SCHOOL OF PSYCHOLOGY

DOCTORATE IN CLINICAL PSYCHOLOGY

MAJOR RESEARCH PROJECT

LITERATURE REVIEW: A summary of the evidence of social capital in healthcare organisations: a systematic review

EMPIRICAL PAPER: Exploring the social processes occurring within and beyond Reflective Practice Groups: perspectives of attendees and non-attendees

Submitted by Sabinah Janally to the University of Exeter
in part fulfilment for the degree of Doctor of Clinical Psychology, July 2019

Word Count:	Literature review:	6,589
	Empirical Paper:	8,800

I certify that all material in this thesis which is not my own work has been identified and that no material has previously been submitted and approved for the award of a degree by this or any other University.

Table of Contents

List of Tables

Literature Review

List of Figures

Empirical Paper

Appendix

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LITERATURE REVIEW

A summary of the evidence of social capital in healthcare organisations: a systematic review

Trainee Name: **Sabinah Janally**

Primary Research Supervisors: **Dr Ian Frampton**

Senior Lecturers, University of Exeter

Dr Janet Smithson

Senior Lecturer, University of Exeter

Secondary Research Supervisors: **Dr Tony Wainwright**

Senior Lecturer, University of Exeter

Target Journal: Journal of Interprofessional Care

Word Count: 6,589

Submitted in partial fulfilment of requirements for the Doctorate Degree in Clinical Psychology, University of Exeter

Abstract

Background and Aims: In the United Kingdom (UK), growing concerns have emerged from the rapidly increasing workforce shortage of the national health service (NHS). Economic burdens coupled with continuous organisational reforms, have created additional pressures for the workforce that remains. Consequently, healthcare staff are reported to be experiencing high levels of stress and burnout. In response to these challenges' researchers have proposed fostering social capital within healthcare organisations to create sustainable services and positive working environments. The review will aim to gain further understanding of the organisational and workforce factors linked to social capital within healthcare systems. The review will also aim to identify studies that explore social capital in samples of multi-disciplinary professionals operating within the same service.

Methods: The following databases were used to search for peer review articles from 2000 until January 2019: Web of Science, CINAHL, Embase, psycINFO, and Ovid Medline. A hand-search of relevant articles was also carried out.

Results: A total of 2716 records were found, 36 were reviewed at full-text level and 13 articles were identified as meeting the SPIDER criteria. The identified papers have been published in the last 10 years. Earlier records consider social capital within single professional groups as opposed to multi-professional teams or services. The recent increase in literature within this area may reflect global interest to cultivate effective inter-professional team-working in order to foster high-quality care and productive organisations.

Conclusion: The studies demonstrated a number of associations between social capital and organisational and workforce outcomes, such as increased work

engagement, job satisfaction, reduced burnout, and the negotiation of professional boundaries during organisational change. Only two studies noted the challenges of social capital. More specifically, increased turnover intentions were linked to relational conflict in teams with high levels of social capital. Another study demonstrated the paradoxical consequence of commodifying social capital into an organisational improvement tool. A number of limitations were identified, related to how social capital had been operationalised and measured by studies, which impacted upon the interpretation of the findings. Clarity as to how social capital exists within organisations as well as how and why it is linked to different organisational outcomes was limited. Further research is needed to develop the concept as well as to understand how it can be effectively fostered within healthcare services.

Keywords: social capital, healthcare organisations, multi-disciplinary professionals.

Introduction

The National Health Service (NHS) Crisis

A recent publication examining the present and future of the healthcare workforce in the United Kingdom (UK) illustrates the scale of the challenges confronting the NHS (King's Fund, 2018). The candid briefing paper published by the King's Fund, entitled "make or break", communicates a clear warning that the threat to the sustainability of the NHS is not the economic troubles, but the workforce crisis. More specifically, debilitating staff shortages have created pressurised services, which are under-resourced for managing the rising demands of the growing, and aging population. The workforce that remains must navigate a volatile and complex healthcare system where reform, economic pressures and political challenges generated by BREXIT represent additional perils (Alderwick & Ham, 2016). Consequently, staff wellbeing is suffering with staff stress recorded to be significantly higher than that of the general working public (West, 2019).

In 2008, Anne Hofmeyer and Patricia Marck (assistant professors working in the Faculty of Nursing at the University of Alberta, Canada) wrote a paper in response to the global challenges experienced by healthcare services, where they urged nurse managers to consider building social capital (SC) to create safe and sustainable healthcare organisations. They described "*healthcare environments [as being in a] vulnerable place in urgent need of systemic ecological repairs"*, with leaders "*juggling chronic staff shortages against a constant demand from short-term cost efficiencies*" (Hofmeyer & Marack, 2008, p.145). Despite the difference in time and socio-political milieu, their depiction of healthcare systems echoes the difficulties confronting the present NHS.

Hofmeyer and Marck (2008) viewed SC as a socio-ecological tool that could be used in a healthcare context, to understand the complexity of human relationships and networks in the hope of retaining healthcare staff and improving care quality. Given the diminished economic resources available to services, Hofmeyer and Marack (2008) regarded SC as an ethical asset that relies on interpersonal interaction to generate 'capital' such as evidence-based knowledge, personal support, and cooperative team functioning. They argued that these assets could be exchanged to benefit an individual, teams, and the organisation as a whole.

The importance of establishing reliable interprofessional teams has remained a priority of the NHS for many years (Best & William, 2019). Collaborative and compassionate healthcare teams are viewed as essential to workforce retention, innovation, wellbeing and safe healthcare cultures (West & Dawson, 2012; Spiegelhalter, 2018). Consistent with this argument, Hofmeyer and Marck (2008) proposed that "*social capital at the unit, team, organisational and system level is critical in forming participatory, evidence-informed healthcare cultures that value and collaborate in the use of research knowledge to create safer car*e" (p.146). Thus, exploring the evidence of SC in healthcare organisations may provide further understanding of its significance in fostering sustainable NHS services and workforces.

Social Capital

SC is a useful concept as noted above. However, it is poorly operationalised, which has led to ambiguity and concern regarding its application (Andriani &

Christoforou, 2016). Several scholars have attempted to define SC, resulting in a variety of conceptualisations. Key definitions will be outlined and utilised to identify relevant literature for the review.

For several decades, sociologists have explored SC in social behaviour within varying contexts (Cohen & Prusak, 2001). Pierre Bourdieu's writings represent some of the earliest and most influential work on the theoretical concept (Adam & Rončevic, 2003). Bourdieu (1986, p.248) defined SC as:

"*the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalised relationships of mutual acquaintance and recognition – […] to membership in a group, which provides each of its members with the backing of the collectively-owned capital, a "credential" which entitles them to credit*".

Bourdieu's (1986) theory centred on individual resources, which contrasted with Coleman's (1988) perspective. Coleman (1988) regarded SC as a commodity or a 'personal asset' that could be traded for individual and collective gain. Sociologists interested in the creation of communities, collective norms, values, and meaning advanced the concept of SC in organisations and society (Cohen & Prusak, 2001). For instance, Putnam (1993) demonstrated the theoretical application of SC within politics and institutions. Putnam (1995, p.664-665) defined SC as: "*features of social life - networks, norms and trust that enable participants to act together more effectively to pursue shared objectives. The norms include reciprocity, cooperation, and tolerance*".

Nahapiet and Ghoshal (1998, p.243) added to the definitions of SC and described it as "*the sum of the actual and potential resources embedded within, available through, and derived from networks of relationships possessed by the individual or social unit*". Nahapiet and Ghoshal's (1998) structural framework encapsulates different facets of SC identified by authors of the time (e.g. Coleman, 1988; Putnam, 1995; Burt, 1992; and Cicourel, 1973). Nahapiet and Ghoshal (1998) categorised these facets into three interrelated SC dimensions: structural, relational and cognitive. Structural SC refers to patterns of interaction occurring at a micro (individual), meso (group), and macro (organisational) level. The structural patterns are considered in terms of their level of density, relatedness, and hierarchy as well as the network's utility. Cognitive SC concerns shared understanding, language, and meaning among members of a network. Relational SC describes personal relationships between people that have developed over a period of interaction. Individuals in the networks have an emotional affiliation with one another, involving respect and friendship, which influences behaviour. Relational SC also fosters interpersonal trust, a sense of obligation, norms and collective identity.

A network perspective on SC was offered by Putnam (2001), who made a distinction between 'bonding' and 'bridging' SC. Bonding SC refers to " *trusting and co-operative relations between members of a network who see themselves as being similar, in terms of their shared identity*" (Szreter & Woolcock, 2004, p.655). Strong horizontal relationships between individuals characterise bonding SC. Group members in bonding relationships emphasise the collective identity and actions aimed at maintaining cohesion as well as bolstering norms, loyalty and evading sanctioned

behaviours — those within this informal connection trade knowledge, guidance and favours to meet a collective goal. The benefits of bonding include increased individual wellbeing, and improved network performance through recognition and acknowledgement (Hofmeyer & Marck, 2008). However, bonding can lead to the exclusion of out-group members who are perceived to be unlike those in the group, which can stifle group progression (Portes, 1998).

Bridging SC, on the other hand, comprises "*relations of respect and mutuality between people who know they are not alike in some socio-demographic or social identity sense (differing by age, ethnic group, class, etc.)*" (Szreter & Woolcock, 2004, p.655). Bridging creates new opportunities and increases access to essential resources. Linking SC represents an extension to the framework proposed by Szreter and Woolcock (2004). This SC dimension refers to a 'vertical' relationship between individuals interacting across "*explicit, formal or institutionalised power or authority gradients in society*" (Szreter & Woolcook,2004, p.665). This form of interaction is imperative for accessing knowledge or resources and fostering partnerships (Hofmeyer & Marck, 2008).

Social Capital and Clinical Psychology

There is a general lack of links between social capital and clinical psychology as identified by Helliwell and Barrington-Leigh (2012). In the field of clinical psychology, SC has been applied to the study of social and ecological factors that may contribute, maintain, and prevent the development of mental health problems (De Silva, McKenzie, Harpham, & Huttly, 2005; Saegert & Carpino, 2017). In the early 2000s, recognition of SC and its reported connection to health inequalities, resulted in

the UK government publishing mental health policies that encouraged services to promote the development of SC in communities as a preventive strategy (Department of Health, 2001; Department of the Deputy Prime Minister, 2004). Endorsed activities included people fostering roles within their community and widening their social network (De Silva et al., 2005).

An early systematic review that evaluated twenty-one studies on the association of SC and mental illness, showed higher reported levels of SC was linked to lower risks of mental health difficulties (De Silva et al., 2005). Furthermore, cognitive SC had a strong negative correlation with common mental health disorders. The authors' speculated that the observed relationship is due to negative cognitive appraisal, which is common in depression and anxiety. A negative cognitive appraisal may influence how an individual interacts with their social world, they may find it hard to trust others or to engage in reciprocal behaviours (Ehsan & De Silva, 2015). Furthermore, symptoms of depression may lead to social isolation, preventing individuals from being active members of their community (Silva et al., 2005). Flores et al., (2017) conducted a systematic review on the impact of SC interventions on mental health and found positive results. More specially, social relationships, social identity, and a sense of belonging to a group was linked to improved mental health and well-being (Haslam, Jetten, & Alexander, 2012; Haslam, Jetten, Postmes, & Haslam, 2009; Cruwys, Dingle, Haslam, Haslam, Jetten, & Morton, 2013).

Recent research has highlighted the significance of SC in mental health organisations. Eliacin et al (2018) carried out interviews with forty mental health providers to study the link between SC and burnout. The research was conducted

following reports that 67% mental health workers experience burnout (Morse et al., 2012), which is higher than other health professionals (Kavalieratos et al., 2017; Shanafelt et al., 2015). Burnout has been associated with poor quality of care and negative appraisal of patients (Salyers et al., 2017). Emerging research suggests SC may be important for understanding burnout in clinical settings (Read & Laschinger, 2015). Eliacin et al., (2018) found that SC factors including strong relational connections between co-workers and work cultures that value collaboration were important for reducing the risk of burnout.

Review Aims and Research Question

This review aimed to gain further understanding of the organisational and workforce factors linked to SC within healthcare systems to assess the utility of Hofmeyer and Marck's (2008) recommendations to the modern-day challenges facing the NHS. The review also aimed to identify studies that used samples of multi-disciplinary professionals operating within the same service to further understand SC application to the NHS given the centrality of inter-professional team working. The review achieved this by answering the following research question:

What are the reported organisational and workforce factors that have been linked to social capital from studies that have used multi-professional/multi-disciplinary team (MDT) samples working in healthcare settings?

Method

The Preferred Reporting Items for Systematic Reviews and Meta-Analyses-P (PRISMA-P) detailing standard protocols for systematic review were followed (see Table 4) (Moher et al., 2015).

Search Strategy

Five databases were searched: Web of Science, CINAHL, Embase, psycINFO, and Ovid Medline. To ensure methodological rigour, the selected databases were guided by a previous systematic review that explored parallel social processes within healthcare organisations (Cunningham et al., 2012). An initial scoping review was conducted to identify relevant literature, and to define key terms and phrasing for inclusion in the resulting search terms. Inspiration on the development of the terms was also taken from previous systematic reviews conducted in the area of SC (Cunningham et al., 2012; Long, France, Cunningham, & Braithwaite, 2013) and from key papers (e.g. Hofmeyer & Marck, 2008). A search restriction was placed on the year of publication, starting from 2000 until January 2019 because a scoping review found that earlier records published before 2000 primarily focused on single professional group samples. The search terms aimed to capture the phenomena of SC at an organisational or unit level with a sample of multi-disciplinary healthcare professionals (see Table 1). Boolean and truncation operators were used to broaden and/or limit the search results. The operators also ensured that the search was targeted at the area of interest.

Table 1. Search terms

	Key Terms
Phenomena	"social capital", "community participation", "social cohesion", "social organi*ation", "workplace social capital", "collective efficacy"
	AND
Organisations	"Health Care Services" OR "Mental Health Services" OR "Health Services" OR "Community Mental Health Services" OR "Public Health Services" OR "healthcare" OR "primary healthcare" OR "secondary healthcare service*" OR "primary health services" OR "primary health" OR "secondary health" OR "primary care" OR "secondary care" OR "health care"
	AND
Sample	"Health Personnel" OR "workplace" OR "staff" OR "Personnel" OR "employe*" OR "profession*" OR "worksite" OR "practitioner" OR "nurse*" OR "team$" OR "workers" OR "workforce" OR "work force" OR "doctor*" OR "physician*" OR "clinician" OR "psychologist" OR "Allied Health Personnel"

Screening Procedures. The inclusion and exclusion criteria of SPIDER (Sample, Phenomenon of Interest, Design, Evaluation, Research) were used to ensure suitable journal articles were identified (see Table 2). In line with the recommendation of Dixon-Woods et al. (2007) articles published in peer-reviewed journals were included in the review. Duplicated research and literature not written in English were excluded due to constraints in translation resources. To ensure all articles of interest were included, a hand search was carried out on both the referencelist from articles that met the inclusion criteria as well as on articles citing the

included papers. Furthermore, key authors' published research in the field were reviewed.

Following recommendations from Seidler et al. (2016), six randomly selected papers that passed the full-text screening stage were assessed by a second reviewer based on the SPIDER criteria. An inter-rater reliability score of 100% was achieved.

Table 2. Outline of SPIDER inclusion and exclusion Criteria

SPIDER	Inclusion	Exclusion
Sample	• Healthcare organisations. • Samples including healthcare professionals from different specialities (such as nursing, medicine, psychology, healthcare assistants, administration) working within the same hospital or multidisciplinary teams.	• SC researched within non-healthcare related organisations. • A sample of professional from a single speciality. • A clinical sample. • Students or healthcare professional trainees due to these individuals not being employees of a healthcare organisation. • Inter-agency working between healthcare service with other sectors such as third sector services.
Phenomenon of Interest	• Social capital as defined within the introduction.	• Research that does not have a primary focus on social capital. • Other forms of capital such as psychological capital or intellectual capital. • Individual-level social capital. • Community-level social capital related to societal factors.
Design	• All research designs to be considered. This includes studies that use interviews,	• Not applicable.

	focus groups, questionnaires, surveys and observations.	
Evaluation	• Participants' perceptions, opinions, attitudes, experiences and beliefs.	• Not applicable.
Research	• Qualitative • Quantitative • Mixed methods	• Non-peer reviewed literatures. • Systematic reviews and meta-analyses • Editorials. • Research that is not published in English • Secondary sources e.g. book chapters.

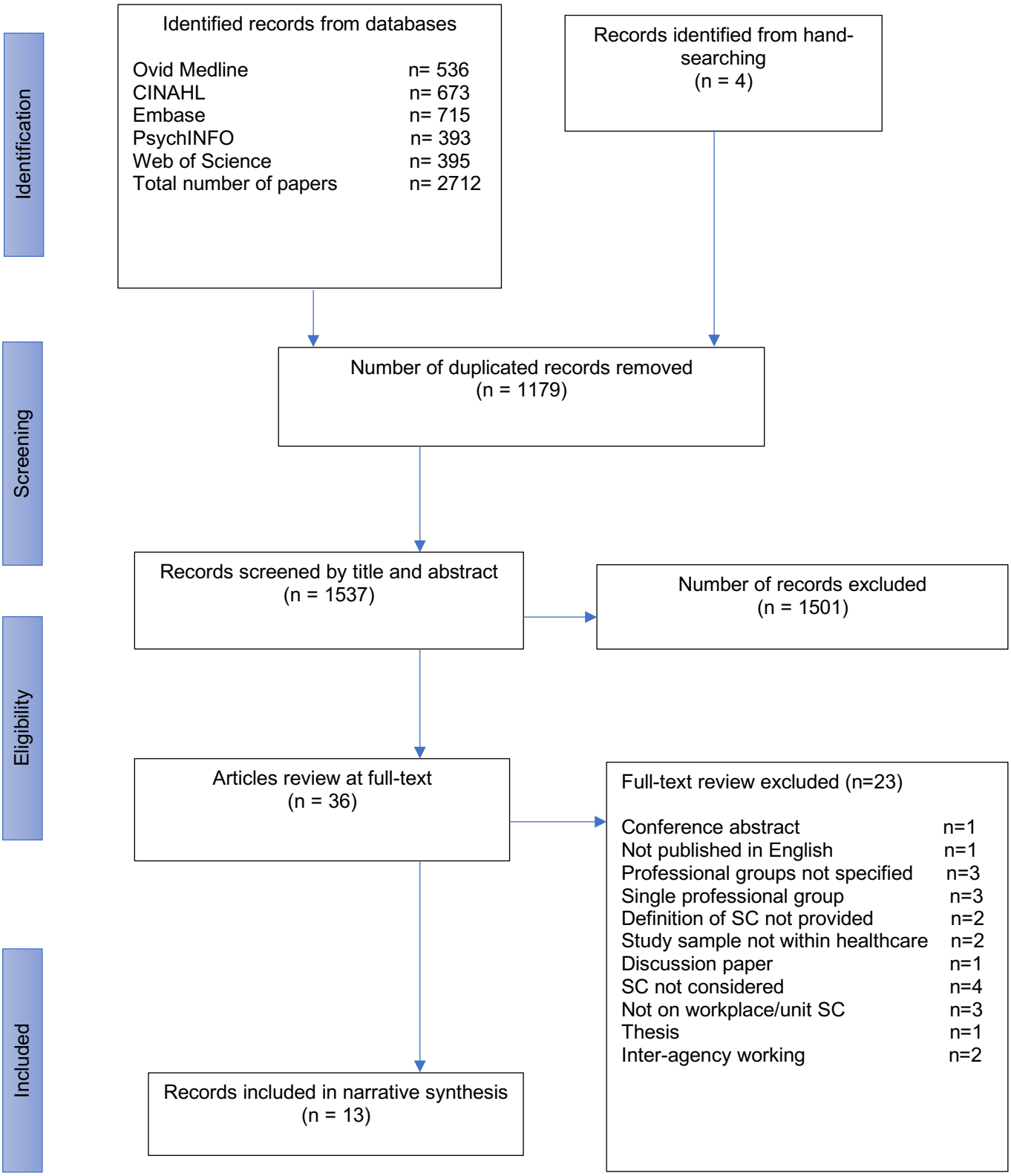

Figure 1. PRISMA-P flow diagram of literature selection

Data Selection

Electronic and hand-searches identified 2,716 records, which were reduced to 1,537 after duplicates were removed (see Figure 1). Following PRISMA-P guidelines (Moher et al., 2015), titles and abstracts were screened, with 1,501 articles excluded for not meeting the inclusion criteria. Full-text assessment of 36 articles led to the exclusion of a further 23 records. A total of 13 studies were included in the final review. No further articles that met the inclusion criteria were identified from an assessment of the reference lists of each included study.

