?

What were the research questions? Were these clearly stated? Was the significance and relevance clearly stated?

2. Was the choice of qualitative methodology appropriate?

Was the design used appropriate for the aims? Did the authors justify their choice of method (compared to others)? Could it have been investigated better using a different design? Was the design appropriate for general/specific aims? Was the design congruous with methodological guidelines? Were any interventions used described sufficiently?

3. Was bias considered?

Did the authors state their theoretical orientations / personal anticipations (owning one's perspective)? Were these considered in the formulation of the method? Were there any conflicts of interest?

4. Were ethical issues considered?

Was there sufficient information to determine if ethical procedures were followed (in design, consent, and recruitment)? Did the authors consider outcomes on participants and other stakeholders during and following the study? Was the relationship between researcher and participants considered? Was there service user involvement in the design, analysis and dissemination?

5. Was the **recruitment** of participants appropriate? Was the recruitment strategy appropriate? Was the sample situated with sufficient information? Were the participants appropriate to give access to the data required? Were all those approached accounted for?

6. Was **data collection** conducted in an appropriate way? Were the data collection methods and settings described clearly and explicitly? Was justification given for the method? Was the form of data used clear and justified? Was saturation of data discussed?

7. Was the data analysed with sufficient **rigor**? Was the data analysis described in sufficient detail for replication? Was the data analysis credible (e.g. triangulation, followed recommended guidelines)? Did the researchers critically examine their own roles in analysis and dissemination? For interpretative methods, was there evidence that the original data had been interpreted?

8. Was there a clear statement of **findings**? Did these relate to the aims? Were they discussed in relation to the original research question? Were the themes coherent and integrated? Were there arguments for and against?

9. Was the presentation of data appropriate?

Were extracts of data used to provide examples of themes? Did the extracts presented provide evidence for the suggested themes? Could the themes be understood from the data/extracts presented? Was contradictory data considered? Was the analysis process made clear by offering an explanation of how the presented data was selected? Have they considered null results?

10. What were the clinical implications?

Has transferability been discussed? Were further study/follow ups suggested?

- 11. Had the study been considered in the context of **existing literature**? Did the author(s) critically evaluate the literature relating to the subject? Did they consider positions that they do not agree with? How did the results sit with existing literature?
- 12. Did the publication **resonate** with the reader? Did it accurately represent the subject matter or further understanding of the subject? Were experiences brought to life?

Appendix 6: Quantitative paper screening tool

- 1. Was the research addressing a **clearly focussed** issue? Were the aims and research question(s) clear and relevant? Was the population well defined? Were the outcomes considered?
- 2. Was the choice of quantitative **methodology** appropriate? Did the authors justify their choice of method (compared to others)? Was the design used appropriate for the aims? Was the method described in sufficient detail? Could it have been investigated better using a different design? Was the design appropriate for general/specific aims? Were any interventions used described sufficiently?
- 3. Were all variables clearly defined? For example: Outcome, exposure, predictor, potential confounder, & effect modifier variables.
- 4. Was **bias** considered? Were measurements objective? Were there any conflicts of interest (for participants/researchers)? Were potential sources of bias addressed?
- 5. Were ethical issues considered?

Was there sufficient information to determine if ethical procedures were followed (in design, consent, and recruitment)? Did the authors consider outcomes on participants and other stakeholders during and following the study? Was there service user involvement in the design, analysis and dissemination?

- 6. Was the **recruitment** of participants appropriate? Was the recruitment strategy (including sampling and inclusion/exclusion criteria) appropriate? Were the participants representative of a defined population? Was group assignment randomised? Was everyone included who should have been included? Were the participants suitably described? Were all those approached accounted for at the end?
- 7. Was **data collection** conducted in an appropriate way? Were the data collection methods (including researchers) and settings described clearly and explicitly? Were the assessment tools used validated? Were assessments used consistently across groups?
- 8. Was the data analysed with sufficient **rigor**? Was the data analysis described in sufficient detail for replication? Was the data analysed in a way that addressed the study aims? Did the researchers critically examine their own roles in analysis and dissemination?
- 9. Was there a clear statement of **results**? What were the results? Did these relate to the aims? Were they discussed in relation to the original research question? Were there arguments for and against?
- 10. Was the presentation of results appropriate?

Were effect sizes, probabilities and statistics clearly and accurately reported? Do these justify the conclusions? Was contradictory data considered? Were all important outcomes considered? Have they considered null results? Were potential limitations (e.g. bias, imprecision) discussed? Were all participants accounted for at analysis/follow up?

11. What were the clinical implications?

Could the findings be applied? Was generalisability discussed? Were further study/follow ups suggested? Were follow ups reported? Were any potential harms considered?

12. Had the study been considered in the context of **existing literature**? Did the author(s) critically evaluate the literature relating to the subject? Did they consider positions that they do not agree with? How did the results sit with existing literature? What does it add to our knowledge?

Appendix 7: Interview questions

Can you tell me about your profession and how you have ended 1. up working in CAMHS? How long have you worked within a CAMHS setting? 2. Have you come across the Clinical Psychology formulation in your MD team-working or general experience? If yes please elaborate (description of what you think it is), if not, what method do you use when deciding how to work with a client in understanding/explaining their issues from a psychological perspective? 3. Does this method have a name in your profession? 4. Do you think that there is a role for the Clinical Psychology formulation within the CAMHS MDT setting? 5. Can you tell me about what you understand about the Clinical Psychology role within the CAMHS MDT? 6. What do you think the negatives might be / are there any drawbacks for using the formulation within the MDT? 7. What role do you think the Clinical Psychologists have within the MDT? 8. What do you see are the strengths and limitations of having a Clinical Psychologist as part of the team?

Appendix 8: Initial codes developed from themes in transcripts

Medical model (a priori) Hierarchy Resentment Rivalry (a priori) Resistance Social psychological Model Confidence Mismanagement Restricted team meetings Knowledge (a priori) Assessment Individual tensions Expectation Team dynamics Experience Roles within team Generic vs. specific skills Understanding of role Understanding of formulation Complex casework Helpful Tick box exercise Leadership **Broad perspectives** Stereotype Context Goal-setting Development Confusion Usefulness Different Solution-focused Limitations Direction Structure Progress

Labelling Application Time value Speed Rigidity Flexibility Dependant Supervision Misunderstood Tensions **Hypothesis** Sharing **Restricted discussions** Cost effective Expansive Collaborative Joint-working Psychology-driven Imbalance **Develop skills** Diversity Time constraint Training Financially expensive Banding Lack of confidence Arrogance Jealousy Equality Change Supportive Expensive resource Frustration with team dynamics Contradiction Critical of psychological approach education Experience VS.

 4. Role of clinical psychology (main theme) 4.1 Medical model vs Psychology ("a priori") (HOC) 4.1.1 Higher wage band and leadership (LOC) 4.1.1.1 Expensive resource (LOC) 4.1.1.1 Wage banding (LOC) 4.1.1.2 Academic qualification (LOC) 4.1.1.3 Specialist role (LOC) 4.1.2 Supervision role (LOC) 4.1.2 Supervision role (LOC) 4.1.2.1 Supportive (LOC) 4.1.2.2 Flexible (LOC) 4.1.3 "Old boys club" (LOC) 4.1.3 "Old boys club" (LOC) 4.2.1 Perspectives (HOC) 4.2.1 Perspectives (LOC) 4.2.1.1 limitations in complex casework (LOC) 4.2.1.3 Higher education and broad Knowledge base (LOC) 4.2.1.4 Rigidity of methods (LOC) 4.3.1 Imbalance in team (LOC) 4.3.2 Generic vs. specific skills expectations (LOC) 4.3.3 Tension (LOC) 4.3.4 Professional rivalry ("a priori) (LOC) 4.3.5 Misunderstanding of role (LOC) 4.3.6 Resentment (LOC) 4.3.6 Resentment (LOC) 4.4.1 Leadership (LOC) 4.4.2 Supervision (LOC) 4.4.4 Consultation, guidance and advice (LOC) 4.4.5 Elexibility around type of work (LOC) 4.4.6 Specialist knowledge around psychological issues (LOC) 4.4.7 Collaborative working/generic role (LOC) 	
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4.4.7 Collaborative working/generic role (LOC)	
	4.4.7 Collaborative working/generic role (LOC)

Appendix 9: Final template for main theme 'Clinical psychology role'