Quality Assessment

In accordance with the PRISMA-P recommendations, the methodological quality of the studies, and the risk of bias (systematic error) in their inclusion in the review were appraised. The Critical Appraisal Skills Programme (CASP) (CASP, 2017) checklist was used to examine the quality of qualitative research. The CASP includes 10 questions that aim to measure: (1) the validity of the studies' results, (2) the content of the findings, and (3) the knowledge contribution of the results. A score out of 10 is given for each study. The Effective Public Health Practice Project (EPHPP) Quality Assessment Tool (EPHPP, 1998) was used for quantitative studies. EPHPP criteria assess six specific areas: (1) selection bias, (2) study design, (3) confounders, (4) blinding, (5) data collection methods, and (6) withdrawals and dropouts. Each section is given a rating of either 'weak', 'moderate', or 'strong'. An overall rating is calculated based on the number of 'weak' component ratings (e.g. a study is considered 'strong' if it achieves no 'weak' scores). An independent second-reviewer assessed the quality of four of the studies. The second-reviewer was a clinical

psychology doctorate student. Again, an inter-rater reliability score of 100 % was gained.

Data Extraction

Data extraction was targeted at how SC was operationalised within the studies as well as how the studies drew on SC to explain organisational or workforce factors such as staff burnout[1] or work engagement[2]. Furthermore, attention consideration was paid to the studies' samples to ensure that they included people from different professional backgrounds working within the same service or organisation. Additional study characteristics were extracted and can be seen in Table 3.

[1] **Burnout** is defined as *"a state of exhaustion in which one is cynical about the value of one's occupation and doubtful of one's capacity to perform"* (Maslach, Jackson, & Leiter, 1996, p.20).
[2] **Work engagement** is defined as "a *positive, fulfilling, work-related state of mind that is characterised by vigour, dedication, and absorption*" (Schaufeli, Salanova, Gonzàlez-Romá & Bakker, 2002, p.74).

Results

A summary of the studies included in the review can be seen in Table 3. The papers have been numbered, which has been used as a study identifier in the review. The studies were conducted between 2012 and 2018 and took place in a range of countries, including Denmark (3, 14), Sweden (4, 10,13), Germany (8), Italy (11), UK (2), USA (6, 9), Canada (1), Japan (12), and Taiwan (7). Overall, it would appear that the study of SC using samples of multi-disciplinary professionals is a relatively new undertaking, given the recent publication dates. Black and Fitzgerald (2018) suggest the relevance of using multi-professional samples may represent global interest from healthcare organisations attempting to understand how best to utilise social resources in order to foster effective and high-quality services built on inter-professional working.

Table 3. Summary of the Identified Studies

no.	Author	Country	Aim	Design	Sample/setting	Data collection	Method/ analysis	Main findings
1	Lee (2013)	Ontario, Canada	To examine the relationship between SC and relational coordination (RC)[1] within interprofessional healthcare teams.	Cross-sectional	Nurses (*N*=144) and physicians (*N*= 198) in outpatient clinics within university-affiliated healthcare organisations	RC survey (Gittell et al.,2000) SC survey (Contractor, Wasserman & Faust, 2006; Gianvito, 2007; Levin & Cross, 2004; Tsai & Ghoshal, 1998; Moran, 2005). Formal coordination mechanism survey (Gittell, 2002). Demographics survey.	Structural equational model (SEM) to test hypothesised model that SC is positively related to RC factors (quality communication & supportive relationship). Formal communication mechanisms are positively related to RC and team tenure is positively related to SC.	The hypothesised model was found to have a good fit with the data (comparative fit index =0.966; standardised root mean square residual = 0.0316). SC was found to predict RC factors. The finding suggests that team member relationships are important to foster informal coordination. Within RC, SC is a stronger predictor of supportive relationships (*b*=0.1, *p*<0.001) than quality communication (*b*= 0.7, *p*<0.001). Team tenure was found to have a small effect size on predicting SC (b=0.13, *p*<0.05).
2	Huby, Harris, Powell, Kielman, Sheikh, Williams & Pinnock (2014)	England & Wales, UK	To explore the impact of organisational change on the negotiation of professional boundaries between healthcare professionals working in hospitals and community-based services.	Longitudinal qualitative interviews and observations	Team PCO: 3 PCO managers, 1 General Practitioner with a specialist interest (GPwSIs), 1 consultant, 1 specialist nurse Merged PCO: 6 PCO managers, 3 GPwSIs, 2 consultants, 4 specialist nurses,1 GP leader. Commissioning PCO: 3 PCO managers, 2 consultants, 2 specialist nurses, 1 hospital manager, 2 GPs. Rural PCO: 4 PCO managers, 7 GPs, 2	Total of 73 interviews with 16 PCO managers, 7 respiratory consultants, 4 GPwSIs, 7 specialist respiratory nurses & 1 acute hospital manager at 3 times across the 4 sites. The interviews focused on collaborative efforts, service negotiations and competition resulting from the organisational changes. Interview numbers at different stages: Team PCO beginning phase = 4 mid phase = 5 exit interviews= 1	Thematic analysis	The study found that organisational change led to professionals making effort to secure and expand their working boundaries to maintain and obtain resources. Money and power acted as drivers for organisational change. The negotiation of professional boundaries created new service configurations. Engagement in change over conflict created the biggest barrier to effective organisational change, because engagement in change was found to foster relationships across and along professional boundaries. Thus, the use of SC was significant in promoting change. However, the relationships fostered, which gave access to valuable resource also perpetuated or generated hierarchies leading to some professionals being excluded.

					consultants, 2 specialist nurses.	Merged PCO: beginning phase = 11 mid phase = 16 exit interviews= 4 Commissioning PCO beginning phase = 8 mid phase = 4 exit interviews= 1 Rural PCO beginning phase = 4 mid phase = 12 exit interviews= 3 Observation data: minutes from meetings and local and national policy briefs.		
3	Ernst, Hindhede, & Andersen, (2018)	Denmark	To examine how SC was transformed from a theoretical concept to be used as an organisational tool to improve public sector services. The study also aimed to explore how SC was being used in a hospital, gaining perspectives from managers and nurses.	Bourdieusian ethnographic design	Nurses, doctors, and hospital managers	118 hours of observations of nurses and doctors. 20 face-to-face interviews with nurses, doctors and managers. Analysis of hospital documents. Observation of 26 meetings on managerial initiatives.	Interviews and fieldnotes analysed according to Miles and Huberman's (1994) recommendations.	The study uncovered the challenges of attempting to use theoretical frameworks to create organisational consultancy tools. The challenges stemmed from (1) the ambiguity of the concept, (2) the contradiction between the theoretical concept and its application in organisations in which strategies create pressure on services to adhere to the SC principles (e.g. trust, reciprocity) and (3) the onus of the adoption of SC is located within frontline staff (e.g. nurses and managers).
4	Strömgren, Eriksson, Bergman & Dellve (2016)	Sweden	To examine the association of SC (recognition, vertical trust, horizontal trust and reciprocity) with job satisfaction (JS)[2], work engagement (WE)[3] and engagement in clinical improvements.	Prospective cohort design Participants answered a questionnaire on two occasions.	Intensive care units and emergency, surgical and medical units at five Swedish midsize hospitals. Healthcare professions including physicians, registered nurses & assistant nurses.	Questionnaire at baseline (N=1602) Questionnaire at one-year follow-up (N=1548)	Univariate, multivariate and logistic regression analyses were performed. The prospective analysis was centred on 477 respondents scores.	SC was found to be linked to healthcare professionals work engagement and job satisfaction. All aspects of SC including recognition, vertical trust, horizontal trust and reciprocity were associated with engagement in clinical improvements of patient safety and care-quality. The prospective analysis results demonstrated that as SC increased it also predicted an increase in JS , work engagement

								and employee's engagement in clinical improvements.
5	Perzynski, Caron, Margolius, & Sudano (2018)	Cleveland, OH, USA	Examined the relationship between SC, burnout[4], job satisfaction (JS) and patients perceived rating of care-quality.	Cross-sectional study	8392 adult primary care patients and 265 healthcare staff (physicians, nurses, allied health and support staff) at 10 community health clinics (Primary care).	Surveys used to gather data from healthcare staff. Telephone surveys completed with patients. Patients provided rating on care-quality received. Staff survey included a measure of workplace SC, burnout, and JS.	Univariate descriptive statistics were used to examine data for distribution assumptions and outliers. The data were aggregated, and measures were studied at a unit-level[5]	SC was linked to burnout (r= -0.40, p<.01) and JS (r= 0.59, p <.01). Patient perceived quality of care rating was positively correlated with SC (r=0.88, p=.001), burnout (r= -0.74, p<.05), and JS (r=0.69, p<.05). The factors explained a significant proportion of the difference in patients rating of perceived care-quality.
6	Huang, Tsai, & Wang (2012)	Taiwan	To explore the relationship between SC (institutional trust and interpersonal trust), health promotion[6], and job satisfaction (JS).	Cross-sectional	Full-time employees of 16 hospital in Taiwan that were classed as Health-promoting Hospital (HPH). Healthcare professional detailed to be included: Nurses, administrative staff, medical technicians and physicians.	Obtained 2,884 valid questionnaires which measure interpersonal trust, health promotion in hospitals and JS.	Structural equational modelling to assess the hypothesised model that institutional trust has a positive connection with health promotion, interpersonal trust andJ S. Interpersonal trust is also predicted to be linked to JS. Health promotion was also predicted to be associated with JS.	Institutional trust had a significant effect on interpersonal trust and health promotion. Institutional trust, interpersonal trust and health promotion had a significant positive effect on JS.
7	Nitzsche, Kuntz, & Miedaner, (2017)	Germany	Examined the association between unit-level SC and work-home conflict in healthcare professionals.	Cross-sectional study	Physicians and nurses (N= 1733) from 66 neonatal intensive care units (NICUs)	Outcome measures: Survey Work-Home Interaction – Nijmegen (SWING) scale for negative work-home interaction (Geurts et al. 2005). Social Capital instrument developed by Pfaff et al. (2004). Structured quality reports that contain self-reported information on structures and procedures performed in the hospital. *Control variables*: -Autonomy	To account for employees nested within hospital units, two-level random intercept hierarchical linear models with maximum likelihood estimation were used (Rabe-Hesketh & Skrondal, 2008). The intra-class correlation coefficient (ICC) was calculated to identify the variance in work-home conflict which identified the differences between NICUs.	Individuals working in wards with higher SC reported significantly less work-home conflict. SC perceived to be an important collective resource. Hospitals are encouraged to develop working environments that nurture mutual trust, encouragement and perceived togetherness.

						-Workload - Social support from supervisors and co-workers *Demographics – confounders for statistical control*: gender, age, education, occupation and employment type. Structured quality reports that contain self-reported information on structures and procedures performed in the hospital.	They investigated the association between organisational SC at the ward-level and work-home conflict at the individual employee-level, whilst taking into account control variables.	
8	Avgar, Kyung Lee, Chung, (2014)	New York, USA	Investigating the moderating effect of choice and unit-level SC on the association between individual perception of team conflict, stress and turnover intention.	Cross-sectional study	Health professionals: registered nurses, licensed practical nurses, certified nurse's assistants, social workers, therapist & other allied professionals 857 individuals working in 90 units. Units classified by work type such as administration, ventilation, rehabilitation and physical therapy. Teams had between 2 and 37 people, with an average of 10 members.	Measured job satisfaction and turnover intention (dependent variables) together with perceptions of task conflict, relationship conflict, employee discretion, and unit-level SC (independent variables) *Control variables:* age, tenure gender, education, employment status, work shift, additional employment, union membership and professional affiliation.	Hierarchical linear modelling to test the moderating effects of employee discretion, SC on task conflict and relationship conflict on job stress and turnover intention.	Employee discretion moderated the relationship between task conflict and job stress. Unit-level SC moderated the relationship between perceived relationship conflict and turnover intentions. A mixed moderation at low to moderate levels of conflict compared with high conflict levels. Moderating role of contextual variable were found to be more complex than hypothesised.
9	Strömgren, Eriksson, Ahlstrom, Bergman & Dellve (2017).	Sweden	Examined the association between leadership quality and SC. Leader quality was also assessed in relation to the (e.g. relational, task-	A cohort study	Healthcare professionals (physicians, registered nurses, assistant nurses, administration) - baseline (N=865), one-year follow-up	The Copenhagen Psychosocial Questionnaire (COPSOQ II) (Pejtersen et al. 2010) Modern Worklife Questionnaire (MWQ) (Oxenstierna et al. 2008).	The data was analysed using Pearson's correlations and linear regression modelling.	Longitudinal repeated measures demonstrated relation-orientated leadership had the strongest association with SC. The significance of relational-orientated leadership quality decreased during organisational redesign. In situation with low

			oriented or developmental-orientated) perceived significance of SC during different types of organisational changes (e.g. mergers, service redesign, change of management).		(N= 908) and two-year follow-up (N=632). 5 small (approx. 100-bed) or mid-sized (approx. 500-bed) hospital were included.			degree of group dynamics difficulties the significance of developmental-oriented leadership quality for SC increased. For all three types of leadership quality the significance of SC decreased when there were group dynamics problems. Task-oriented leadership quality for SC was perceived as more important when managers were new or inexperienced.
10	Mura, Lettieri, Radaelli & Spiller (2016)	Italy	Aimed to understand how different types of knowledge sharing behaviours (including sharing best practice, sharing mistakes, gaining feedback) are encouraged and assisted by knowledge assets (organisational capital[7] and SC). They also sought to understand how these factors are associated with innovative work behaviour (IWB).	A cross-sectional study	Healthcare professionals from 3 hospice and palliative care organisations. Physicians, nurses, psychologists, physiotherapist and healthcare assistants (*n*= 195)	Measured - Structural SC, relational SC, organisational capital, Knowledge sharing (sharing best practice, sharing mistakes and seeking feedback) together with IWB (comprising idea generation, idea promotion and idea implementation) *Control variables*- age, gender, professional experience, professional experience in the present organisation.	Structural equation modelling to assess the hypothesised relationships: -Organisational capital associated with knowledge sharing. Knowledge sharing is linked to IWB. -Structural SC is connected to knowledge sharing and psychological safety -Relational SC is linked to knowledge sharing and psychological safety. -Psychological safety is linked to IWB.	Psychological safety mediates the direct and indirect relationship between knowledge asset and knowledge sharing. Psychological safety mediates the relationship between relational SC, structural SC, seeking feedback and sharing mistakes. The knowledge sharing dimension had an impact on the individual factors of employee IWB. Best practice has an influence on all the IWB dimension.
11	Fujita, Kawakam, Ando, Inoue, Tsuno, Kurioka, & Kawachi (2016)	Japan	Examined the relationship between unit-level SC and individual level work engagement in healthcare employees.	Cross-sectional study	Healthcare professionals: doctors, nurses, assistant nurses, pharmacists, public health nurses, welfare workers, rehabilitation staff, technical staff, nutrition/dental staff, clericals and cooks. Healthcare profession worked (*n*=440) 35 units containing 5 or	Measures looked at: Workplace Social Capital, WE and job stress. Covariates: age, gender, marital status, education, occupation, rotating shifts, and employment status.	Multilevel regression analysis with a random intercept model to examine the relationship between the variables.	Once adjusted for demographic variables, unit-level SC was significantly and positively related with individual-level rated work engagement (p<.0.001). The relationship continued to remain significant after adjusting for individual-level of perceived SC (p<0.001).

					more respondents per unit.			
12	Strömgren (2017)	Sweden	Aimed to examine the association between SC and intention to leave as well as to assess the moderating effect of SC on the association between job demand[8] and healthcare professional's intention to leave their jobs.	Cross-sectional study	Five hospitals working undergoing organisational change to improve care quality. Healthcare clinicians including assistant nurse, nurses and physicians (*n*=849)	Measure social capital (trust for management, mutual trust between employees, and reciprocity), job demand and job resources. [9]	T-test was used to compare occupational groups Pearson's correlation with investigated variables. t-test was used to compare levels of SC with levels of intention to leave. Linear regression models were used to examine if SC moderated the relationship between job demand and intention to leave.	High rating of SC was linked with lower levels of turnover intention. The moderating effect of SC was not found. Intention to leave differed between occupational groups and was influence by SC, job resources and job demands.
13	Jensen, Flachs, Skakon, Rod, & Bonde, (2018)	Denmark	Investigated the association between organisational changes and employees leaving their jobs. The study considered whether this association was mediated through SC.	Cross-sectional study	Healthcare professionals: Nurses, administrative staff, social/healthcare workers, service/technical staff, medical doctors, dentist, pedagogical workers The sample included 14,059 staff nested in 1216 work units including data on work-unit organisational change in the last six months of 2013, work-unit social capital in March 2014, employee exit from work (EFW) from	Estimate levels of EFW from January to December 2014 Survey on organisational changes Survey on SC *Confounder variables*: sex, occupational groups, previous abuses related to sick relative, day absent due sickness. *Confounder variables at unit-level:* number of employees in work unit, mean of employee age, mean of personal gross income, mean of sickness-absence leave days in 2012, number females within work-unit, number of	Logistic regression models were used to analyse SC and organisational change data. Marginal Cox models were used to assess the rate of employee exit from work (EFW) with SC. Marginal Cox models were also used to assess the rate of EFW after organisational change.	Higher rate of EFW after organisational change compared to no organisational changes [hazard ration (HR) 1.10, 95% confidence interval (CI) 1.10-1.19]. They found an inverse dose-response relationship between SC and EFW. There was a higher risk of reduced SC in work-units that had undergone organisational change.

	January - December 2014.	employees with child-related absence between 2012-2013 and number of each occupation group in work-unit.

*[1]**Relational coordination (RC)** refers to "the spontaneous behaviour and attitude involved in informal coordination, and these are influenced by the relationships among members of the team" (Gittell, 2002 taken from Lee, 2013, p.82). For RC to exist it requires (1) high quality communication and (2) supportive relationships characterised by trust and respect. [2]**Job satisfaction** (JS) is defined as "a positive (or negative) evaluative judgement one makes about one's job or job situation (Weiss, 2002, p.175). [3]**Work engagement** (WE) is defined as "a positive, work-related mindset that consists of vigour (high levels of energy, activity, and mental resilience during work), dedication (being strongly involved in, proud of and enthusiastic about the work) and absorption (being fully concentrated and happily absorbed in work) (Bakker, Schaufeli, Leiter, & Taris, 2008, taken from Strömgren et al. 2016). [4] **Burnout** is defined as "an emotional and behaviour impairment that results from the exposure to high levels of occupational stress. Burnout has been described as a combination of three factors: emotional exhaustion, depersonalisation and personal accomplishment" (Schaufeli & Bakker, 2013, taken from van Mol et al. 2015). [5] **unit-level** refers to data aggerated together to represent healthcare professionals not as single individuals but collectively as a whole team or service. [6]**Health promotion** refers to helping people to gain control over and to improve their health (World Health Organisation, 1986).[7] **Organisational capital** refers to "codification and systematization of knowledge through databases, patents, manuals" (Youndt et al. 2004 taken from Mura et al. 2016). [8] **Job demand** refers to "high-work pressure, emotional demands, and role ambiguity" (Bakker & Demerouti, 2006, p. 309). [9]**Job resources** refers to leadership quality, having role clarity as well as strong and positive relationships with colleagues (Strömgen, 2017).*

Table 4. Quality ratings and study limitations

Study no.	Author	Limitations	QAT/CASP score
1	Lee (2013)	Cross-sectional design difficult to ascertain a causal relationship or to confirm the direction of the predictive relationship between SC and RC. Self-reported data increases risk of common method bias and measurement bias. Small sample size, unable to detect statistical significance. Unable to tell if blinding occurred.	QAT rating: A: Moderate B: Weak C: Moderate D: Weak E: Strong Global rating: Weak
2	Huby, Harris, Powell, Kielman, Sheikh, Williams & Pinnock (2014)	The qualitative method used to analyse the data not explicitly specified. Unclear whether the researchers critically examined their role, potential bias and their influence during the analysis and selection of themes. Limitations of qualitative design not considered.	CASP score: 7/10
3	Ernst, Hindhede, & Andersen (2018)	The relationship between the researcher and participants was not detailed. They did not critically examine their own role, potential bias and their influence in the study. Ethical issues were inadequately considered. No details were provided of whether ethical approval was gained. Discussions with participants about ethical issues were not recorded, although the interviewees' identification was anonymised, and the hospital was provided with a pseudonym.	CASP score: 7/10
4	Strömgren, Eriksson, Bergman & Dellve (2016)	Cross-sectional design used, unable to describe how the association between SC, JS, WE and engagement in clinical practice develops over time. Also, unable to ascertain the direction of the predictive associations. Data analysed at individual-level as unit-level analysis was found to lack power and was therefore excluded. Difficult to ascertain whether those who chose not to participate in study had different or similar levels of SC, WE and JS. Difficult to generalise the findings due to sample taken from Swedish hospitals. Self-reported data increases risk of common method bias and measurement bias. Unable to tell if blinding occurred.	QAT rating: A: Weak B: Weak C: Weak D: Weak E: Moderate Global rating: Weak
5	Perzynski, Caron, Margolius, & Sudano (2018)	Cross-sectional design used, difficult to ascertain a causal relationship or confirm the direction of the predictive relationship. No control variables or demographic information. The surveys were anonymous, thus employee characteristics (e.g. gender or years of employment) were not considered in the analysis. As a result, confounding variables may have had an influence on the findings. Data collected from a single healthcare system.	QAT rating: A: Weak B: Weak C: Weak D: Strong E: Strong

			Global rating: Weak
6	Huang, Tsai, & Wang (2012)	Cross-sectional design used, difficult to ascertain a causal relationship or confirm the direction of the predictive relationship. Confounding variables not detailed. Unable to ascertain blinding.	QAT rating: A: Strong B: Weak C: Weak D: Weak E: Strong Global rating: Weak
7	Nitzsche, Kuntz, & Miedaner (2017)	Reverse causation cannot be discounted due to cross-sectional design. It is difficult to ascertain a causal relationship or confirm the direction of the predictive relationship. Common method bias cannot be ruled out as organisational SC was an aggregated score of individual values. Also, the data is self-reported subjective accounts. Unmeasured confounding variables may also account for the findings.	QAT rating: A: Strong B: Weak C: Moderate D: Moderate E: Strong Global rating: Moderate
8	Avgar, Kyung Lee, & Chung (2014)	Reverse causation cannot be discounted due to cross-sectional design. It is difficult to ascertain a causal relationship or confirm the direction of the predictive relationship. Data collected from a single source of healthcare units (e.g. neonatal intensive care unit). Unable to ascertain blinding.	QAT rating: A: Weak B: Weak C: Strong D: Weak E: Strong Global rating: Weak
9	Strömgren, Eriksson, Ahlstrom, Bergman & Dellve (2017)	Hospital setting reduced generalisability. Contextual factors may have confounded healthcare managers behaviours (Wikström & Dellve, 2009). Subjective accounts of employee perceptions of managers leadership skills may also have been influenced by their length of time within the team, their relationship with the manager, the team's stage of group development. Unable to ascertain blinding.	QAT rating: A: Weak B: Moderate C: Weak D: Weak E: Strong Global rating: Weak

10	Mura, Lettieri, Radaelli & Spiller (2016)	Small sample size, difficult to generalise the results. Cross-sectional design used, difficult to ascertain a causal relationship or confirm the direction of the predictive relationship. Explanatory power of the model limited, further variables need to be added to understand how knowledge assets are associated with knowledge sharing and IWB.	QAT rating: A: Weak B: Weak C: Weak D: Weak E: Strong Global rating: Weak
11	Fujita, Kawakam, Ando, Inoue, Tsuno, Kurioka, & Kawachi (2016)	Self-reported questionnaire makes it difficult to rule out common method bias. Generalisability of findings poor due to workplace SC being tied to the organisation's culture and practices. Data also from a single organisation. Other psychosocial factors may have had an impact on WE. Other individual confounder variables not considered such as personality traits and support network beyond the work context. Reverse causation cannot be ruled out.	QAT rating: A: Moderate B: Weak C: Weak D: Weak E: Strong Global rating: Weak
12	Strömgren (2017)	Cross-sectional design used, difficult to ascertain a causal relationship or confirm the direction of the predictive relationship. Self-reported data, unable to rule out common method bias. Unable to ascertain blinding.	QAT rating: A: Moderate B: Weak C: Weak D: Weak E: Strong Global rating: Weak
13	Jensen, Flachs, Skakon, Rod, & Bonde, (2018)	Self-reported data, unable to rule out common method bias. Unable to ascertain blinding. Intention to leave was not examined after organisational change announcement. They were unable to adjust for the effects of organisational change when they followed up on EFW due to lack of data.	QAT rating: A: Moderate B: Moderate C: Weak D: Weak E: Strong Global rating: Weak

Quality Assessment Result

The methodological quality of the studies reviewed varied from moderate to weak (see Table 4). Of the quantitative studies, the majority were classified as weak, with the Nitzsche, Kuntz, and Miedaner (2017) study being the only one gaining a rating of moderate. Overall, the qualitative studies gained an average quality score of 7.7 out of ten. Studies with methodological weaknesses were not omitted from the review. A narrative synthesis of the studies is presented. The quality of the papers and the explanation of the results from the studies will be critically discussed.

Phenomena of Interest – definitions of SC

The identified studies used a variety of different definitions of SC to guide their research (see Table 1 in the Appendix). The majority of studies provided clear definitions of SC citing earlier authors including Bourdieu (1985, 1986), Coleman (1988), Putnam (2000, 2003), Nahapiet and Ghoshal (1998) and, Szreter and Woolcock (2004). A limitation noted by the review was that the researchers selected different facets of SC to analyse. This created a challenge in comprehending how SC as a whole is linked to different organisational and workforce factors such as job satisfaction.

Study Design and Methodology

Nine out of the thirteen studies employed a cross-sectional design (1, 5, 7, 8, 11, 12,13, 10). Both Strömgren et al. (2017) and Strömgren et al. (2016) used a cohort design. The cohort design was selected in response to previous recommendations made by researchers who highlighted the need for prospective longitudinal studies to understand the causal factors related to SC in workplace outcomes (e.g. Avolio et al.

2009). Two studies conducted qualitative research (2, 3). Huby et al. (2014) conducted a longitudinal qualitative investigation collecting interview and observational data. Details on the qualitative method employed to analyse the data were not described. Ernst et al. (2018) selected a Bourdieusian ethnographic approach, as it provided a relevant methodological and analytical framework to address the research aims. Both Ernst et al. (2018) and Huby et al. (2014) failed to provide details on their relationship with the participants, nor did they critically appraise the possible influence of their own role and personal biases on the research findings. Ernst et al. (2018) inadequately addressed research ethics, providing no details on how ethical approval was gained or how ethical considerations where discussed with participants.

Nine studies did not explicitly justify their research design (1, 2, 5, 6, 7, 10, 11, 12, 13). The absence of this information influences the validity as well as the relevance of the reported findings because the reader is unable to ascertain whether the design selected is the most appropriate to address the research question.

The heavy reliance on cross-sectional designs also limits the credibility of the conclusions that can be drawn from the findings, inasmuch as cross-sectional designs are vulnerable to response bias. The samples of the studies may not have been representative of the population of interest due to differences that may have existed between the participants who consented to take part in the research and those who did not (Sedgwick, 2014). Furthermore, as the data are a record of a single point in time, causation and the directionality of the associations between SC and the studied variables cannot be confirmed (Sedgwick, 2014). A longitudinal design provides a solution to these difficulties; however, caution should be taken when making

inferences from longitudinal data as new forms of SC may arise during the period of study, which might go undetected (Arneil, 2006).

Measures of SC. Table 5 represents the measures created and used by the studies. As can be seen, most researchers constructed their own measure of SC by adapting items devised by previous authors or selecting items from validated assessments. Lee (2013) created a 16-item survey, based on the Nahapiet and Ghoshal (1998) framework. The selected items assessed open communication (structural SC), trust and liking (relational SC), as well as shared language and shared interpretation (cognitive SC). The three studies from the same authors (4, 9, and 12) developed a survey taking items from the Copenhagen Psychosocial Questionnaire (COPSOQ-II) and the Modern Work Life Questionnaire (Oxenstierna et al. 2008). The questions aimed to assess healthcare professionals' levels of trust for management, as well as mutual trust between work colleagues, recognition, and reciprocity. The participants in Jensen et al. (2018) study were asked to complete a 'work-environment' questionnaire, which also comprised items from COPSOQ-II, together with three items created by four specialists in occupational medicine. The tool aimed to assess collaboration, trust, and organisational justice.

Perzynski et al. (2018) developed their own tool called the "Practice Experience Survey", which comprised 23 questions. The survey drew on the work of Leana and Pi (2006), who created items based on Naphapiet and Ghoshal's (1998) framework. Huang et al. (2012) created survey items based on the work of Lindström and Janzon (2007), and of Mohseni and Lindstrom (2007), to explore trust. Avgar et al. (2014) tailored and used items from Subramaniam and Youndt (2005), which focused on

information sharing, communication, and the exchange and sharing of ideas with people working within the same unit and those from different units. Mura et al., (2016) also adapted items from Subramaniam and Youndt (2005), together with Tsai and Ghoshal (1998) to measure structural SC. They used inspiration from Kale et al. (2000) as well as Wasko and Faraj (2005) to construct questions to assess relational SC. Nitzsche et al. (2017) opted to use an SC instrument developed by Pfaff et al. (2001). The study of Fujita et al. (2016) was the only study that used an established and validated measure of workplace SC.

No measures exist to the author's knowledge, that can systematically assess the different facets of SC. As a result, tailoring measures appeared to enable authors to create tools that reflected their area of interest and how they had conceptualised or understood SC. However, Inaba (2012) suggests biases are introduced by the researcher in how they select SC elements to study as these factors are not chosen at random. Thus, the measures used are not entirely objective nor impartial as they are guided by the researcher's intentions, which possibly mirror their personal biases (Inaba, 2012). Furthermore, the challenge of survey-based approaches is that they elicit highly subjective responses, which can be troublesome when making comparisons between groups or communities. For instance, Inaba (2012) argues that there could be a cultural difference in how people interpret and respond to items related to facets of SC such as trust. As a result, caution must be taken in the interpretation of the research findings and to the researcher's conclusions.

Main Findings

Table 5. provides an attempt to summarise the organisational and employee factors that have been linked to different facets of SC.

Inter-professional working. Lee (2013) found that Relational Coordination (RC), (which is a form of informal interpersonal coordination substantiated by communication and supportive relationships) is predicted by the level of SC within interprofessional teams. The authors concluded that teams characterised by trust, honest communication as well as by shared understandings, values and beliefs, are more likely to adapt intuitively to changing circumstances. Furthermore, SC was a greater predictor of supportive relationships than communication RC. The authors felt that the connection between SC and RC supportive relationships may be because the two concepts share similar properties related to shared objectives, knowledge, and respect. Team tenure also predicted SC. This suggests that time and similar team composition increases the likelihood of team member interaction. Also, increased familiarity with members of the team helps to develop collective communication patterns, trust, and cognitions. However, the size of this effect was small and should be considered with caution.

In the Mura et al. (2015) study, relational SC (involving interpersonal trust and reciprocity) and psychological safety (involving an evaluation of interpersonal risk) were found to influence healthcare professionals' ability to share mistakes and to seek feedback. Structural SC had an indirect positive effect on innovative work behaviour, increasing professionals' tendency to share best practice when they gained a sense of psychological safety. The association between relational SC, structural SC, seeking feedback and sharing mistakes was mediated by psychological safety. The authors recommend organisations foster high-quality interpersonal teams based on cohesive

network ties to encourage knowledge sharing. However, the explanatory power of the structural equation model was poor. The authors suggested that additional variables, that were not cited are needed to fully understand how knowledge assets (i.e., SC and organisational capital) influences knowledge sharing and employee innovative behaviour.

Organisational Change. In a longitudinal study, Jensen et al. (2018) found organisational change (relating to mergers, service divisions or management change) may lead to low SC. Significant reductions in scores on trust at employee-level were linked to service restructuring and change management. It was suggested that change dimensions that impact upon SC have the possibility to alter social relationships. Furthermore, an inverse dose-response relationship between SC and employee job tenure was found, whereby low SC scores predicted employees' intention to leave.

Huby et al. (2014) qualitatively explored organisational change longitudinally across four settings in a single healthcare system. SC was found to be a strategic tool for healthcare workers, aiding the negotiation and protection of professional boundaries. Effective change agents were those who fostered connections across service boundaries and gained access to resources, power and political influence. Change agents used SC to develop loyalty and establish new services. However, those within more powerful positions were more likely to have opportunities to engage in informal transactions, which excluded others and perpetuated hierarchies.

Leadership. Strömgren et al. (2017) found that leadership quality has a significant impact on SC within healthcare organisations. Leadership quality was divided into three types: relational (emphasis on the relationship between leader and their followers in pursuit of shared goals), task-orientated (completion of objectives is prioritised), and developmental (where leaders invest in the development of their

followers). Workplace groups with high levels of leadership quality had significantly higher SC compared to groups with medium to low levels of leadership quality. This difference persisted over two years. All three types of leadership qualities were linked to SC, with relational-orientated leadership being most strongly linked with SC. The authors argue that the results suggest healthcare leadership style and quality could be significant to the development of SC. The success of the leadership style adopted must also match the environmental and social circumstances. However, a drawback of the study was that the subjective ratings of managers' leadership quality by employees may be influenced by time, interpersonal relationships, and the teams' stage of development, which are not taken into consideration.

Team and Employee Related Outcomes. Strömgren et al. (2016) found SC was positively correlated with job satisfaction, particularly in respect of perceived recognition. The logistic regression model showed that an increase in SC predicted an increased work engagement, although there was no association found between trust and work engagement. Furthermore, all measured facets of SC (reciprocity, trust regarding management, mutual trust between employees, and recognition) were positively correlated with employees' engagement with patient safety and quality of care. Prospective analysis demonstrated that increased SC predicted increased job satisfaction, work engagement, and commitment to clinical developments for patient safety. Further support for the positive association of workplace SC with work engagement comes from Fujita et al. (2016). The relationship was significant when adjusted for individual ratings of perceived workplace SC. The authors acknowledged that other confounding variables such as personality traits and support networks outside of work may be important to the findings; however, they were not considered.

Perzynski et al. (2018) demonstrated that patient ratings of perceived quality of care were positively correlated with SC. Also, workplace SC was moderately to strongly linked to burnout and job satisfaction. Furthermore, patient ratings of care

quality correlated positively with SC, burnout and job satisfaction. The authors suggested healthcare organisations should invest in workplace SC to improve employee outcomes and patient experiences of care. Related findings come from Huang et al. (2012). They found that components of SC (institutional trust and interpersonal trust), together with hospitals' engagement in health promotion programmes, had a significant, positive impact on job satisfaction. Huang argued that the results provided evidence for hospitals in Taiwan to strengthen the presence of SC and health promotion programmes to heighten employee job satisfaction.

Strömgren (2017) found that high levels of SC were associated with low levels of healthcare employees' intentions to leave. Physicians were shown to have the highest level of SC and the lowest rating of intention to leave. Participants who had worked in their current role for shorter periods valued SC more than those who had been in their role for over 14 years. Strömgren concluded that job resources, job demands and the presence of SC within one's occupational group influenced healthcare professionals' intention to terminate their employment.

Conflict. Nitzsche et al. (2017) found healthcare professionals reported less home-work conflict in work-units with high levels of SC. Avgar et al. (2014) discovered that healthcare professionals working in nursing homes with high workplace SC were prone to greater turnover intentions when faced with workplace relationship conflict. The authors concluded that the existence of high-quality relationships characterised by reciprocal knowledge sharing and communication heightened the negative effects of relationship conflict on turnover intention. This finding goes against their hypothesis that SC would shield employees from the individual's costs of conflict. The authors believe that SC increases, as opposed to safeguarding against employees' intention to leave their job, when they are experiencing relational conflicts at work.

Ernst et al. (2018) illustrated how SC was transformed into a public sector reform tool to be used within hospitals in Denmark. The ethnographic approach discovered how management consultancy commodified SC into a formal product that could be applied to help improve organisational productivity and quality. Observations and interviews were with key individuals within one hospital who had adopted an SC policy. The pressure and responsibility of cultivating SC was placed upon managers and staff, which created tensions when specific guidance was not followed. The gentle, bottom-up approach instead became distorted into a rigid, top-down strategy. SC is regarded by the authors as primarily ideological, although it has gained substantial political and commercial attention for its implied benefits.

Practical Implications. Nine of the studies provided clear practical implications of their findings. The recommendations from these researchers centred around encouraging healthcare organisations to create opportunities for collaboration, increased interaction between employees and different teams and services to foster relationships, and connection through the use of multi-disciplinary meetings, organised trips or establishing peer support systems.