4. Clinical Psychology role (Main theme)
4.1 Role confusion (HOC)
4.1.1 Hierarchy (LOC)
4.1.2 Expectations: generic vs. specialist skills (LOC)
4.2 Cost effectiveness (HOC)
4.2.1 Contradiction (LOC)
4.2.1.1 limitations in complex casework (LOC)
4.2.1.2 Willingness to work collaboratively (LOC)
4.2.1.3 Rigidity of methods (LOC)
4.2.3 Higher education and broad Knowledge base (LOC)
4.3 Professional rivalry (<mark>a priori</mark>) (HOC)
4.3.1 Imbalance in team (LOC)
4.3.2 Medical model vs. Psychology (<mark>a priori</mark>) (LOC)
4.3.3 Psychology heavy (LOC)
4.3.4 Misunderstanding of role (LOC)
4.3.5 Resentment (LOC)
4.3.6 Feeling undervalued (LOC)
4.4 Perceived benefits (HOC)
4.4.1 Leadership (LOC)
4.4.2 Supervision (LOC)
4.4.4 Consultation, guidance and advice (LOC)
4.4.5 Flexibility around type of work (LOC)
4.4.6 Specialist knowledge around psychological issues (LOC)
4.4.7 Collaborative working (LOC)

Appendix 10: Excerpt from interview depicting development of codes

3 'a priori' codes were developed: 'Rivalry', 'Knowledge', 'Medical Model'

Interviewer (I) Respondent (R) Higher-order code (HOC) Lower-order code (LOC)

I What do you think are the limitations for having a clinical psychologist as part of the MDT?

R I don't think there are, I don't think there's limitations in having a clinical psychologist. I think like all teams and all multi-disciplinary teams, there are sometimes tensions (LOC-tensions) and (HOC - rivalry) between different ways of working, and especially at the moment because the team is very much driven by psychologists (HOC-Rivalry), often at the expense of (LOC-undervalued) other professions. I don't think that helps matters.

I Can you tell me what you understand to be the clinical psychology role within the MDT?

R Well in our teams psychologists are higher up (LOC-Hierarchy) in the team and might have specialist methods (LOC-specialist methods) things that are useful such as an understanding (LOCspecialist methods, Higher education and broad knowledge base) at least in CBT and things like systemic working and that's useful, I think no particular professional group should be seen as more skilled, just different in what they bring, but at the moment this seems to get missed (HOC – Rivalry, LOC –Imbalance in team, resentment). Everything seems to be psychology-led (HOC –Rivalry, LOC – Imbalance, tension, psychology heavy, feeling undervalued) at others' expense. This causes resentment (HOC – Rivalry, LOC – resentment, tension, feeling undervalued) I think. I also think that for what they seem to give to the team, the psychologists, they are an expensive resource (HOC –Rivalry, LOC – Misunderstanding of role, HOC- Cost effectiveness, LOC – Expensive resource), and it seems every time there's a vacancy in the team, it's given to another psychologist.



Title: The Clinical Psychology formulation: To investigate nonpsychology team members' accounts of their use of psychological case formulation in a multidisciplinary team setting

Date: Venue:

Time:

Introduction: (5-10 minutes) The interviewer will discuss the purpose of the study with the interviewee, which is to investigate non-psychology team members' accounts of their understanding of psychological case formulation in a CAMHS multidisciplinary team setting.

Preliminary Questions: (5 minutes) The interviewer will introduce themselves and ask the interviewee general questions about themselves. An ice-breaker question or two will assist with settling them in and relaxing.

Conduct of interview / Main questions: (60 minutes; 10 minutes per question and an extra 10 minutes if necessary)

- 1. Can you tell me about your profession and how you have ended up working in CAMHS?
 - How long have you worked within a CAMHS setting?

2. Have you come across the Clinical Psychology formulation in your MD team-working or general experience?

- If yes please elaborate (description of what you think it is), if not, what method do you use when deciding how to work with a client in understanding/explaining their issues from a psychological perspective?
- 3. Does this method have a name in your profession?
- 4. Do you think that there is a role for the Clinical Psychology formulation within the CAMHS MDT setting?
- 5. Can you tell me about what you understand about the Clinical Psychology role within the CAMHS MDT?
- 6. What do you think the negatives might be / are there any drawbacks for using the formulation within the MDT?
- 7. What role do you think the Clinical Psychologists have within the MDT?

- 8. What do you see are the strengths and limitations of having a Clinical Psychologist as part of the team?
- 9. Is there anything else you wish to add?

Conclusion: (5 minutes) This entails a debriefing session, asking the participant if there is anything else they would like to add and asking are they happy with the interview. The interviewer can answer any questions in this section and ensure the participant understands the purpose of the study and what will happen with the findings.

Thank you for your time and participation.

(*all times are approximate, to be used as a guideline, as some sections will not take the allocated times.)



Appendix 12: Opt In form

OPT-IN FORM

Title of Project: The Clinical Psychology formulation: To investigate nonpsychology team members' accounts of their understanding of psychological case formulation in a multidisciplinary team setting.

Name and contact details of Principal Investigator: Andrew Adams, a.adams@keele.ac.uk / 00951351@student.staffs.uk

Please tick box if you agree with the statement

1 I have read the information sheet and wish to take part in the study

2 I have read the information sheet and **do not** wish to take part in the study

Date	_ Signature
Date	Signature

Appendix 13: Letter of invitation to Multidisciplinary team introducing project

Andrew Adams Science Centre Staffordshire University Leek Road Stoke-on-Trent ST4 2DF Date

Re: The Clinical Psychology formulation: To investigate non-psychologist team members' accounts of their use of psychological case formulation in a Child and Adolescent Mental Health (CAMHS) multidisciplinary team setting in Staffordshire.

Dear Sir/Madam,

I am currently undertaking a research study as part of my Doctorate in Clinical Psychology at Keele and Staffordshire University.

I am a trainee clinical psychologist with an interest in the clinical psychology formulation. With your help, I hope to carry out research into the views and experiences of the clinical psychology formulation by different professionals that make up CAMHS teams within North Staffordshire Combined health.

This study aims to explore themes around the question: What are the perceptions and experiences of the clinical psychology formulation by non-psychologists within a CAMHS multidisciplinary setting? This is in the hope of identifying benefits and areas for development within clinical psychologists' use of formulation, and to highlight benefits and improve any areas of intervention for the client population. This will hopefully not only benefit clients, but also the multidisciplinary team overall, in improving the understanding of the relevance of the clinical psychology formulation within the team structure, and to increase access to the clinical psychology perspective when carrying out intervention work with clients.

I would like to invite all non-clinical psychologist CAMHS professionals to take part. Anyone who chooses to take part will be requested to sign a consent form to partake in one audio taped interview, which will be held in the vicinity of the CAMHS office you work from (or an alternative venue can be arranged if the participant so wishes) with an estimated duration of 60 minutes.

Any information gathered during this study which is identifiable to you will remain fully confidential and anonymity will be maintained throughout the study as best as possible. All participants have the right not to take part or to withdraw from the study at any stage without penalty.

Thank you for taking the time to read this letter. Should you wish to take part in the study or have any further questions you would like to ask before making a decision, please feel free to contact me at the above address or alternatively you can ring me on 01782 294007 or email <u>am951351@staffs.ac.uk</u> or H.M.Priest@staffs.ac.uk.

If you do decide that you would like to participate in this research study please sign the opt-in form attached, and return it to me in the pre-stamped envelope. Should I not hear from you, I will contact team members once again by email, and contact the Team lead to make a general request to participate. Should I still not hear from you then I will assume that you do not want to take part and I will not contact you again.

Yours sincerely,

Andrew Adams

Signed: _____

Appendix 14: Interview topic guide

Interview topic guide

The interview will look to examine your experiences and understanding of the psychology case formulation in your current practice setting, both from an individual standpoint, and also as a member of a multidisciplinary team. It is anticipated that the interview will take approximately 60 minutes to complete.

The rationale is to look into the views/experiences of non-psychologist professionals to see if clinical psychology formulations are playing an effective role in therapy, and whether there are alternative methods that may be implemented to benefit the service user.

At the end of the interview, the researcher will de-brief you by once again explaining the outline of the purpose for this study. They will provide their contact details for further questions, and explain that the information you have provided can be accessed, withdrawn and viewed at any time throughout the research.

Many thanks for your participation.

Andrew Adams

Appendix 15: Participant information sheet

Participant Information Sheet

Study Title: The Clinical Psychology formulation: To investigate nonpsychology team members' accounts of their understanding of psychological case formulation in a multidisciplinary team setting.

Aims of the Research

The rationale behind the research is to look into the understanding of other professionals that make up the multidisciplinary teams, in order to see if clinical psychology formulations are playing an effective role in therapy.