Table 5. A summary of the organisational and employee factors that have been linked to specific SC facets

Authors	Organisational and employee factors	SC facets
Lee (2013)	Relational coordination	Structural, cognitive and relational SC
Lee (2013)	Team tenure	Structural, cognitive and relational SC
Perzynski et al. (2018)	Patients perceived quality of care	Structural, cognitive and relational SC
Perzynski et al. (2018)	Burnout	Structural, cognitive and relational SC
Perzynski et al. (2018)	Job satisfaction	structural, cognitive and relational SC
Mura et al. (2016)	Sharing mistakes and seeking feedback	Relational SC (interpersonal trust and reciprocity) together with psychological safety
Mura et al. (2016)	Innovative work behaviour	Structural SC
Mura et al. (2016)	Sharing best practice	Structural SC
Strömgren et al. (2016)	Work engagement	Reciprocity and recognition
Strömgren et al. (2017)	Leadership qualities - relational, developmental and task-orientated	SC - Mutual trust, trust in management, reciprocity and recognition
Strömgren et al. (2016)	Employee engagement with patient safety and quality of care	SC - Mutual trust, trust in management, reciprocity and recognition
Strömgren (2017)	Lower intention to leave	SC - Mutual trust, trust in management, reciprocity and recognition
Strömgren et al. (2016)	Engagement in clinical improvements	Trust regarding management and recognition
Nitzsche et al. (2017)	Less home-work conflict	SC - mutual trust, shared values and standards, cooperation and reciprocity
Avgar et al. (2014)	Greater turnover intention when faces with relationship conflict	Reciprocal knowledge sharing and communication
Jensen et al. (2018)	Service restructuring	Trust at employee level
Jensen et al. (2018)	Intention to leave during organisational change	SC - trust, reciprocity and social cohesion
Huang et al. (2012)	Job satisfaction	Institutional trust and interpersonal trust
Strömgren et al. (2016)	Job satisfaction	Recognition
Huby et al. (2014)	Strategic tool for organisational change	SC - bonding, bridging, linking. Trust, norms, obligations and expectations
Huby et al. (2014)	Fostering connections during organisational change	SC - bonding, bridging, linking. Trust, norms, obligations and expectations
Huby et al. (2014)	Helping to access resources through connections	SC - bonding, bridging, linking. Trust, norms, obligations and expectations
Huby et al. (2014)	SC perpetuates hierarchies leading to limited access to resources for those unable to foster connection across boundaries	SC - bonding, bridging, linking. Trust, norms, obligations and expectations
Fujita et al. (2016)	Work engagement	SC - Bonding, bridging and linking

Discussion

The review systematically presents research exploring SC within varying healthcare-related organisations. The identified studies explored observable behaviours and the perspectives of multi-professional groups to try to understand SC and its connections to organisational and workforce outcomes. The purpose of the review was to consider the evidence-base behind the Hofmeyer and Marck (2008) recommendation for healthcare organisations to 'build' SC to foster sustainable workforces and improved care quality.

The review found SC had been positively associated with a variety of employee- and team-related outcomes in healthcare organisations. More specifically, SC was linked to reduced staff burnout, increased job satisfaction, lower levels of intent to resign, less home-work conflict, increased relational coordination, work engagement, knowledge sharing, and innovative work behaviour. Qualitative studies drew links between healthcare employees successfully navigating organisational change through the use of social capital mechanisms such as establishing trusting relationships between different healthcare departments, which led to the access and sharing of resources.

Only two studies reported the negative consequence of SC in healthcare services. For instance, the presence of SC within a team was connected to increased turnover intentions when employees experienced negative relational conflicts. Ernst et al. (2018) referred to SC as being '*Janus-faced'* when applied as an organisational tool aimed at improving healthcare organisations' productivity and quality. The study

illustrated the paradoxical consequence that emerged from commodifying SC into an organisational improvement tool, whereby the responsibility to foster SC fell upon hospital staff. The application of SC within the service was found to constrain rather than encourage organisational development. Ernst et al. (2018) suggest that SC had been influenced by the "*measure pressure*" (Van Thiel et al., 2002), whereby theoretical frameworks are transformed into appraisal tools. Ernst et al., (2018) argued that these tools are problematic, as it is unclear to what they actually assess.

Several significant limitations were identified in the review of the studies. Firstly, SC has been conceptualised and defined by some authors however these definitions have not been adhered to or used consistently. Researchers were found to selectively pick different facets of SC to study. As a result, the majority of researchers have constructed their own measurement tools. These inconsistencies in the way researchers have applied, and operationalised SC weakens the overall conclusions that can be drawn from the findings. More specifically, the definitions of SC appeared to be vulnerable to subjective interpretation, resulting in the creation of tools that corresponded to the researcher's area of interest. The conclusions a researcher draws from their findings may therefore be strongly affected by their assumptions and optimism of the rewards that can be gained from SC within healthcare organisations (Inaba, 2012). Consequently, the associations found within the studies could differ depending upon how SC is understood and applied. Due to these difficulties, accurately identifying the key SC facets that impact upon organisational and workforce outcomes is therefore problematic.

The review found that the described connections within the identified research lacked theoretical understanding as to ‘how’ or ‘why’ SC is significant to the discovered relationships. Furthermore, the connections appeared to be extremely broad in some cases. For instance, work engagement was linked to bonding, bridging and linking SC. The weight of the influence of SC facets upon workforce and organisational factors was also not indicated. The research studies did not take into account the individual or cultural differences that may have existed between participants in how they interpreted the items of SC such as trust. Sweeping recommendations were also made by some researchers who suggested the need for healthcare organisations to “reinforce” or “invest” in SC, with no clear direction on how to achieve this goal. Researchers failed to report the mechanisms or processes that encourage the development of SC, which would have enabled the reader to fully comprehend the ideological concept and its relationship with the organisational/workforce outcomes. The perspectives that consider the undesirable and unconstructive elements of networks with high bonding SC (Putnam, 2001) also appeared to be neglected within the extant literature.

The majority of the findings cannot be generalised as they have come from specific settings and different countries. Inaba (2012) contends that the social capital within a group is dependent upon its history, which makes the groups’ interactions, norms and characteristics unique. Researchers noted that other confounder variables such as personality traits, may have impacted upon the findings.

Clinical Implications It is clear that SC offers a compelling and attractive ideological framework to understand healthcare organisational behaviour. For instance, it can inform social processes that occur within collective interactions and the forces of social connection, as observed by sociologists who made the concept popular (e.g. Bourdieu, 1986; Putnam, 1993, 2001).

In regard to clinical psychology training and practice, SC represents a possible valuable concept to the profession. More specifically, clinical psychology training courses may consider incorporating a module on SC into their academic curriculum. The module could teach trainee clinical psychologists the theory and the evidence-base that exists on its application within practice. Hofmeyer and Marck's (2008) SC framework provides a clear structure that may help trainees foster SC while on placement or when qualified. The framework recommends the development of five key features of SC, including (1) social networks, (2) trust and solidarity, (3) collective action and cooperation, (4) communication and knowledge sharing, (5) social cohesion and inclusion. Great importance has been placed on clinical psychologists to become leaders in their profession and within the services that they operate within. By holding a leadership position, psychologists can help promote these five SC features. Eliacin et al. (2018) suggest that staff members should engage in group supervision, which could be facilitated by psychologists. Group supervision offers a valuable space that may enable the sharing of information, joint problem-solving, the development of psychological safety and trust, which promotes positive risk-taking and reduces social isolation of staff members (Rapp et al., 2015). Furthermore, the collective supportive process of group supervision has been found to improve staff resilience and reduce risks of burnout (Barak et al., 2009).

To establish SC within MDTs, activities that promote the development of SC facets may need to be valued and encouraged by all staff members. For instance, services may consider developing clear service pathways that encourage different professional groups to work collaboratively with another to effectively exchange information and provide high-quality care. Other activities that have been shown to foster SC include social events such as team away days, conferences, and training (Eliacin et al., 2018). Organisationally, team leaders may consider creating policies on team working that promote the value of open communication and joint-working between different professional groups and hierarchical levels. Establishing these five

facets of SC may create services defined by innovation, compassion, and resilience, which could have a ripple effect on the quality of care received by service users. More specifically, effective communication between MDT staff members may result in the delivery of efficient services and care. Furthermore, increasing the well-being of staff and fostering compassion in the workforce has been linked to improved patient care (Maben et al., 2018).

However, caution must be taken to carefully interpret the data and the conclusions drawn from research findings as the studies may overclaim the positive benefits of SC. Moreover, there appears to be a bias towards the publication of positive outcomes, and little is known about the undesirable effects of SC. Given the identified limitations, the recommendation of commodifying and transforming SC into an organisational improvement tool should be considered with care. As seen with the Ernst et al. (2018) study, enhancing SC in practice is not as easy as it appears in theory. Moreover, organisations should consider the ethical consequences and the possibly dysfunctional mechanism of using SC measures to audit organisations. If SC is to be considered as an organisational initiative, the responsibility must be owned by all levels of a service.

Future Research. Further insight is needed to understand the mechanisms and processes that lead to the development of SC as well as how individual facets of SC emerge in a network. Additional understanding is required on when, how, and why SC can produce positive or negative organisational and workforce outcomes.

Conclusion

Research within healthcare organisations that considers the exploration of SC using samples of multi-disciplinary teams and services appears to be a relatively new

venture. In response to the research question, a number of workforce and organisational outcomes were found to be positively associated with SC. However, the review demonstrated that the studies were not strong methodologically, nor did they exhibit theoretical rigor. In particular, the studies may have reflected the subjective interest of researchers, who selectively investigated different SC facets using a variety of definitions, which acted as a guide in the creation of multiple SC tools. As a result, the interpretation and conclusions drawn from the research findings needed to be considered with caution due to the possible presence of subjective bias. The accurate identification of how and why each SC facet linked to different reported outcomes was also not established. The overreporting of positive and optimistic findings, may have led researchers to overclaim the benefits of SC, encouraging healthcare organisations to foster SC, with minimal guidance. Further research is needed to address the identified limitations and to fully comprehend the theoretical basis of SC within healthcare organisational settings.

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Appendix A - Summary of the social capital definition used, the social capital dimensions studied and the measures

	Study	Definition of SC	SC dimensions	Measures	Validity and reliability
1	Lee (2013)	**"***the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition*" (Bourdieu, 1986, taken from Lee, 2013, p. 82)	Used SC to explain understand the construct of relational coordination Structural SC Cognitive SC Relational SC	Used a previously validated tool on relational coordination (RC) created by Gittell et al. (2000). SC was measured using a 16-item survey created from the structural, cognitive and relational SC facet (Nahapiet & Ghoshal, 1998). Structural SC was represented by open communication (Contractor, Wasserman & Faust, 2006; relational SC was represented by trust and liking (Gianvito, 2007; Levin & Cross, 2004; Tsai & Ghoshal, 1998) and cognitive SC was represented by shared language and shared interpretation (Gianvito, 2007; Moran, 2005; Tsai & Ghoshal, 1998). To measure formal coordination 3 items were taken from Gittell (2002) surveys.	Construct validity and discriminatory validity confirmed. CFA model found a good fit of the model with the data (CFI= 0.91, TLI= 0.89; RMSEA = 0.100, X^2 =321.79, df= 177, p<.001) RC – Cronbach's α = 0.81 SC- Cronbach's α = 0.84 Formal coordination mechanism - Cronbach's α = 0.21
2	Huby, Harris, Powell, Kielman, Sheikh, Williams & Pinnock (2014)	"*social capital refers to skills, influence, knowledge, and information that become productive at the point when they are accessed and deployed through individual transactions in networks of social connections"* (Bourdieu, 1985; Coleman, 1988) (Huby et al. 2014, p.403).	Bonding (Putnam, 2000), Bridging (Burt 1992), Linking (Narayan, 1999. Trust (Garfinkel, 2011) Norms, obligations and expectations.	N/A – qualitative study	N/A – qualitative study
3	Ernst, Hindhede, & Andersen, (2018)	Uses Bourdieu's (1985, p.247) definition of SC - "*the aggregate of the actual or potential resources which are linked to durable networks of more or less institutionalised relationships of mutual acquaintance or recognition"*	Bourdieu (1985) Coleman (1988) – "*public common good*" (Ernst et al. 2018, p. 640), trust, safety and reciprocity.	N/A – ethnographic study	N/A – ethnographic study

			Putnam (2003) – networks, norms and trust. SC regarded as measurable.			
4	Strömgren, Eriksson, Bergman & Dellve (2016)	Concepts used and defined as: "*Trust can be seen to exist and move in both vertical and horizontal directions, where the horizontal trust concerns interpersonal relationships at the same hierarchical level, and the vertical the different levels of power, for example, between management and employees (Szreter & Woolcock, 2004). Perceptions of reciprocity are, according to Woolcock (1998), manifested at the horizontal relational level between employees. Reciprocity is viewed as norms of equal expectations of each other concerning behaviour, such that actions in the present will in the future yield commensurate returns as well as obligations of repayments of favors"* (Suzuki et al. 2010; Tansley & Newell, 2007)." (Strömgren, Eriksson, Bergman & Dellve, 2016, p. 117). Reciprocity is considered between employees. "*Recognition manifests, for example, as mutual feelings of respect and gratitude among people related to the network"* (Bourdieu, 1986; Nahapiet & Ghoshal, 1998). (Strömgren,	Perceptions of vertical and horizontal trust, reciprocity and recognition (Harpham et al. 2012; Pejtersen et al. 2010). Mutual trust between employees Trust between employees and managers Reciprocity and recognition	Job satisfaction • measured by an index consisting of six items from the COPSOQ II (Cronbach's alpha 0.82). Work engagement • measured by the Swedish Scale for Work Engagement and Burnout (SWEBO) (Hultell & Gustavsson, 2010). Engagement in clinical improvements • Two indexes were developed and tested for internal consistency. • *Engagement in clinical improvements of patient safety* consisted of four items. • *Engagement in clinical improvements of quality of care* consisted of three items. Social capital • *Reciprocity* was assessed with an index from the Modern Work life Questionnaire (Oxenstierna et al. 2008), consisting of three items: (1) At my workplace we care for each other, (2) At my workplace we treat each other with respect and (3) At my workplace I feel safe and accepted. • *Trust regarding management* was assessed with an index consisting of two items: (1) Can you trust the information that comes from the management? and (2) Does the management withhold important information from the employees? (reversed score). • *Mutual trust between employees* was assessed with an index consisting of	Engagement in clinical improvements • Pilot testing of these scales was conducted by individual interviews with physicians, registered nurses and assistant nurses (n = 11). Found good face validity. Swedish Scale for Work Engagement and Burnout (SWEBO) construct validity confirmed by Hultell and Gustavsson (2010). COPSOQ II construct validity confirmed by Bjorner and Pejtersen (2010). MWQ validity confirmed by Oxenstierna et al. (2008). **Reliability** • COPSOQ II (Cronbach's α = 0.82). • SWEBO: vigour (Cronbach's α = 0.83), dedication (Cronbach's α = 0.84) and attentiveness (Cronbach's α = 0.85). • *Engagement in clinical improvements of patient safety* - Cronbach's α = 0.80 • *Engagement in clinical improvements of quality of care* - Cronbach's α = 0.72 • Modern Work life Questionnaire (Oxenstierna et al. 2008), Cronbach's alpha = 0.89 • Recognition- Cronbach's α = 0.82 • SC - Cronbach's α = 0.73

		Eriksson, Bergman & Dellve, 2016, p. 117 -118).		two items: (1) Do the employees withhold information from the management? and (2) Do the employees in general trust each other? • *Recognition* was formulated as an index consisting of three items: (1) Is your work recognized and appreciated by the management? and (2) Does the management at your workplace respect you? (3) Are you treated fairly at your workplace? • The indexes trust regarding management, mutual trust between employees and recognition were from COPSOQ II. *Social capital* was calculated as the sum of reciprocity, trust regarding management, mutual trust between employees and recognition.	
5	Perzynski, Caron, Margolius, & Sudano (2018)	Workplace social capital defined "*the combination of information sharing, shared vision, and trust between team members*" (Perzynski et al. 2018, p. 2). Bonding SC – referring to "*the strength and characteristics internal to homogenous groups or teams* (Alder & Kwon, 2002; Gulliford, Jack, Adams, & Ukoumunne, 2004; Leonard, 2004; Newell, Tansley, & Huang, 2004; Woolcock & Narayan, 2000).	Trust, shared vision and information sharing. Bonding SC Structural, relational and cognitive SC.	Perzynski et al. (2018) created the "*Practice Experience Survey*" consisting of 23 items: 1. To measure workplace social capital, they drew on the work of Leana and Pi (2006), using survey items based on Naphapiet and Ghoshal's (1998) 3 facets of SC (structural, relational, and cognitive). The structural facet was measured using items adapted from items developed by Hyatt and Ruddy (1997). Trust was measured from 3 items adapted from work conducted by Pearce et al. (1998). The cognitive facet of SC was assess using 3 items adapted from research in organisational behaviour by Tsai (2003). 2. To measure employee outcomes burnout was measured using a 5-item scale utilised by Conley and Woosley (2000).	CFA model found an adequate to good fit of the model with the data (CFI =.97, TLI=.94. RMSA=.075, X^2 =59.9, df= 24, p<.001). Trust – Cronbach's α = .805 Shared vision – Cronbach's α = .828 Information sharing – Cronbach's α =.788 Workplace SC- Cronbach's α =.903 Burnout - Cronbach's α =.937 Satisfaction - Cronbach's α =.861

				3. To measure job satisfaction, 6 items were created from work completed by Allen and Meyer (1990).	
6	Huang, Tsai, & Wang (2012)	"*Social trust refers to the expectation that an individual or institution will act competently, fairly, openly, and considerately"* (Mohseni & Lindstrom, 2007; Putnam, 1993, taken from Huang, Tsai, & Wang 2012, p.1203). Considers SC definitions from Bourdieu (1985), Coleman (1990, Putnam, Leonardi, and Nanetti (1993).	SC dimension of social trust Interpersonal trust – "general trust in others, involving an individual or group relying on the word, promise or verbal or written statement of another individual (Rotter, 1967, taken from Huang, Tsai, & Wang 2012, p.1203 Institutional trust – "the trust of citizens in institutions, particularly the public institutions within society (Lindstrong & Janzon, 2007, taken from Huang, Tsai, & Wang 2012, p.1203).	Questionnaire measured: 1. Interpersonal trust (Lindstrom & Janzon, 2007; Mohseni & Lindstrom, 2007), 2. Health promotion based on the WHO manual and self-assessment forms for implementing health promotion in hospitals in Europe (World Health Organization, 2006), 3. Job satisfaction (Ommen et al. 2009).	CFA model found a good fit of the model with the data (CFI =.96, TLI=.96. RMSA=.0515, X^2/df=8.551, p<.001). . **Reliability** Cronbach's α of subscales ranged from 0.85 to 0.94.
7	Nitzsche, Kuntz, & Miedaner, (2017)	The study uses definitions of SC that regard it as a "*collective good*" (Coleman, 1990, 1988). SC is regarded as a "*collective good that makes collective actions easier and is available to all actors within a given collective"* (Coleman, 1990, 1988) (Nitzsche et al. 2017, p.140).	SC principles considered – "*Mutual trust, shared values and standards, and a willingness to cooperate based on reciprocity*" (Nitzche, 2017, p. 140).	1. Survey Work-Home Interaction – Nijmegen (SWING) scale for negative work-home interaction (Geurts et al. 2005). 2. Social capital instrument developed by Pfaff et al. (2004).	Survey Work-Home Interaction validity and reliability found by Geurts et al. (2005). Social Capital instrument validity and reliability established by Pfaff et al. (2004).

		Putnam's SC – "*features of social-network, norms, and trust then enable participants to act together more effectively to pursue shared objectives*" (Putnam, 1995, p. 664-665)			
8	Avgar, Kyung Lee, Chung, (2014)	Used Nahapiet & Ghoshal's (1998) definition of SC - "*as the sum of the actual and potential resources embedded within, available through, and derived from networks of relationships possessed by the individual or social unit"* (Nahapiet & Ghoshal, 1998, p.243).	Focus on relational dimension of SC – trust, reciprocity (Nahapiet & Ghoshal, 1998; Tsai & Ghoshal, 1998) Bonding (Putnam, 2000)	1. Job stress measured using two items from Motowildo et al.'s (1986) subjective stress measure. Including: "my job is extremely stressful" and "I feel a great deal of stress because of my work" 2. Turnover intentions measure a single item adapted from Colarelli (1984) – "I often think about leaving this nursing home". 3. Perception of task conflict measured using 3 items adapted from Jehn & Mannix (2001). Sample item: "How much friction is there among members in your work unit?" 4. Perception of relationship conflict measured using 3 survey items adapted from Jenh and Mannix (2001). 5. Unit-level SC – 5 items adapted from Subramaniam and Youndt (2005) – focused on levels of information sharing, overall level of communication and the extent to which they exchange and share ideas with people within their unit and those in other units.	CFA model found a good fit of the model with the data (CFI =.91, GFI=.94. RMSA=.063, X^2 =367.84, df= 91, p<.001). Discriminant validity confirmed. **Reliability** Intraclass correlation coefficient (ICC) • *Job stress measure*: Cronbach's α was 0.73 and ICC 0.01 and F=1.07, *p*>0.10 • *Turnover measure*: Cronbach's α was 0.76 and ICC was 0.02 and F= 1.20, *p*<0.10 • *SC measure*: Cronbach's α was 0.69 and ICC 1 =0.03; F=1.29, *p*<0.05)
9	Strömgren, Eriksson, Ahlstrom, Bergman & Dellve (2017)	A specific definition of SC not provided. Facets of SC are discussed. Facets include: norm of reciprocity, recognition, trust, relationships (Bourdieu, 1985; Coleman, 1988; Macinko & Starfield, 2001; Putnam, 2000; King, 2004, Nahapiet & Ghoshal, 1998).	Considers SC a relational resource. It also considers the facets of networks, norms, trust, coordination and collaboration for the common	Leadership quality • To assess quality of leadership an index from the COPSOQ II (Pejtersen et al. 2010) was used. Eight items were within the index. Social Capital • Reciprocity was assessed using an index from Modern Worklife	COPSOQ II construct validity confirmed by Bjorner and Pejtersen (2010) MWQ validity confirmed by Oxenstierna et al. (2008). **Reliability** • COPSOQ II - Cronbach's α = 0.94

			good (Olesen et al. 2008). Mutual trust between employees Trust between employees and managers Reciprocity and recognition.	Questionnaire (MWQ) (Oxenstierna et al. 2008). • COPSOQ II (Pejtersen et al. 2010) was used to assess trust regarding management, mutual trust between employees and recognition. • SC was calculated as a sum of trust regarding management, mutual trust between employees and recognition and reciprocity	• MWQ – Cronbach's α = 0.73
10	Mura, Lettieri, Radaelli & Spiller (2016)	Structural SC "*impersonal configuration of linkages between people or units*" (Nahapiet & Ghoshal, 1998, p.244). Relational SC – "*affective ties in which connected individuals share mutual identifications and interpersonal trust"* (Makela & Brewster, 2009) (Mura et al. 2016, p. 1228).	Structural and relational SC (Nahapiet & Ghoshal, 1998)	• Structural SC measure by 4 items adapted from Tsai & Ghoshal (1989) and Subramaniam & Youndt (2005). • Relational SC was measured by a 4-item scale adapted from Kale et al. (2000) and Wasko & Faraj (2005). • Organisational capital measured by a 4-item scale adapted from Subramaniam & Youndt (2005). • Knowledge sharing block – sharing best practice, sharing mistakes and seeking feedback measured by 4-items scale drawn from Huy et al. (2010). • Idea generation, idea promotion and idea implementation – were considered to capture the dimensions of IWB. Items for these constructs were drawn from de Jong & den Hartog (2010).	The factor loadings were within the 0.70 threshold, confirming convergent validity. **Reliability** Composite reliabilities and Cronbach's α of all scales were above the 0.70.
11	Fujita, Kawakam, Ando, Inoue, Tsuno, Kurioka, & Kawachi (2016)	SC defined as "*features of social organisations, such as civic participation, norms of reciprocity, and trust in others, which facilitates cooperation for mutual benefit*" (Kawachi, Subramanian, & Kim, 2008, taken from Fujita, et al. 266).	Workplace social capital is related to the level of SC analysis. Workplace SC concerns studying within organisations amongst work colleagues (Kawachi, 1999).	Workplace SC was measured using the Japanese version of Workplace Social Capital Scale (Kouvonen, Kivimäki, Vahetra et al. 2006; Odagiri, Ohya, Inoue et al. 2010) Work engagement was measure using the Japanese short version of Utretcht Work Engagement Scale (Schaufeli, Bakker & Salanova, 2006; Shimazu, Schaufeli & Kosugi, 2008)	A confirmatory factor analysis of the workplace social capital scale was conducted with data to test one-factor and three-factor models. The three-factor model fit the data best. (chi-square=64.179, df=17,GFI=0.966, AGFI=0.928, RMSEA=0.080, CFI=0.984, AIC= 102.179, ECVI=0.233) compared with the one-factor model (chi-square=779.005,

			SC principles considered: bonding, bridging and linking.	Psychosocial work characteristics (e.g. job demand, job control, and workplace support) were measured using three subscales of the Brief Job Stress Questionnaire (Shimomitsu, Haratani, Nakamura et al. 1999).	df=20, GFI=0.684, AGFI=0.431, RMSEA= 0.294, CFI=0.744, AIC=811.005, ECVI=1.847) The inter-correlations between the three factors were high (Pearson r.0.6 to 0.9), there is a risk of multicollinearity. Japanese short version of Utretcht Work Engagement Scale validity confirmed by Schaufeli, Bakker and Salanova (2006) and Shimazu et al., (2008) **Reliability** Japanese version of Workplace Social Capital Scale- Cronbach's α = 0.92 Japanese short version of Utretcht Work Engagement Scale - Cronbach's α = 0.93 Job demand - Cronbach's α = 0.076 Job control - Cronbach's α = 0.64 Workplace support - Cronbach's α = 0.85
12	Strömgren (2017)	No clear definition of SC provided. Identifies an interest in SC principles including: trust, reciprocity and recognition (Bourdieu, 1986; Tansley & Newell, 2007; Harpham, Grant, & Thomas, 2002; Pejtersen et al. 2010; Kouvonen et al. 2006).	Mutual trust between employees Trust between employees and managers Reciprocity and recognition	1. Recognition, trust regarding management, and mutual trust between employees were measured by The Copenhagen Psychosocial Questionnaire (COPSOQ II) (Pejtersen et al. 2010) 2. Reciprocity was measured by the Modern Worklife Questionnaire (MWQ) (Oxenstierna et al. 2008). 3. Job demands were assessed using 2 validated indexes – quantitative demands (four items) and work pace (3 items) 4. Job resources were measured using indexes from COPSOQ II. These included: predictability (two items), influence (four items), role clarity (three items), development opportunities (four items) and leadership quality (eight items)	COPSOQ II construct validity confirmed by Bjorner and Pejtersen (2010). MWQ validity confirmed by Oxenstierna et al. (2008). **Reliability** SC - COPSOQ II : Cronbach's α = 0.73 *Job demand*: • quantitative demands - Cronbach's α = 0.83 • work pace- Cronbach's α = 0.83 *Job resources* • predictability- Cronbach's α = 0.61 • influence- Cronbach's α = 0.70 • role clarity - Cronbach's α = 0.78 • development opportunities - Cronbach's α = 0.69

				• leadership quality - Cronbach's α = 0.93 MWQ reliability confirmed by Oxenstierna et al. (2008).	
13	Jensen, Flachs, Skakon, Rod, & Bonde, (2018)	SC "*resources that are accessed by individuals as a result of their membership of a network or group*" (Kawachi & Berkman, 2014, taken from Jensen et al. 2018, p. 1-2)	Trust, reciprocity and social cohesion with a group of co-workers (Kawachi & Berkman, 2014).	Work unit social capital • The social capital scale ranging from 0-100 was based on eight employee reported items from the work environment survey assessing collaboration, and trust/organisational justice. • Five of the items came from the COPSOQ II • Three items were selected by four specialists in occupational medicine	Correlation coefficients between all items ranged from 0.24 – 0.74 ($p < 0.001$) **Reliability** Cronbach's α = 0.85

Appendix B - Journal of Interprofessional Care Instruction for authors

About the Journal

Journal of Interprofessional Care is an international, peer-reviewed journal publishing high-quality, original research. Please see the journal's Aims & Scope for information about its focus and peer-review policy.
Please note that this journal only publishes manuscripts in English.

Journal of Interprofessional Care aims to disseminate research and new developments in the field of interprofessional education and practice. We welcome contributions containing an explicit interprofessional focus, and involving a range of settings, professions, and fields. Areas of practice covered include primary, community and hospital care, health education and public health, and beyond health and social care into fields such as criminal justice and primary/elementary education. Papers introducing additional interprofessional views, for example, from a community development or environmental design perspective, are welcome. The Journal is disseminated internationally and encourages submissions from around the world.

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The *Journal of Interprofessional Care* publishes the following types of manuscripts:
1. Peer-reviewed Original Articles (research studies, systematic/analytical reviews, theoretical papers) that focus on interprofessional education and/or practice, and add to the conceptual, empirical or theoretical knowledge of the interprofessional field.
2. Peer-reviewed Short Reports that describe research plans, studies in progress or recently completed, or an interprofessional innovation.
3. Peer-reviewed Interprofessional Education and Practice (IPEP) Guides that offer practical advice on successfully undertaking various interprofessional activities.
4. Guest Editorials that discuss a salient issue related to interprofessional education and practice.
5. Book and Report Reviews that offer summaries of recently published books and reports (published on the Journal's Blog).
Original Articles should usually have no more than 6,000 words (including abstract, main text and references). The total number of words should be indicated in the appropriate space in the ScholarOne Manuscripts system during the online submission process. Authors wishing to submit manuscripts than exceed 6,000 words should contact the Editor-in-Chief before submission.
Short Reports are submissions that describe research plans, studies in progress or recently completed, or innovative initiatives in the interprofessional field. These papers have a maximum of 1,500 words and six references, and may contain one table or figure. Short Reports should also have an abstract no more than 200 words written in paragraph form (not structured with sub-headings). Authors should include 4 to 6 keywords. The text should in general, but not necessarily, be divided into sections with

the headings: Introduction, Methods, Results, Discussion, and Conclusion. Short Reports should also follow instructions for formatting of abstracts, tables/figures, endnotes, and appendices as noted above. References should be APA style.

Interprofessional Education and Practice (IPEP) Guides aim to provide practical advice for novice and more experienced colleagues involved in the design, development, implementation, evaluation, and assessment of interprofessional activities. IPEP Guides should be between 4,000 and 5,000 words in length and should include: an overview of the IPEP activity; approach to implementing the activity; 10–20 key guidance issues (e.g. lessons learned); key resources and references. IPEP Guides should also follow instructions for formatting of abstracts, tables/figures, endnotes, and appendices; and the formatting of references.

Guest Editorials are usually invited but we welcome unsolicited submissions. Editorials aim to discuss a key issue or element related to the interprofessional field. Suggestions for possible editorials need to be discussed with the Editor-in-Chief before submission.

Book and Report Reviews, published on the Journal's Blog, summarize the key contents of recently published books and reports which focus on interprofessional issues. In general, reviews should be approximately 500 words. Suggestions for materials for the reviews section should be discussed with the Books/Reviews Editor before submission.

Articles should be written with the following elements in the following order: title page; abstract; keywords; main text introduction, background, methods (including research design, sample/participants, data collection, data analysis, ethical considerations), results, discussion; acknowledgments; declaration of interest statement; references; appendices (as appropriate); table(s) with caption(s) (on individual pages); figures; figure captions (as a list)

Articles should contain an unstructured abstract of 200 words.
Articles should contain between 4 and 6 keywords. Read making your article more discoverable, including information on choosing a title and search engine optimization.

Style Guidelines
Please refer to these quick style guidelines when preparing your paper, rather than any published articles or a sample copy.
Please use American spelling style consistently throughout your manuscript.
Please use double quotation marks, except where "a quotation is 'within' a quotation".
Please note that long quotations should be indented and single spaced without quotation marks.

Terminology
Given the ongoing terminological uncertainty within the interprofessional field, the Journal now employs a range of key terms, each with an associated definition. Submitting authors need to ensure they select the term that best describes the activities in their work and use the terms consistently:
Collaborative patient-centred practice is a type of arrangement designed to promote the participation patients and their families within a context of collaborative practice.

Collaboration is an active and on-going partnership, often between people from diverse backgrounds, who work together to solve problems or provide services.
Interdisciplinary teamwork relates to the collaborative efforts undertaken by individuals from different disciplines such as psychology, anthropology, economics, geography, political science and computer science.

Interprofessional collaboration is a type of interprofessional work which involves different health and social care professions who regularly come together to solve problems or provide services.

Interprofessional coordination is a type of work, similar to interprofessional collaboration (see above) as it involves different health and social care professions. It differs as it is a 'looser' form of working arrangement whereby interprofessional communication and discussion may be less frequent in nature.

Interprofessional education occurs when members (or students) of two or more health and/or social care professions engage in learning with, from and about each other to improve collaboration and the delivery of care.

Interprofessional learning is learning arising from interaction between members (or students) of two or more professions. This may be a product of interprofessional education or happen spontaneously in the workplace or in education settings and therefore be serendipitous in nature.

Interprofessional networks are loosely organised groups of individuals from different health and social care professions who meet and work together on a periodic basis.
Interprofessional teamwork is a type of work which involves different health and/or social professions who share a team identity and work closely together in an integrated and interdependent manner to solve problems and deliver services.

Intraprofessional is a term which describes any activity which is undertaken by individuals within the same profession.

Multidisciplinary teamwork is an approach like interprofessional teamwork (see above), but differs as the team members are composed from different academic disciplines (psychology, sociology, mathematics) rather than from different professions such as medicine, nursing and social work.

Professions are occupational groups who in general provide services to others, such as nurses or social workers. It can be used as a term of self-ascription to avoid the need to apply regulatory criteria which differ between groups.

Transdisciplinary is an activity designed to promote generic working: a process whereby the activities of one discipline are undertaken by members of another.
Transprofessional is an activity designed to promote generic working: a process whereby the activities of one professional group are undertaken by members of another.

Unidisciplinary is an activity undertaken by one discipline alone.

These terms are based on glossaries published in: Barr, H., Koppel, I., Reeves, S., Hammick, M. & Freeth, D. (2005). *Effective interprofessional education: Assumption, argument and evidence.* Oxford, UK: Blackwell; and also in: Reeves, S., Lewin, S., Espin, S. & Zwarenstein, M. (2010). *Interprofessional teamwork for health and social care.* London, UK: Blackwell-Wiley.

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Checklist: What to Include

Author details. All authors of a manuscript should include their full name and affiliation on the cover page of the manuscript. Where available, please also include ORCiDs and social media handles (Facebook, Twitter or LinkedIn). One author will need to be identified as the corresponding author, with their email address normally displayed in the article PDF (depending on the journal) and the online article. Authors' affiliations are the affiliations where the research was conducted. If any of the named co-authors moves affiliation during the peer-review process, the new affiliation can be given as a footnote. Please note that no changes to affiliation can be made after your paper is accepted. Read more on authorship.

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EMPIRICAL PAPER

Exploring the social processes occurring within and beyond Reflective Practice Groups: perspectives of attendees and non-attendees

Trainee Name: **Sabinah Janally**

Primary Research Supervisors: **Dr Ian Frampton**

Senior Lecturers, University of Exeter

Secondary Research Supervisors: **Dr Janet Smithson**

Senior Lecturer, University of Exeter

Dr Tony Wainwright

Senior Lecturer, University of Exeter

Target Journal: Reflective Practice - International and Multidisciplinary Perspectives

Word Count: 8,800 words (excluding abstract, table of contents, list of figures, tables, figures, references, footnotes, appendices)

Submitted in partial fulfilment of requirements for the Doctorate Degree in Clinical Psychology, University of Exeter

Abstract

Aims: The aim of the research was to explore healthcare staff members' perceptions and experiences of reflective practice groups (RPGs) that had been conducted in a learning disability service. The research also aimed to gain the perspective of both RPG attendees and non-attendees (people who did not engage in the groups). Obtaining the perspective of non-attendees provided a valuable and often overlooked insight into the social processes occurring outside the RPGs.

Methods: A qualitative grounded theory method was adopted to address the research aims. The study took place within a learning disability service that had implemented RPGs for five months. Observational data (including audio-recordings and field notes) were collected on three RPGs planning meetings and two facilitator supervision sessions. Semi-structured interviews were conducted with the RPG facilitators (N=3) attendees (N=5) and non-attendees (N=5). The observation and interview data were analysed using a social constructionist approach to grounded theory.

Results: Three main themes emerged from the analysis. Theme 1 described the collective process occurring within the RPGs that attended to unmet needs and resulted in the development of shared connections, restorative experiences, as well as mutual support. Theme 2 illustrated how the RPGs led to the enhancement of personal, professional and team identities. The social processes occurring within the group also created conflicts in how people navigated their multiple identities. Theme 3 identified the divisions and differences that existed beyond the RPGs that may have impacted upon people's engagement in the group.

Conclusion: Social identity theory and social capital theory offered useful frameworks to understand the collective processes occurring with and beyond the RPGs in a learning disability service. The findings suggest that RPGs could represent a

significant team-based intervention that promotes collaborative working, solidarity and commitment. Further research is needed to explore the relevance and strength of these theories to the implementation of and staff engagement with RPGs.

Keywords: Reflective practice groups, social identity, social capital theory, healthcare, learning disability service.

Introduction

The care quality commission (CQC) guidelines (CQC, 2014) have emphasised the need for services to prioritise staff wellbeing in order to improve staff engagement as well as the effective and safe delivery of healthcare (George, 2016). Interventions such as reflective practice groups (RPGs) have been recommended as a strategy that moves the onus of responsibility for fostering sustainable and high-quality organisations from individual staff members to the service as a whole (George, 2016). However, there is limited empirical research on the use of RPGs as a staff-based approach within National Health Service (NHS) organisations (Heneghan, Wright, & Watson, 2014). Thus, the present study aimed to add to the evidence-base of RPGs, by using a grounded theory approach to explore the individual and social processes occurring within and beyond the RPGs that had been implemented in a learning disability (LD) service. The analysis of the emerging data was considered in the light of social identity theory (SIT) (Tajfel & Turner, 1979) together with social capital (SC) theory (Nahapiet & Ghoshal, 1998; Szreter & Woolcook, 2004; Putnam, 2001).