Invitation

You are being invited to consider taking part in the research study "The Clinical Psychology formulation: To investigate non-psychology team members' accounts of their use of psychological case formulation in a CAMHS multidisciplinary team setting in Staffordshire". This project is being undertaken by Andrew Adams, and will hope to utilise the skills of both an academic supervisor (Dr Helena Priest, Clinical Research Director), and a clinical supervisor (Dr Carrie Ambrose, Chartered Clinical Psychologist, South Staffordshire CAMHS).

Before you decide whether or not you wish to take part, it is important for you to understand why this research is being done and what it will involve. Please take time to read this information carefully and discuss it with friends and relatives if you wish. Ask us if there is anything that is unclear or if you would like more information.

Why have I been chosen?

You have been invited to take part in this study because you work within a CAMHS multidisciplinary team in Staffordshire, and you are not a psychologist. It is anticipated that between 10 and 25 participants will be required for this study.

Do I have to take part?

You are free to decide whether you wish to take part or not. If you do decide to take part you will be asked to sign two consent forms, one is for you to keep and the other is for our records. You are free to withdraw from this study at any time and without giving reasons.

What will happen if I take part?

You will be asked to take part in a semi-structured interview on the topic of clinical psychology formulation and your understanding of this within a

Multi-disciplinary setting. The interview will be recorded on audio and later transcribed into document form to enable further analysis.

You will also be asked to provide demographic data relating to the profession you are part of, and number of years experience in that role and within CAMHS. The whole procedure should take approximately 60 minutes to complete.

If I take part, what do I have to do?

You will be invited to attend an interview at a convenient location for yourself. The interviewer will conduct a semi-structured interview with you, and ask a series of questions for you to answer. The responses will be audio recorded and later transcribed.

What are the benefits (if any) of taking part?

There are no direct benefits to the participant. This research is being carried out in the hope of identifying benefits and areas for development within clinical psychologists' use of formulation, and to highlight benefits and improve any areas of intervention for the client population. This will hopefully not only benefit clients, but also the multidisciplinary team overall, in improving the understanding of the relevance of the clinical psychology formulation within the team structure, and to increase access to the clinical psychology perspective when carrying out intervention work with clients.

What are the risks (if any) of taking part?

The researcher does not anticipate any harm, discomfort, distress to the researcher or the participant throughout the study. The only inconvenience anticipated, might be the time provided by the participant to engage in the semi-structured interview.

How will information about me be used?

The information will be transcribed and investigated for themes. This information will then be written up by way of thesis, and may also be published in a relevant journal. The dataset collected may also be used for future research projects.

The data will be stored for 5 years or until the participant wishes to withdraw their participation from the project.

All information gathered in the current research will remain completely anonymous. Your information will not be associated with your name and no individual will be identifiable in the report of the research or any publications arising from it. You are under no obligation to take part in this study and you may stop at any time without having to provide a reason. You have the right to have your information removed from the study at any time.

Who will have access to information about me?

The researcher and research team consisting of an academic supervisor and clinical supervisor will have access to this data. This will be to ensure that ethics are being followed correctly, and to contribute to the analysis process/quality and rigour of the research.

I do however have to work within the confines of current legislation over such matters as privacy and confidentiality, data protection and human rights, and so law might sometimes override confidentiality. For example, in circumstances whereby I am made aware of future criminal activity, abuse either to yourself or another (i.e. child or sexual abuse) or suicidal tendencies I must pass this information to the relevant authorities.

Data collected will be by way of audio recording for later transcription and analysis. This data will be individually tagged (ID tag from participant number), stored electronically (mp3 data or similar on memory stick), and locked in secure facilities when not in use. The data will be collected and anonymised in transcript by way of issue number from participant sheet.

As above, all data will be stored securely when not in use, and not disclosed to anyone outside of the research team.

The data will be stored for 5 years or until the participant wishes to withdraw their participation from the project.

Who is funding and organising the research?

This is not a funded project. Keele University will be sponsoring the research, and North and South Staffordshire NHS will be hosting the research.

What if there is a problem?

If you have a concern about any aspect of this study, you may wish to speak to the researcher(s) who will do their best to answer your questions. You should contact Andrew Adams on <u>a.adams@keele.ac.uk</u>. Alternatively, if you do not wish to contact the researcher(s) you may contact h.m.priest@keele.ac.uk.