The NHS context

The NHS continues to battle with dwindling resources and financial debt, leading to unrelenting organisational reforms and pressurised staff (Alderwick & Ham, 2016). Financial efficiency and subsequent restrictions have resulted in organisational cultures characterised by stress and disengagement (Campling, 2016). A recent 2018 NHS staff survey revealed 38.4% of staff were affected by occupational stress, which has increased since 2016 (36.7%) (NHS England, 2018). In the context of LD services, Mutkins, Brown & Thorsteinsson (2011) found LD healthcare workers were

more likely to experience depression and burnout symptoms in organisations with low social support.

The issues have been recognised as precursors to the systematic failures identified by the Mid Staffordshire inquiry (Francis, 2013). Employee wellbeing has been found to be an antecedent, as opposed to a consequence of patient care performance (Maben et al., 2012). Abbasi (2012) suggests the emotional needs of NHS staff are often overshadowed by the needs of patients. Finding time for mutual professional support and self-care is often difficult within the current NHS climate (Wool, 2015).

To manage the complexity encountered by healthcare teams, Campling (2016) recommended the implementation of RPGs to improve teamwork, promote wellbeing and bolster the NHS (Heffernan, 2015). By attending RPGs individuals from distinct professional groups may also create a better understanding of one another's professions, principles and practices (Heneghan, Wright, & Watson, 2014).

Reflective practice (RP) and RPGs. Reflection and RP are ill-defined concepts (Fisher, Chew, & Leow, 2015). Gillmer and Marckus (2003) argue this is because reflection does not have a theoretical basis, making it challenging to operationalise. Overall, reflection and RP can be seen as *"a conscious and focused way of thinking that helps one to learn about practice and make sense of experiences, as well as leading to change in practice"* (Schutz, 2007 cited in Knight, Sperlinger, & Maltby, 2010, p.428). Harrison and Fopma-Loy (2010) found engaging in reflection

encourages problem-based learning and improves self-contemplation, enabling clinicians to make sense of challenging situations.

RP in a group setting involves people engaging in a shared reflective process. It is a space that enables participants *"to learn about and experience group dynamics",* and which provides *"a means of aiding 'reflection-on-action', reflection about 'impact on others', along with reflection 'about self'"* (Knight, Sperlinger, & Maltby, 2010, p. 428). Group discussions can be a powerful process, producing deeper understanding than individual reflection (Börjesson, Cedersund, & Bengtsson, 2015). The supportive environment promotes care for self and colleagues (Thorndycraft & McCabe, 2008). Additionally, the reflective process provides insight into how group dynamics influence collective beliefs and values, helping to develop team cohesiveness (Davenport, 2002). In recent years, Schwartz Centred Rounds ® (SCR®) (The Point of Care Foundation, 2016), which are a form of RPG, have gained popularity as an effective staff-based intervention enabling people to reflect on emotional, interpersonal aspects of care and issues in their healthcare practice (Maben et al., 2018).

Social processes within and beyond RPGs. Social capital (SC) and social identity theory (SIT) are relevant and significant concepts to consider, due to their theoretical conceptualisation of social processes that occur within, and external to, groups such as RPGs. Within the RPG, these processes may include the formation of a newly established network, involving the socialisation of members, which may lead to the development of shared norms and values (Stull & Blue, 2016). Beyond the RPG, the possession of several identities related to one's profession, level of responsibility and connection to the multi-disciplinary team may influence people's

engagement with the RPG (Turner, 1986; Forsyth & Mason, 2017). Moreover, self-perception and perceptions of others' social identities may influence people's decisions to access the groups, particularly when potential attendees conceptualise who the groups are intended for.

Social capital. Social capital theory offers great value to the study of collective processes. SC can be studied at different levels starting from the individual, to organisations and within communities in society. This study focusses on how SC operates at the organisational level, within the context of an LD service. The study adopts Cohen and Prursak's (2001) definition of SC in organisations as it provides a clear understanding of the social human processes that may emerge between individual working within the same healthcare service.

"*Organisational social capital refers to trust, mutual understanding, and shared values and behaviours that bind the members of human networks and communities and make cooperative action possible*" (p.3).

Two fundamental frameworks of SC provide further understanding of the key structural components of the concept, which are relevant to the study of RPGs. Firstly, Nahapiet and Ghoshal's (1998) SC consists of three facets: structural, relational and cognitive. Structural SC concerns the interactive patterns between people within a network. Cognitive SC refers to the development of shared language, vision, and understandings of network members. Finally, relational SC pertains to interpersonal interactions of group members, which foster trust, collective norms, obligations and a shared identity.

The second relevant social capital framework relates to an additional three structures proposed by Putnam (2001) and Szreter and Woolcook (2004). These structures include bonding, bridging, and linking. Bonding SC is a dimension that exists between individuals within a group who share common characteristics such as status level. Bonding SC is theorised to generate a shared identity, mutual connection, solidarity, collective goals and access to resources (Putnam, 2001). The challenge of bonding SC is that it can create a closed environment by encouraging homogeneity, which prevents access to external knowledge, inhibiting the growth of the group and can result in the exclusion of others perceived as dissimilar. Bridging SC concerns the interaction and the formation of connections between people from different groups who possess a similar status. These connections cross social margins resulting in the attainment of new knowledge (Szreter & Woolcook, 2004; Woolcook, 2001). Finally, linking SC refers to relationships that span hierarchical boundaries, for example where leaders are connected with staff members (Hofmeyer & Marck, 2008).

Previous studies into RPGs and Schwartz Centred Rounds ® have identified a number of these features theorised by SC (e.g., trust, the significance of space to reflect, and the development of a collective identity) (George, 2016; Heneghan, Wright, & Watson, 2014) However, to the researchers' knowledge, SC frameworks have not been previously used to understand the development or existence of these qualities within RPGs (Høyrup & Elkjaer, 2006).

Tomozumi Nakamura and Yorks (2011) recommend the use of RPGs as a means of developing SC within organisations. They propose that the shared process of collective reflection enables the co-creation of meaning and understanding as well

as opportunities for learning through the exchange of knowledge (Le Cornu, 2009; Mazuitis & Slawinski, 2008). However, empirical research that supports this assertion could not be found.

Social identity theory. In a recent study on SCR®, the author notes the emergence of a shared identity amongst members of the group, who gained a sense of likeness after self-disclosures led to insights into mutual experiences (George, 2016). Further exploration of these findings, however, as far as known, has not been pursued.

Social identity theory was originally proposed by Tajfel and Turner (1979). Tajfel (1972, p.31) defined social identity as:

"*an individual's knowledge that he [or she] belongs to certain social groups together with some emotional and value significance to him [or her] of this group membership*".

Social identity includes an individual's internal representation of a group to which they are connected (Tajfel & Turner, 1979). This internal cognitive appraisal enables people to understand '*who they are*' within a given context (Haslam et al., 2017). The group that an individual is connected to is referred to as the ingroup (Turner, 1985). Categorising the self as belonging to a specific group has important consequences for reasoning and behaviour. How we comprehend and interact with other people is contingent on the degree to which we perceive them as having a shared identity with us. A shared social identity enables members to operate as a

meaningful entity, encouraging reciprocal contributions, and to profit from its accomplishments (Tajfel & Turner, 1979).

According to Turner, Oakes, Haslam, and McGarthy (1994), social identity is affirmed through social comparison and self-categorisation (Hogg & Terry, 2000). Self-categorisation (Turner et al., 1994; Turner, 1985) occurs when "*people perceive themselves and others in terms of particular social categories, instead of separate individuals*" (Hogg & Terry, 2000, p.6). The process of defining the self by group membership involves (a) establishing the group's meaning through social comparison with similar outgroups, and (b) actively finding evidence that ensures the ingroup is perceived more positively than the outgroups. A social identity is determined by the fit of a particular self-categorisation (Oakes, Haslam, & Turner, 1994). The fit of the social identity refers to whether an individual perceives similarities between themselves and the ingroup.

Social identity encourages the development of social connection, whereby people feel they are psychologically coupled with others in the group (Turner, 1985). Within an ingroup, trust, respect, and improved communication develop as people begin to relate to one another. A social identity may also foster social disconnection from those in the outgroup.

Summary

The challenges facing the NHS have had a significant impact upon healthcare staff well-being and workforce morale (West, 2019). RPGs are recommended as an invention to help improve staff well-being (Campling, 2016). The theories presented

above provide useful frameworks for exploring and understanding staff engagement in the RPGs as well as the social processes operating within and beyond the groups.

Research aims

The aim of the research was to explore LD healthcare staff members' perceptions and experiences of RPGs. The research also aimed to gain the perspective of both RPG attendees and non-attendees (people who did not engage in groups). Obtaining the perspective of non-attendees provided valuable and overlooked insight into the social processes occurring beyond the RPG in the organisation that may have significant consequences for the successful implementation of the group.

Method

A qualitative design using grounded theory (GT) (Glaser & Strauss, 1967) methodology was used to explore staff members' perceptions and experiences of RPGs. GT is not concerned with testing hypotheses derived from pre-existing theory (Dunne, 2011). Therefore, the approach is appropriate for the current research as previous inquiry into the areas of interest have not been investigated (Henwood & Pidgeon, 2003). GT was also selected as the qualitative method as it enables subjective realities and meanings to emerge (Urquhart, 2012). Other qualitative methodologies were considered such as interpretative phenomenological analysis; however, the present research did not aim to gain a detailed understanding of idiosyncratic experiences on a specific phenomenon or lived event (Smith, 2015).

GT is an iterative and comparative process that generates inductively driven theory (Charmaz, 2014). The analysis adhered to Charmaz's (2014) social constructionist approach. This epistemological position argues that "*people create social reality or realities through individual and collective actions*" (Charmaz, 2014, p.344).

Eligibility criteria

All staff members who engaged or did not engage in the RPGs conducted by the service, could participate in the study. In recent years' much of the evidence pertaining to the effectiveness of RPGs have come from the evaluation of Schwartz Centre Rounds (SCR) (The Point of Care Foundation [TPCF], 2016). However, research into SCR® is limited by the use of retrospective measures and the exclusion of controls. Therefore, the research aimed to use controls by gaining the perspective

of those who had not attended the RPGs (the non-attendees). By exploring non-attendees' perspectives, it was hoped that it might help establish the individual impact of attending an RPG, how it may or may not influence the development of a shared social identity. The study also sought to explore the potential 'ripple effect' (Maben et al., 2018) of the use of RPGs on the organisation to see whether such interventions have an influence beyond the group.

Staff members who were not working within the team during the period that the RPGs took place were excluded from the recruitment process.

Recruitment setting

The RPGs were implemented in an LD service which provides specialist health care to adults with learning disabilities. The service is separated into four community teams. The four teams are separated into two services, the East and the West. The RPGs took place in the East team with the intention of the West team, implementing the model after the completion of the current research project.

The reflective practice groups were set up by the service in March 2018. The service implemented one group per month over five months between March and July 2018. A total of three RPGs were carried out together with three planning meetings and two supervision sessions. Two scheduled RPGs were cancelled due to limited interest in attendance over the summer period. Posters and emails to staff members were used for advertising the groups. Staff members were asked to provide topics and stories related to the topic to be discussed in the RPGs. The topics discussed in the groups included work-life balance, 'what can we learn from our service users?' and

working with inter-agencies. The groups took place at lunchtime after a business meeting with all staff members to ensure maximum attendance. The RPGs ran for 45 to 60 minutes. Thorndycraft and Mccabe's (2008) 'Team Development and Reflective Practice' (TDRP) model, together with elements from the SCR® model, were used in the design and implement the groups. Please refer to Appendix 1 for a description of the RPG model and format used by the service.

Participants. A total of 2 RPG facilitators, 1 RPG supervisor, 5 RPG attendees, and 5 non-attendees agreed to participate (n=13) in the study. The participants worked in different professional groups including administration, speech and language therapy, physiotherapy, occupational therapy, psychology, nursing, and management. Psychologists represented the largest group of attendees of the RPGs and participants. The length of time that the participants had been working within their posts ranged from 1.4 years to 37 years. The period of time that the participants had worked for the NHS ranged from 3 to 39 years.

Ethical and regulatory consideration

Ethical approval to conduct research with NHS staff was sought and obtained from the University of Exeter Psychology Department Ethics Committee (Appendix 1) and the NHS Health Research Authority (Appendix 2). Consent to complete observations of RPGs was obtained from the NHS Trust Research and Development department (Appendix 3).

All risks of participating were explained verbally and in the information sheet (Appendix 4). Participants were informed that engaging in the interviews may lead to

emotional and/or psychological distress due to talking about experiences of attending or not attending the RPGs, which may elicit discussions on the emotional consequences of caring as well as organisational difficulties. Participants' welfare remained a priority and signposting to support services was offered. Participants were made aware of the general topics that would be discussed in the interview in order to help them make an informed decision to participate in the study. The limits of confidentiality were explained. They were reminded of their right to end the interview at any point and/or to withdraw their data. The handling of the data abided by the General Data Protection Regulation rules (2018). Informed consent to participate in the study was gained from participants (Appendix 5). Participants names have been anonymised.

Procedure

Sampling. The field-supervisor working in the team carried out the sample recruitment. Initially a convenience sampling strategy was used as the target population expressed interest in participating. To attain heterogeneity, a targeted approach was later adopted to gain representation from different professional groups and NHS bandings. The study adopted '*theoretical sufficiency'* (Dey, 1999) as opposed to '*theoretical saturation'* to determine the end of data collection. Theoretical sufficiency is advocated by Charmaz (2014) and it is achieved when new data maps onto the core theoretical categories (Dey, 1999).

Data collection. GT can be used to triangulate both field notes from observations and interviews as a data collection method (Charmaz, 2014). According

to Fusch and Ness (2015), triangulation can enhance the reliability of findings and help to achieve data saturation.

Observational data of the RPGs and RPG planning meetings were collected. A total of three RPGs, three planning meetings and two supervision sessions were observed. A total of 4 hours and 30 minutes of observations was carried out. Semi-structured face-to-face individual interviews were conducted to gain further insight into the personal experiences of attendees, non-attendees and facilitators of the RPGs. The interview schedule was guided and adapted from Leaver's (2016) interview questions. Leaver's (2016) research focused on understanding the subjective experience of SCR® panellists as well as the wider impact of SCR® on the organisation. The aim of the interview schedule was similar to the objective of the present study, which intended to gain insight into healthcare staff members' experience of RPGs and non-attendees understanding of organisational forces impacting on their decision not to participate in the RPGs. Furthermore, both studies were interested in exploring the wider impact of RPGs/SCR® on the organisation. Therefore, the line of inquiry taken by Leaver was felt to be appropriate for achieving the aims of the study. The adapted interview schedule (Appendix 6) was piloted to evaluate its applicability to the research objectives and service context. Interviews with the attendees lasted between 20 and 55 minutes. Interviews with the non-attendees lasted between 14 and 28 minutes. Interviews took place two months after the last RPG. The interviews and the observations were audio-recorded and transcribed verbatim in accordance with the ethical standards of the University of Exeter.

Data analysis. The interview and the observational data were analysed using GT. The primary stages of analysing the data involved creating initial codes and focused codes. Initial coding involved line-by-line analysis to identify the conceptual tone and direction of the data. Coding by actions was adopted to detect similarities and variations in the participants' responses. Significant initial codes were identified during focused coding to compare alongside new data. The process guided the direction of analysis and provided an indication of exploratory categories (Charmaz & Bryant, 2016). The codes were grouped together to create categories that represented similar concepts.

Focused codes and incomplete understanding of emerging ideas guided the evolution of the interview questions and the recruitment of participants. The process assisted in the development of core concepts. The exploration of focused codes and themes either emerged from the participants' narratives or formed specific areas of questions within the interview-schedule. Constant comparative method (Glaser & Strauss, 1967) of assessing early focused codes and themes against the new initial codes from fresh data occurred. Analytical distinctions were made, which aided the development and understanding of categories and their theoretical connections. (See Appendix 7 and 12 for examples of initial codes and focus codes).

Memo-writing was completed throughout the analysis (Appendix 8). Reflections on ideas and themes were recorded together with the possible impact of researcher's theoretical knowledge upon the process (Charmaz & Bryant, 2016). Memos facilitated the development of categories; they acted as an audit trail and assisted in creating links to the literature.

Reflexivity. A reflective diary recording personal experiences of the study was maintained from the start of the project development to identify and manage bias (Appendix 9). Reflections on the researcher's theoretical knowledge of organisational theories and their relationship with the LD service were recorded and extensively discussed with supervisors. The supervisors encouraged reflexivity and identified personal assumptions. An interview transcript and corresponding memo-notes were assessed by the supervisors to minimise irregularities in the analysis. A second independent researcher analysed three anonymised interviews. A comparison of the results was completed to assess for disparities. To ensure data credibility, clarification of participants' responses occurred during the interviews. Feedback on the developed model was gained from the participants to foster accurate representation of experiences.

Results

Three central themes emerged from the observational and interview data, with thirteen subthemes (Appendix 12). After the themes had been identified they were considered in the light of the social capital (SC) and social identity theoretical (SIT) framework. The focus codes that emerged fitted the concepts of SC and SIT, which informed the names of the themes.

Themes 1 and 2 emerged from the attendees' describing experiences of participating in the RPGs. The perspectives of both non-attendees and attendees led to the emergence of the third theme. The themes will be considered individually with descriptive quotes and drawn together with an explanation of the emerging model.

Theme 1. The development of an RPG ingroup and bonding processes

Attendees' description of the social processes occurring in the RPG resembled features of an emerging RPG ingroup and SC bonding, as illustrated below.

Shared connection. Attendees spoke of how individual reflections on personal experiences resonated with other members' stories of frustrations, which fostered feelings of affirmation and a perceived shared connection. One attendee observed the display of collective empathy and mutual support.

> P2: there was a real shared connection with everybody (….) there was a person who might have shared their frustrations (….) and it seemed that other people got some benefit from that shared experience knowing that they were not the only one to feel that way so that felt really positive and affirming.

P1: you could really see that there was a lot of kind of empathy (….) so you definitely got that feeling or sense of camaraderie.

Attendees described the RPG environment to be one that felt "*encouraging*", which empowered people to engage in group discussions and openly reflect on their experiences in the absence of overt judgement.

P5: I think the fact that it didn't matter what you said, like you were never shot down, you were made to feel like you could speak openly, and everybody was really encouraging.

Attendees expressed how the sharing of reflections resulted in unexpected insights into other's experiences which, for some, was challenging to hear. Listening to other's reflections validated and normalised their own actions, thoughts, and feelings. They spoke of how the stories reduced their sense of personal and professional isolation, helping them to see that they are "*all in it together*" (P7).

P1: as a co-worker it felt really hard to listen to because I think I saw maybe a different side of people that I had been working with (…) then to see a side of their role where they have really struggled it was really quite touching.

P5: I think really just listening to somebody talking about something and thinking, (…) '*that's exactly how I felt*.' And especially people that you wouldn't

have thought would feel that way about a certain situation. It kind of made everyone seem a bit more '*human'*, which is nice.

Becoming an 'observant colleague'. Attendees spoke of how the RPG enabled people to stop "*muddling through*" or "*carrying on*", by allowing them to focus on the challenges they and others were facing. Stepping back to observe and listen helped people to gain perspective on themselves, their work and the organisation. Without the RPG space, participants recognised that signs of individual and collective suffering may have remained unnoticed.