If you remain unhappy about the research and/or wish to raise a complaint about any aspect of the way that you have been approached or treated during the course of the study please write to Nicola Leighton who is the University's contact for complaints regarding research at the following address:-

Nicola Leighton Research Governance Officer Research & Enterprise Services Dorothy Hodgkin Building Keele University ST5 5BG

Appendix 16: Consent Forms

CONSENT FORM

Title of Project: The Clinical Psychology formulation: To investigate nonpsychology team members' accounts of their use of psychological case formulation in a Child and Adolescent Mental Health (CAMHS) multidisciplinary team setting in Staffordshire.

Name and contact details of Principal Investigator: Andrew Adams, a.adams@keele.ac.uk

Please tick box if you agree with the statement

- 1 I confirm that I have read and understand the information sheet for the above □ study and have had the opportunity to ask questions.
- 2 I understand that my participation is voluntary and that I am free to withdraw at any time.
- 3 I agree to take part in this study.
- 4 I understand that data collected about me during this study will be anonymised before it is submitted for publication.
- 5 I agree to the interview being audio recorded
- 6 I agree to allow the dataset collected to be used for future research projects
- 7 I agree to be contacted about possible participation in future research projects.

Name of participant	Date	Signature
Researcher	 Date	 Signature

П



CONSENT FORM (for use of quotes)

Title of Project: The Clinical Psychology formulation: To investigate nonpsychology team members' accounts of their use of psychological case formulation in a Child and Adolescent Mental Health (CAMHS) multidisciplinary team setting in Staffordshire.

Name and contact details of Principal Investigator: Andrew Adams, a.adams@keele.ac.uk

Please tick box if you agree with the statement

1	1 I agree for any quotes to be used			
2	I do not agree for any qu	otes to be used		
 Nan	ne of participant	Date	Signature	
 Res	earcher	Date	 Signature	

Appendix 17: Research contract

Research Thesis

Contract between trainee and research supervisor(s)

This initial contract is a collaborative document to be completed in negotiation between the trainee and research supervisor(s) as close as possible to the start of the project. It can be re-negotiated at any point, with the agreement of all parties. Each person should retain a copy of this contract, and a signed copy forwarded to the Research Director. The contract covers roles and responsibilities, expectations concerning submission of the thesis research for publication, and expectations concerning authorship.

Completed contract to be submitted to Programme Office by 31st January (Year 2)

Name	Contact Details
Trainee name: Andrew Adams	Address:
	Staffordshire and Keele Doctorate in Clinical
Signature:	Psychology
	Science Centre, Leek Rd
Date: 7/1/14	Stoke-on-Trent
	ST4 2DF
Andy Adams	
U	Phone: 01782 294580
	E-mail: am951351@staffs.ac.uk
Academic research supervisor name:	Address:
Dr Helena Priest	Staffordshire and Keele Doctorate in Clinica
	Psychology
Signature: LI LI Da o	Science Centre, Leek Rd
signature by the free	Stoke-on-Trent
Signature: Upper Date: 29/1/14	ST4 2DF
¢.	Phone: 01782 294580
	E-mail: h.m.priest@staffs.ac.uk
Clinical versarch supervisor name:	Address:
Clinical research supervisor name: Dr Carrie Ambrose	Cross Street Clinic,
Dr Carrie Ambrose	Cross St.
	Burton-on-Trent
Signature: CLANN	DE14 1EG
Date: 22/1/14	0014 100
	Phone: 01283 505 820
	E-mail: carrie.ambrose@sssft.nhs.uk

Identify corrective action as required, and provide full guidance and advice

Lengres

Research support policy

1. Amount of time offered for research supervision

Trainees should receive supervision approximately monthly up to a maximum of 18 hours across the whole programme (to be distributed between academic and clinical as they wish). To get the most out of supervision time they could aim to meet academic and clinical supervisors conjointly. For trainees with extensions or who need to revise and resubmit, additional supervision hours should be offered prorata.

2. Amount of feedback on written drafts of thesis

Supervisors may read and give feedback on **up to 2 drafts** of each thesis paper before submission (e.g. a rough outline/structure and a final draft). Supervisors should also read drafts of papers being submitted for publication after the viva, particularly if they are named co-authors. For trainees who need to revise and resubmit, supervisors may read and give feedback on **up to 2 further drafts**.

Lone/out of hours researching

In the event that trainees wish to collect research data out of normal working hours, and/or in an environment such as a participant's home where there is limited or no access to support services, trainees must gain agreement from the clinical research supervisor. The clinical research supervisor must undertake a risk assessment of the proposed activity and indicate the appropriate safety measures to be taken (e.g. buddy arrangements, calling in, emergency arrangements) in accordance with the relevant Trust/Service/Organisation lone worker policy.

Evidence of this agreement and details of the safety measures to be put in place must be provided in writing/e-mail to the Programme Office via <u>h.m.priest@staffs.ac.uk</u> or <u>a.boardman@staffs.ac.uk</u> before any lone/out of hours research activity is arranged.

Roles and Responsibilities

Please discuss and sign agreement to roles and responsibilities below, including target dates/deadlines where appropriate. Shaded boxes do not require a signature.

Activity	Signatures and date:			
	Trainee	Academic supervisor(s)	Clinical Supervisor(s)	
Ensure familiarity with relevant institutional research regulations and policies	AD	Hubert	5000103	
Maintain regular and frequent contact and prepare adequately for supervisory meetings	Ado	weprest		
Identify research topic	AB	reaport		
Identify appropriate design/methodology	Aa	Hupnest		
Ensure ethical principles are upheld	A	Heno, d		
Obtain relevant ethical approvals	An	- Write a		
Gain approval to access participants and research site	A		CAMAS	
Ensure satisfactory progress is made according to agreed timetable/framework	Ac	UniPred	CEAMDS	
Submit work for comment and evaluation as required by the supervisor and act upon guidance provided	Ad			
Notify supervisors of any problems affecting the research	R			
Continuously reflect on the process of research by maintaining a research diary	R			
Maintain records of progress according to agreed timetable/framework and copy to Research Director	Na			
Write the literature review	AD			
Write the research report	A			
Write the reflective review	AD			
Monitor trainees' work and progress, and provide timely constructive feedback		tenhest	CRAMAC	
Ensure trainees understand when progress or quality of work fall below expected levels		Hendred Harred	WAR	

Appendix 18: Letter of insurance for study





23rd July 2013

VERIFICATION OF INSURANCE

TO WHOM IT MAY CONCERN

We act as insurance brokers to the above client and in this capacity can provide brief details of their current Professional Indemnity policy

Insured

Insurer

Period of Insurance

Policy Number

Limit of Indemnity

Keele University, Keele University Science Park Ltd and Keele University Science and Business Park Ltd.

RSA Group

1st August 2013 to 31st July 2014

SA13328793

 $\pounds 5,000,000$ for each claim and in the aggregate in respect of all claims first made in any one period of insurance with one automatic reinstatement of the limit to provide an additional $\pounds 5,000,000$ of cover in the aggregate if the first $\pounds 5,000,000$ is exhausted.

In respect of claims made against the Insured in the USA or Canada the Limit of Indemnity is restricted to $\pounds 1,000,000$ in the aggregate in any one period of insurance, with no automatic reinstatement.

Excess

£25,000 each and every claim

This document is provided for information only and is subject to Insurers policy terms, conditions, limitations and exclusions. Cover may also be subject to cancellation provisions and warranties.

LOCKTON COMPANIES LLP

4^A Floor Higham House, New Bridge Street West, Newcastle upon Tyne NE1 8AN Tel: 01912613077 Fax: 01912613060 www.lockton.com

A limited liability partnership registered in England & Wales at The St Botolph Building, 138 Houndsditch, London EC3A 7AG. Company number: OC353198 Authorised and regulated by the Financial Conduct Authority and a Lloyd's Broker A list of the designated members and individual members of Lockton Companies LLP is available for inspection at the registered office **Appendix 19: Letter of Sponsorship**

Date 14.01.14

Dear Sir/Madam,

Chief Investigator: Andrew Adams Full Project Title: The clinical psychology formulation: To investigate non-psychology team members' accounts of their understanding of psychological case formulation in a multidisciplinary team setting

Keele University is registered with the Department of Health to act as a Sponsor for research projects that fall under the Research Governance Framework for Health and Social Care.

Keele University has agreed to act as lead Sponsor for the above named research study. Certain Sponsorship responsibilities have been delegated to North Staffordshire Combined Health Care Trust as indicated in the attached Delegation of Sponsorship Responsibilities Agreement. This decision has been made because North Staffordshire Combined Health care Trust are the substantive employer.