P1: [the RPG] really made me think to maybe take a step back and notice how other people are getting on a bit more, instead of being so focused on just my own work and my own pressures (…) so maybe just being a bit more of an observant colleague.

P1: actually, when you stop and take a bit of step back you actually realise things have been quite difficult or quite good and then you have a space to really recognise it.

Restorative experience. Attendees described how the RPG was seen as a "*rejuvenating"* (P1) process. The environment of the RPG enabled "*off the record*" (P4) conversations that would not have occurred in other settings such as supervision. Being able to "*chat"* (P5) with their colleagues to *"off-load*" (P7) was a restorative experience.

> P1: I know one person when we finished it was a real like "*ahhhhh*" I am not sure what the word is "*ahhh that was, that felt really good to attend*".

Meeting an unmet need. One attendee described how the absence of reflective practice (RP) within their professional discipline motivated them to attend the groups as it gave them the opportunity to reflect with their colleagues.

> P7: I would try and get to as many [RPGs] as I could. Because there's such a small team that we've got (…) we don't get a chance to chat between ourselves, so it was nice to talk with other people (…) to talk about how things are and what problems you might come up against.

Theme 2. Bridging - conflict and enhancement of multiple collective identities

The observations of the RPGs showed that the group enabled members to engage in reflective conversations with individuals from different professional disciplines. Attendees spoke of how the RPG influenced their personal and professional identity development, as well as how the group highlighted the unique attributes of different professional disciplines. Attendees also spoke of experiencing conflict in possessing multiple social identities.

Professional identity development. Professional identity refers to '*the constellation of attributes, beliefs, and values people use to define themselves in specialized, skill- and education-based occupations or vocations"* (Slay & Smith, 2011, p. 87). Psychologists who were part of the RPG spoke of how the process impacted on their professional identity development, helping them to feel more aligned with their

discipline. However, other non-psychology attendees did not notice a difference to their professional identity commenting "*no, not particularly*" (P5).

> P6: it [the RPG] made me feel more like a psychologist, where perhaps there was a point I was transitioning (…) so kind of growing into that identity.

Conflict in roles and identities within the RPG. Psychologists who were attendees spoke of an internal conflict and discomfort triggered by observing their peers as group facilitators. Participants described feeling unsure what 'role' they should play within the group.

> P8: I know for me I had gone there as a participant but I know I felt very aligned with the psychologist and (…) I felt people were almost treating me as if I was a facilitator too and I found that a little bit uncomfortable (…). I don't know, you just don't know where you are supposed to fit, I guess.

Facilitators described noticing their multiple identities within the RPGs and the challenges that arose due to these affiliations.

> P2: kind of being part of the group and being outside of the group (….) I would say I identify with the group, well the team but also, I feel on the periphery [of the team] in that way I understand clinical psychology.

The facilitators described a strong impulse to *"rescue"* when they heard stories of personal and professional difficulties. Facilitators spoke of a need to protect the

wellbeing of group members and steer the conversation towards more positive themes. They explained that this behaviour appeared to be driven by their awareness that after the RPG they would shed their facilitator identity and re-join the team.

> P2: As facilitators, we find ourselves always wanting to rescue the attendees from feeling negative at the end, and leaving on a negative note, and feeling hopeless about their job.

> P1: When you know someone and you want to make them feel better, and want to say, '*What would help you?*' It's really difficult when you have a relationship with that person, and you're going to come out of that meeting, and still be seeing them.

Intergroup comparison. One attendee spoke of how the RPG enabled them to notice the strength of individual professional identities present within the group, which was less apparent in the context of work.

> P6: I think one of the most interesting things I found from this group (….) was how the strong identity of each profession and the bodies of each profession affected their entire job and all the things that came with that which I do not think I would have noticed.

Personal identity development. Personal identity is defined *as 'the various meanings attached to oneself by self and others"* (Grecas & Burke, 1995, p.42)**.**

Attendees described how the RPG enabled them to gain perspective on themselves. The process resulted in personal acceptance, learning and development.

> P4: I always felt like in this role or in this base I was quite a negative person, but actually I think to know that everybody else is feeling the same way I felt, '*Okay, that's normal*.' I started to doubt myself a few weeks before that and think, '*I'm so negative*,' but actually, yes, it was quite nice in that it wasn't just me.

Theme 3. Beyond the RPG: The outgroups - barriers to bridging and linking

Attendees and non-attendees reflected on the existence of hierarchical challenges and their possible influence upon the RPGs. Non-attendees spoke of the significance of reflective practice to their professional group, highlighting intra-group splits. Additional group divisions emerged from non-attendees' narratives including feeling like an 'expert' or a 'non-expert' in reflective practice, as well as the value of clinical time over self-care.

Power and hierarchy. Attendees and non-attendees spoke of the influence of perceived hierarchical differences between clinical staff compared to non-clinical staff in feeling able to attend the RPG. Others spoke of noticing the absence of higher-banded staff accessing the group, which made them question their personal significance.

> P5: I think because I only went to one of them and I would have liked to have gone to more I think sometimes as admin staff we feel like that we are not

> involved in those kind of things (….) we feel like that we should be in the office all the time (….) not that we were told that we couldn't go to them but sometimes we feel that maybe it is not aimed at us.

> P4: Only the members in the team that were on Band 4 and below that kind of turned up [to the RPG] (….) it sometimes does make you feel slightly like they're [higher bands] more valued.

> P12: I think many of my colleagues and I would agree it wouldn't necessarily be helpful for management to be there because people may not be as open as they could be.

Participants recognised that most attendees did not want managers to attend the RPGs due to fears that it would prevent open reflection. The absence of management made people feel that they had more autonomy. Those in management roles were aware that their position may have impacted upon group dynamics.

> P5: I suppose like I said earlier, without managers telling you how you should be reflecting on things and how that should then be changed. So, it gave people a chance to discuss something, actually think about it and then come up with their own ideas, (…) I think people felt more in control then of how to move forward with things.

> P9: I would hope that if I was able to attend that I could reflect alongside everybody else, but then I think, well actually, would they be as honest if I was there? (…) they could be a bit suspicious of my motives of being there.

However, attendees felt that management attending the RPGs would be beneficial in developing team relationships and mutual understanding of one another's challenges. Another perceived benefit to management attending the RPG would be for those in management positions to "*model to the rest of the service that (staff) are allowed*" (P3) to participate in the groups.

> P7: Everybody's in the same boat. I think management have got their issues with people above them as well, so we're all in one team at the end of the day. It would be nice to think that everybody could get on and talk about things.

Intra-professional and interprofessional reflective practice (RP) engagement. The non-attendee participants spoke of the significance of RP within their separate professional disciplines. RP was noted as an essential skill and a required competency by their professional bodies. Non-attendees described regularly engaging in RP during separate intra-professional meetings. One participant spoke of how the collective RP process resulted in team cohesion.

> P13: I think it (reflective practice) is encouraged anyway being part of the HCPC register. You are encouraged to do that anyway for your registration (…) my little (professional discipline) team talk about it in our monthly (professional discipline) meetings.

> P12: The (professional discipline) team has been really supportive for a [reflective practice] specific group. I think it has brought us closer together (…) and supported team working.

Expert vs non-expert. A number of concerns arose related to people's expertise in other professional roles and abilities to reflect, which indicated a division between two states of being an expert versus a non-expert. For instance, attendees spoke of whether non-attendees worried about "*doing it right*" (P3) as they heard some team members saying that they "*don't know how to do that* [to reflect]" (P2).

> P10: I think I would have enjoyed it listening to other people's cases. Whether I would have felt that I could have make a supportive comment or not, I don't know, because we are not qualified in any of the professional roles (…) I wouldn't wish to comment on something that I didn't know, have enough knowledge about, because that would be unfair.

Psychologists spoke of the importance and value of reflective practice within their profession. One psychologist expressed an ambivalence over this perceived significance, commenting "*psychologists reflect the hell out of everything*" (P8). They further questioned the possible hindrance caused by psychologists "*holding"* reflective practice, leading to the RPG being viewed as a "*psychology thing",* creating a barrier for other professionals accessing the group.

> P8: Sometimes I wonder why we have to hold it [reflective practice] (….) I think that's the perception people have of psychology as a role but also if we are

holding things like we have that, you know we kind of have that expert position which sometimes isn't helpful.

Value of self-care vs the cost of clinical time. Differences in the perceived significances of clinical time over one's engagement in the RPG as a form of self-care emerged. Attendees spoke of the importance of self-care to their personal values, however, equally they recognised the challenges of allowing themselves to engage in the practice. Non-attendees recognised their own personal challenges with self-care.

P7: For me, I will take a break. But for other people they might feel, 'I'm going to have to stay and not [take a break]'. You might be frowned upon possibly.

P9: Most of us don't do it (self-care) particularly well, do we? Not while we're at work. We don't take breaks. We don't take time out for ourselves.

Attendees and non-attendees wondered whether using work hours to reflect within an RPG was seen as a "*luxury*" (P1) or possibly "*self-indulgent*" (P11). This was confirmed by non-attendees who expressed an interest in the RPGs and recognised the significance of self-care although felt unable to attend the groups due to conflicting demands.

P13: I think it [self-care] is very important. You are the most important thing in your own life. You have to care for yourself or you won't have any resources or energy.

> P13: I was really swamped with work. I just couldn't prioritise that [the RPGs]. It wouldn't allow for it.

When engaging in self-care both attendees and non-attendees spoke of feeling "*selfish*" (P8) or "guilty" (P10) for using clinical time.

> P10: I've noticed that I'm beginning to develop a problem with this thumb (…) so I decided that every hour I would get up and walk (…) but in theory you've lost half an hour's work, and how do you put that on the electronic timesheet? (….) You feel guilty that you should be working, and you shouldn't be stretching your legs.

Added to this, non-attendees spoke of about the time pressures, caseload demands and "*conflicting priorities*" (P12) which guided their use of clinical time. Non-attendees spoke of the significance of "*have-to-dos*" (P9), being "*paid to work*" (P11) and the belief that as NHS staff they "*come in and we do*" (P11).

Model of interacting social processes within and beyond RPGs

The model that emerged encompasses the complexity of implementing an RPG within an NHS setting together with the social processes operating within and beyond the group (see Figure 1). The model is grounded in the themes and subthemes identified in the analysis. More specifically, the grey inner circle represents the possible formation of an RPG ingroup resulting from the collective processes occurring within the group (represented by the surrounding grey boxes). The light blue circle under the collective processes (the grey boxes) signifies the emergence of bonding

and bridging social capital dimensions. More specifically, at the beginning of the group formation, ‘bridges’ were formed as group members came from different professional backgrounds, although all with the same level of hierarchal status. As the group became established, attendees spoke of the restorative experience of engaging in reflection within a space that was both supportive and encouraging. The reciprocal sharing of diverse personal and professional stories led to the display of empathy, feelings of companionship and a reduced sense of isolation. Collectively, these features fostered a shared connection and possibly a sense of trust amongst group members. The social processes further illuminated the significance of ‘*stepping back’* to engage reflectively and compassionately with colleagues on a level that was attentive to their needs rather than being driven by task-related incentives. For some, the RPG provided protected time to reflect, meeting an overlooked personal need. Overall, the groups appeared to have fostered bonding SC characterised by shared expectations of the group structure and sanctioned behaviours, obligations to engage in reflection in the absence of judgement, increased insight through the sharing of knowledge and the creation of collective affirmation.

Engaging in the RPG enhanced, influenced or conflicted with (represented by the yellow arrows) individuals’ professional, personal and team identity. The yellow arrows point inwards towards the grey inner circle, representing how people’s identities may have influenced their engagement with the RPG. The dark blue circle surrounding the RPG represents the processes occurring beyond the group as indicated by attendees and non-attendees’ findings. The dark blue circle signifies the bridging and linking opportunities between diverse professional groups and different levels of the hierarchy.

The different identities (represented by the green circles) cross both boundaries of existing within and beyond the RPG group. Power and hierarchy signified outgroup identities (specifically relating to management), which influenced non-attendees and attendees' ability to feel able to engage in the RPG. Attached to professional identity are the dimensions of 'expert versus non-expert', representing non-attendees' belief in their own ability to reflect with others from different disciplines.

The Intra-profession reflective practice (RP) dimension encapsulates the existence of separate RPG-like meetings and their reflective skills, which possibly had an impact upon non-attendees' interest in accessing the groups. More specifically, intra-professional RP groups may have created densely bonded networks, which may have influenced whether non-attendees felt they were able to or needed to engage in additional group reflection.

Attendees also spoke of how the RPG enhanced their team identity although for facilitators a conflict occurred between their identities as a team member with inter-professional relationships and as a facilitator discussing organisational challenges. The other influential outgroup dimension included individual values attached to the significance of clinical time and self-care.

Perceived difference between hierarchical status or level of expertise together with established densely bonded intra-professional groups created a barrier for further opportunities of bridging SC and the emergence of linking SC.

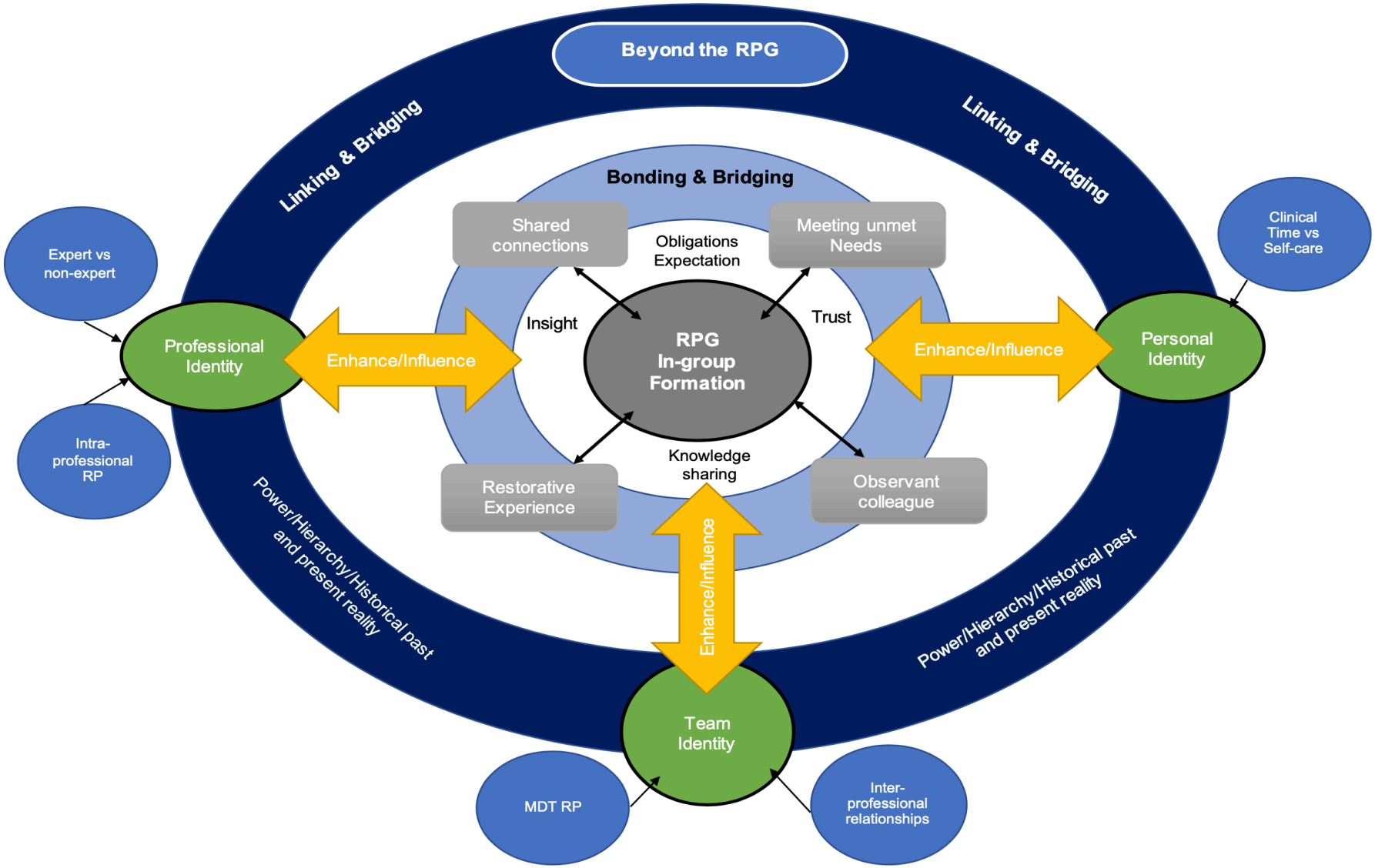

Figure 1. Model of Interacting Processes Within and Beyond RPGs

Discussion

The research aimed to explore the perspective of both attendees and non-attendees to understand their perceptions and experiences of RPGs implemented within their service. The GT analysis identified three themes from the data, which were considered in relation to SC theory and SIT. Theme 1 provided insight into the social dimensions occurring within the RPG. Themes 2 and 3 demonstrated the salience and influence of different social identities and established groups operating within and beyond the RPG. The themes will be interpreted in context of the SC theory and SIT.

The social processes that emerged from the findings are akin to those needed to develop high-quality connections (HQC) (Dutton & Heaphy, 2003) as identified by social capital theorists (Putnam, 2001) and social identity theory (Tajfel & Turner, 1979). HQCs in work settings are mutually beneficial relationships defined by trust and respect. Dutton and Heaphy (2003) believe HQC's provide the foundation in developing a team identity because feeling respected and valued by colleagues is important in fostering collective affiliation (Ellemers et al., 2013). Furthermore, social capital scholars argue that establishing similarities through the mutual exchange of information is believed to result in individuals developing a sense of belonging (Nahapiet & Ghoshal, 1998). It could be hypothesised that the group process began to foster a bonding SC, leading to the development of a salient RPG identity for regular attendees. This is supported by the emergence of shared meanings and positive reflections on the RPG within attendees' narratives.

The development of bonding SC could be further explained by the structural aspect of network ties, which were established by the RPG (Nahapiet & Ghoshal,

1998). More specifically, the RPG provided access to a space that enabled members to engage within a socially interactive dialogue. The environment offered opportunities for bridging SC to occur, whereby individuals from different professional disciplines reflected together (Nahapiet & Ghoshal, 1998). The RPGs were also relatively stable activities that took place across five months, permitting structured time for social contact (Burt, 1992). Furthermore, the membership of the groups was relatively consistent (Inkpen & Tsang, 2005). Time, allocated space, stability and consistency of social interaction are reported to be significant for the emergence of SC (Nahapiet & Ghoshal, 1998). Without these elements, trust and norms of reciprocity might not have surfaced (Cohen & Prusak, 2001).

In support of previous findings participants described how the RPG process heightened their affiliation with their professional identity, enabling them to consider the values and competencies they aspired to develop (Cowdrill & Dannahy, 2009). SIT predicts that interacting with different professionals can increase the salience of one's own professional identity (Ashforth & Mael, 1989). However, for psychologists, their affiliation with their professional group and observation of their peers as facilitators evoked feelings of discomfort. Not knowing what role to adopt (i.e. an attendee or facilitator) appeared to create a level of incongruence between their internal professional representation and the external reality. Being an attendee may have endangered their professional identity, possibly leaving them feeling as if their expertise or role had been destabilised (Horney & Hogg, 2000).