Keele University is assured that the above project meets the relevant standards and can confirm that proper arrangements are in place for the management, monitoring and reporting of the study.

Keele University carries professional indemnity insurance which will indemnify it, subject to the terms and conditions of the policy, for its legal liability for claims for damages which arise out of its research, by reason of any act of neglect, error or omission committed in good faith by the University.

This letter confirms that Keele University will act as lead Sponsor for the above project. The Terms and Conditions of Sponsorship are attached.

If you have any queries, please do not hesitate to contact either Nicola Leighton, Research Governance Officer at Keele University on 01782 733306 or n.leighton@keele.ac.uk

Yours sincerely

Professor Brian Doherty, RI Director for Humanities and Social Sciences, Keele University

Enc

CC Nicola Leighton, Research Governance Officer, Research & Enterprise Services, Dorothy Hodgkin Building, Keele University

Appendix 20: Approval letter from Keele University



RESEARCH AND ENTERPRISE SERVICES

9thJanuary2014! ! Andrew!Adams!Science! Centre!Staffordshire! University1_eek!Road! Stoke!on!Trent! ST42DF!

Dear!Andrew,!

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Thank you for submitting your revised application for review. If the following stocuments have been application has been approved by the Ethics Review Panel. If the following stocuments have been reviewed and approved by the panel as follows: !

Document!	Version!	Date!
Summary of Proposal!	AA2!	04/01/14!
Letter(s) of Invitation!	AA2!	04/01/14!
Information!Sheets!	AA2!	04/01/14!
Consent Form(s)!	AA2!	04/01/14!
Consent Form(s) for use of lquotes!	AA2!	04/01/14!
Questionnaire!-Inclconsent!	AA2!	04/01/14!
Interview!Topic!Guides!	AA2!	04/01/14!

 $The !Chair labol recommends \that lasy out are using an laddress lat !Staffordshire !University, you !may! wish to include their logo.!$

 $\label{the stated in your application, your must hot if y the Ethical Review! Panel via the !ERP administrator lat!!!so.erps@keele.ac.uk!stating ERP2 in the subject line of the leW mail.!!If there have any bother have no more study 'your study 'your must submit an !' application to have no study 'form to the ERP hadministrator stating ERP2 in the subject line of the leW available via http://www.keele.ac.uk/researchsupport/researchethics/!$

Research and Enterprise Services, Keele University, Staffordshire, ST5 5BG, UK Telephone: + 44 (0)1782 734466 Fax: + 44 (0)1782 733740

Appendix 21: letter of approval from North Staffordshire NHS Trust

North Staffordshire Combined Healthcare

RESEARCH AND DEVELOPMENT DEPARTMENT

Trust Headquarters Bellringer Road Trentham Stoke-on-Trent, ST4 8HH Telephone: 01782 441687/651 : Fax: 01782 441637/624 Email: <u>r&d@northstaffs.nhs.uk</u>

02 April 2014

R&D Ref: CHC0093/RD

Mr Andrew Adams NSCHT Unit 2, Dragon Square Chesterton Newcastle Staffs ST5 7HL

Dear Mr Adams

Study Title: An investigation into effects of formulations within MDTs Chief Investigator: Andrew Adams Sponsor: Keele University

I can confirm that the above project (R&D application) has been reviewed and given NHS Permission for Research by the Research & Development Department for North Staffordshire Combined Healthcare NHS Trust, and the details have been entered onto the R&D database.

I note that this research project has been approved by Keele University Ethics Review Panel (09/01/2014).

NHS permission for the above research has been granted on the basis described in the application and supporting documentation. The documents reviewed were:

Document	Version Number	Date
Protocol	AA2	04/01/2014
Patient Information Sheet	AA2	04/01/2014
Consent Form	AA2	04/01/2014
Consent Form (Quotes)	AA2	04/01/2014
Opt-in Form	AA2	04/01/2014
Invitation Letter MDT	AA2	04/01/2014
Interview Schedule	AA2	04/01/2014
nterview Schedule	AA2	04/01/20

Chairman: Mr.K. Jarrold Chief Executive: Ms. F. Myers Working to improve the health and welfare of local communities

R&D-TMP-001

Version 4.1 (03/12/2013)

Page 1 of 2