Facilitators described the challenges of holding multiple identities within the RPG. Their cognitive and behavioural struggle appeared to be related to their

relationship with the team and a possible fear of threatening their group identity (Tajfel & Turner, 1979). In situations where a social identity is under threat, strong emotional reactions will trigger members to attempt to preserve the positive perception of the group (as seen by the facilitators desire to evade negative topics) (Walton & Cohen, 2007). The facilitators' behaviour and its effects could suggest that they equally valued their 'ingroup' status and interdependence with the team (Ramarajan, 2014).

Participants also spoke of how the process enhanced their personal identity, resulting in insight and self-acceptance. These results are supported by findings from Fisher, Chew, and Leow (2015), who found regular engagement in reflective practice for clinical psychologists enabled them to connect with their personal values, beliefs and needs.

Inter-group comparison occurred within the RPG, which resulted in an attendee noticing the positive distinctions between different professional disciplines. The process allowed bridging SC to occur, whereby attendees gained a more meaningful understanding of professional roles (Baker & Flanagan, 2016). This recognition did not appear to provoke negative outgroup comparison, but instead it may have offered an opportunity to build unified links across professional boundaries (Cain, Frazer, & Kilaberia, 2019).

Attendees and non-attendees spoke of divisions that existed beyond the group, which appeared to reflect out-group characteristics (Tajfel, 1978). The possible

presence of management in the RPG created a barrier for both attendees' and non-attendees' engagement (Yalom & Leszcz, 2005). Linking SC did not occur in the RPG as management were reported to be conscious that their presence in the group may have resulted in mistrust. These findings are in line with George's (2016) predictions, whereby reflective groups that are not attended by managers, may lead attendees to experience negative projective feelings towards their line managers. The attendees are believed to foster an ingroup status, which results in managers being perceived as belonging to the outgroup.

For those outside the group, it is possible that people who had not previously accessed the RPG may have regarded it as a "*closed*" network, with established ties, group membership and norms (Coleman, 1988). For instance, non-attendees spoke of feeling that they did not possess the right skills, level of knowledge and qualification to access the group. An awareness from within the group of these challenges emerged from attendees who felt that their perceived 'specialist' position in reflective practice due to their professional background in psychology inhibited shared ownership and access to the group for staff members with different professional backgrounds.

Similarly, non-attendees engaging in reflective practice within their intra-professional groups may have chosen not to access the RPG due to having an established dense network connection (Alder & Kwon, 2002). This was highlighted by a non-attendee describing increased team cohesion emerging from intra-professional team reflective practice meetings. As such, their primary aim is to maintain the homogeneity of their group, limiting interaction with those external to their system to

safeguard established norms and values (Burt, 1992). Furthermore, the needs of the group to engage in reflective practice were being met, as non-attendees spoke of the efficient sharing of resources and the exchange of tacit knowledge (a shared language), which enabled the movement of new information from outside the network to occur.

Clinical implications

The study suggests that access to the groups should continue to be open to all staff members to prevent the development of a closed network, which may inhibit growth. To address ingroup/outgroup dimensions as well as power differences in RPGs, facilitators may require training and regular supervision to understand and manage group dynamics (Gitterman, 2019). Promoting the benefits of group diversity internally and externally to the RPG may help people to feel able to access the groups.

To encourage bridging and foster an inclusive environment, consideration must be made of how reflective practice can become a shared exercise. Not one that is localised within one professional group but is owned by the multi-disciplinary team. Open discussions on reflective practice skills and strategies between the different disciplines may remove barriers preventing collaborative and reflective pursuits. Nurturing linking within the RPG could foster vertical relationships between management and staff members. By doing so, management may gain an increased understanding of the challenges encountered by staff, which could result in an effective alliance and the distribution of influence (Szreter & Woolcook, 2004). As

noted by the attendees, support from management is crucial in promoting the RPG, providing consent for staff members to use their clinical time to engage in the groups.

The large representation of psychologists in the study highlights the perceived importance of RPGs to the profession and practice of clinical psychology. Recent policy and practice guidelines stress the significance and drive for psychologists to operate as leaders and become embedded in teams (Onyett, 2007; BPS, 2017). As seen in the study, psychologists are well placed to lead on implementing and promoting RPGs. Psychologists have the skills to foster compassionate and empathetic discussions on organisational and psychological issues. Crafting a space to reflect and work through stressors with colleagues could result in a number of benefits for staff, the organisation, and service users. More specifically, psychologists can apply their knowledge and skills to facilitate RPGs that help healthcare teams to support one another collectively, to attend to their well-being, and develop innovative strategies that enables the effective and compassionate delivery of care. Psychologists can assist in the creation of high-quality connections, positive team processes, and collective resilience. Furthermore, they can model and ensure person-centred care and patient safety is prioritised. Clinical psychologists may also facilitate the development of system-wide networks by inviting managers and service users to RPGs to provide their personal reflections on their experience of the service.

Overall, the thesis represents a strong argument for a shift in the profession of clinical psychology towards a more socially focussed approach. Previous authors (i.e., Helliwell and Barrington-Leigh, 2012) have highlighted concerns over the professions limited focus on social strategies and theories. To ensure trainee clinical psychologists

possess the right competencies and skills to achieve the above implications, training courses may consider incorporating modules on social psychology as well as on reflective practice and the role psychologists play in teams, within services and communities.

Study strengths and limitations. The use of non-attendee participants represents a strength of the study. Obtaining non-attendees subjective experience and perspectives provided a greater understanding of the social and organisational processes operating within and beyond the RPGs. To date, only a few studies have incorporated the participation of RPG non-attendees (e.g., Maben et al., 2018).

Another strength of the study is its use of grounded theory to explore and develop a model on an area with limited theoretical understanding. Prior to the study, little was known about the social relationships and behaviours that occur within and beyond RPGs. The grounded theory methodology allowed for the development of predictions on what may be happening inside RPGs and within the organisation.

The homogeneity of the sample represents a limitation to the study. More specifically, most participants were from a single professional discipline and only two participants identified as being within a senior position. A balanced collection of perspectives to address the research aims was not attained. The non-attendees who participated expressed interest in attending the RPG; however, the voices of those who did not hold favourable views on RGPs were missing from the data. It is possible people may have felt unable to provide negative feedback due to factors such as to the researcher's relationship with the service, the project being for a doctoral thesis or

perceiving the service to hold a positive outlook on RPGs. Furthermore, the transferability of the findings is potentially limited as the data came from a single service.

Given the researcher's knowledge of organisational theories and their relationship with the service, bracketing interviews before and during data analysis may have been advisable (Tufford & Newman, 2010). The researcher's relationship with the service may have also influenced participants' data. For instance, some participants may have felt compelled to provide socially desirable answers (Holbrook, Greene, & Krosnick, 2003).

Future research. Further research is needed to provide additional insight into the development of social identity and social capital within RPGs. Adopting a longitudinal design that uses both ethnographic observations and interviews with attendees and non-attendees may provide further understanding into how, why and when these social processes emerge. Future studies should consider the inclusion of non-attendees to gain their subjective accounts. Research should also attempt to gain the perspectives of individuals who do not hold favourable views of RPG to achieve a holistic appraisal of its use within healthcare organisations.

Conclusion

The study used grounded theory to explore participants' perceptions and experiences of reflective practice groups, by taking a social identity and social capital perspective on the processes occurring within, and influencing from beyond, the groups. The reflective practice group was described as providing a space that met

attendees' overlooked personal needs; it enabled the development of shared connections and provided attendees with a sense of rejuvenation. The social process occurring in the group appeared to enhance multiple identities, solidarity and mutual positive regard. Conflicts emerged within and beyond the RPG between different identities, with people attempting to manage the demands of maintaining salient group memberships. Divisions generated from perceived difference and power represented a barrier acting upon the RPG. Attending to difference and addressing organisational controls, as well as nurturing bonding, bridging and linking SC is hypothesised to be useful in generating sustainable healthcare organisations. Additional research is needed to test this theory and to further understand the role of social identity theory in reflective practice groups and the development of social capital within healthcare organisations following its implementation.

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Appendix 1- RPG Model and Guidelines

Thorndycraft and Mccabe (2008) 'Team Development and Reflective Practice' (TDRP) model together with elements from the SCR model will be used in the design and implementation of the groups. Table 1 provides details of the model to be used.

Table 1. RPG model and guidelines

Group set up and details	Description
Prior Assessments	Thorndycraft and Mccabe (2008) recommends conducting an initial assessment on the organisation and management structure of the service in preparation of setting up the groups. The assessment will focus on: The level of clinical and management supervision The existence of regular business meetings Questionnaires to gather information on expectations and topics to be addressed in the group The assessment will provide greater understanding on the aims and boundaries of the group.
Facilitators skills	SCR® recommends facilitators should have: prior experience of carrying out group interventions skills in counselling/ clinical psychology/ social work possess skills in presenting an understanding of the organisational, staff and service user issues
Role of the facilitators	Thorndycraft and Mccabe (2008) suggest the role of the facilitator involves: creating a group that can manage psychological projections and anxieties to allow the group to engage in collaborative discussions, to help the group manage their relationships and team unity To ensure the space is used for exploration and not solely problem-solving To manage group conflict and acknowledge conflict is important to group development (Tuckman, 1965); To facilitate the discussion and understanding of emotional processes that can occur within healthcare environments.

Aims of the group	Combining recommendations from Thorndycraft and Mccabe (2008) and SCR® the group will aim to: Help staff feel supported by their organisation; Provide a safe space, that is non-judgement to help group members openly and honestly share stories and reflections. To discuss topics such as the impact of work on their personal, professional wellbeing as well as their relationships with service users and colleagues; To foster effective MDT communication by inviting clinical and non-clinical staff to attend the groups. The hope is that the group develop deeper understanding and respect of one another's roles, helping to improve relationships; To develop effective group processes leading to consistent approaches to practice and team cohesion; To allow professionals to 'de-role' and share their feelings and vulnerabilities; To help staff learn how to develop compassion and be compassionate when caring for others; strengthening relationships between staff and service users; emphasise the experience of caregiving; provide space for staff to feel heard, to express their personal struggles and to rebuild emotionally and physically; To enhance empathy and compassion; To engage and explore ethical behaviour and professionalism.
Group preparation by the steering group	Multi-disciplinary steering group to organise the time and location of the monthly groups; Steering group to regularly advertise the groups by sending out emails. The email should explain the structure of the group, the time and location of the group as well as requesting for a topic and stories related to the topic to be discussed at the next RPG. Staff members to provide cases to discuss; Steering group to select the topic to be discussed prior to RPG.
Group format	Monthly forums; Facilitators introduce the group and briefly outline the topic to be discussed. Facilitators to remind the group rules (see 'other considerations' below). Facilitators to use flip chart paper to note topics, ideas and important reflections raised by the group. Two staff members present their stories for 15 minutes. Facilitators help those present in the group to reflect on the affective response to the story. The facilitator should also encourage people to talk about the similar challenges or issues they may have encountered. The Facilitator leads 45 minutes of discussion and reflection on the presentation content; Feedback on the RPG to be given at the end.

	Reminder of the next scheduled RPG is communicated to the group by the facilitators.
Other considerations	Boundaries for the RPG to be established such as showing respect and sensitivity, turning off mobile phones and punctuality. Discussions to remain confidential. Staff members to be informed that they can speak to the facilitators after the RPG or contact them separately if the content of the group has caused them psychological distress and they would like to receive further support.

Appendix 2- Ethical Approval

CLES – Psychology
Psychology
College of Life and Environmental Sciences
University of Exeter
Washington Singer Building
Perry Road
Exeter
EX4 4QG
Web: www.exeter.ac.uk

CLES – Psychology Ethics Committee

Dear Sabinah Janally

Ethics application - eCLESPsy000098
Using grounded theory to explore NHS staff’s perceptions on the interaction between reflective practice groups and organisatio

Your project has been reviewed by the CLES – Psychology Ethics Committee and has received a Favourable opinion.

The Committee has made the following comments about your application:

- Please view your application at https://eethics.exeter.ac.uk/CLESPsy/ to see comments in full.
If you have received a Favourable with conditions, Provisional or unfavourable outcome you are required to re-submit for full review and/or confirm that committee comments have been addressed before you begin your research.

If you have any further queries, please contact your Ethics Officer.

Yours sincerely

Date: 18/06/2019

CLES – Psychology Ethics Committee

Appendix 3 - NHS Health Research Ethics

Ymchwil Iechyd a Gofal Cymru
Health and Care Research Wales

NHS
Health Research Authority

Ms Sabinah Janally
Doctorate in Clinical Psychology
University of Exeter
Washington Singer Laboratories
EX4 4QG

Email: hra.approval@nhs.net
Research-permissions@wales.nhs.uk

15 October 2018

Dear Ms Janally

HRA and Health and Care Research Wales (HCRW) Approval Letter

Study title:	**Using grounded theory to explore NHS staff's perceptions on the interaction between reflective practice groups and organisational factors**
IRAS project ID:	**244948**
Protocol number:	**1718/33**
Sponsor	**University of Exeter**

I am pleased to confirm that **HRA and Health and Care Research Wales (HCRW) Approval** has been given for the above referenced study, on the basis described in the application form, protocol, supporting documentation and any clarifications received. You should not expect to receive anything further relating to this application.

How should I continue to work with participating NHS organisations in England and Wales?
You should now provide a copy of this letter to all participating NHS organisations in England and Wales, as well as any documentation that has been updated as a result of the assessment.

Participating NHS organisations in England and Wales **will not** be required to formally confirm capacity and capability before you may commence research activity at site. As such, you may commence the research at each organisation 35 days following sponsor provision to the site of the local information pack, so long as:

- You have contacted participating NHS organisations (see below for details)
- The NHS organisation has not provided a reason as to why they cannot participate
- The NHS organisation has not requested additional time to confirm.

You may start the research prior to the above deadline if the site positively confirms that the research may proceed.

If not already done so, you should now provide the local information pack for your study to your participating NHS organisations. A current list of R&D contacts is accessible at the NHS RD Forum

IRAS project ID	244948

website and these contacts MUST be used for this purpose. After entering your IRAS ID you will be able to access a password protected document (password: **House45**). The password is updated on a monthly basis so please obtain the relevant contact information as soon as possible; please do not hesitate to contact me should you encounter any issues.

Commencing research activities at any NHS organisation before providing them with the full local information pack and allowing them the agreed duration to opt-out, or to request additional time (unless you have received from their R&D department notification that you may commence), is a breach of the terms of HRA and HCRW Approval. Further information is provided in the "*summary of assessment*" section towards the end of this document.

It is important that you involve both the research management function (e.g. R&D office) supporting each organisation and the local research team (where there is one) in setting up your study. Contact details of the research management function for each organisation can be accessed here.

How should I work with participating NHS/HSC organisations in Northern Ireland and Scotland?
HRA and HCRW Approval does not apply to NHS/HSC organisations within the devolved administrations of Northern Ireland and Scotland.

If you indicated in your IRAS form that you do have participating organisations in either of these devolved administrations, the final document set and the study wide governance report (including this letter) has been sent to the coordinating centre of each participating nation. You should work with the relevant national coordinating functions to ensure any nation specific checks are complete, and with each site so that they are able to give management permission for the study to begin.

Please see IRAS Help for information on working with NHS/HSC organisations in Northern Ireland and Scotland.

How should I work with participating non-NHS organisations?
HRA and HCRW Approval does not apply to non-NHS organisations. You should work with your non-NHS organisations to obtain local agreement in accordance with their procedures.

What are my notification responsibilities during the study?
The attached document *"After HRA Approval – guidance for sponsors and investigators"* gives detailed guidance on reporting expectations for studies with HRA and HCRW Approval, including:

- Registration of Research
- Notifying amendments
- Notifying the end of the study

The HRA website also provides guidance on these topics and is updated in the light of changes in reporting expectations or procedures.

I am a participating NHS organisation in England or Wales. What should I do once I receive this letter?
You should work with the applicant and sponsor to complete any outstanding arrangements so you are able to confirm capacity and capability in line with the information provided in this letter.

The sponsor contact for this application is as follows:

IRAS project ID	244948

Name: Ms Pam Baxter
E-mail: p.r.baxter2@exeter.ac.uk
Telephone: 01392 723588

Who should I contact for further information?
Please do not hesitate to contact me for assistance with this application. My contact details are below.

Your IRAS project ID is **244948**. Please quote this on all correspondence.

Yours sincerely

Sharon Northey
Senior Assessor

Email: hra.approval@nhs.net

IRAS project ID	244948

List of Documents

The final document set assessed and approved by HRA and HCRW Approval is listed below.

Document	*Version*	*Date*
Evidence of Sponsor insurance or indemnity (non NHS Sponsors only) [Evidence of Sponsor Insurance]		21 November 2017
HRA Schedule of Events [HRA Schedule of Events]	1.0	27 September 2018
HRA Statement of Activities [HRA Statement of Activities]	1.0	27 September 2018
Interview schedules or topic guides for participants [Attendees interview schedule]	V1.0	17 August 2018
Interview schedules or topic guides for participants [non-attendees interview schedule]	V1.0	17 September 2018
IRAS Application Form [IRAS_Form_19092018]		19 September 2018
IRAS Application Form XML file [IRAS_Form_19092018]		19 September 2018
IRAS Checklist XML [Checklist_19092018]		19 September 2018
Letter from sponsor [Letter from Sponsor]	V1.0	30 August 2018
Letters of invitation to participant [Email invitation RPG Attendees]	V1.0	14 August 2018
Letters of invitation to participant [Email invitation to Non-Attendees]	V1.0	17 September 2018
Other [Devon Transcription Data Protection Agreement]		17 September 2018
Other [Service Evaluation Form]		17 September 2018
Other [PIS Service Evaluation]		17 September 2018
Other [Further evidence of insurance]		17 September 2018
Participant consent form [Consent form]	V1.0	17 September 2018
Participant information sheet (PIS) [PIS RPG Attendees]	V1.0	17 September 2018
Participant information sheet (PIS) [PIS RPG Non-Attendees]	V1.0	17 September 2018
Referee's report or other scientific critique report [Scientific critique report]	V1.0	17 September 2018
Research protocol or project proposal [Research Protocol]	V1.0	17 September 2018
Summary CV for Chief Investigator (CI) [CI CV summary]	V1.0	17 September 2018
Summary CV for student [Student CV]		17 September 2018
Summary CV for supervisor (student research) [Field Supervisor CV]		17 September 2018
Summary CV for supervisor (student research) [TW Supervisor CV]		17 September 2018
Summary CV for supervisor (student research) [JS Supervisor CV]		17 September 2018
Summary CV for supervisor (student research) [IF Supervisor CV]		17 September 2018

IRAS project ID	244948

Summary of assessment

The following information provides assurance to you, the sponsor and the NHS in England and Wales that the study, as assessed for HRA and HCRW Approval, is compliant with relevant standards. It also provides information and clarification, where appropriate, to participating NHS organisations in England and Wales to assist in assessing, arranging and confirming capacity and capability.

Assessment criteria

Section	Assessment Criteria	Compliant with Standards	Comments
1.1	IRAS application completed correctly	Yes	No comments
2.1	Participant information/consent documents and consent process	Yes	No comments
3.1	Protocol assessment	Yes	No comments
4.1	Allocation of responsibilities and rights are agreed and documented	Yes	Although formal confirmation of capacity and capability is not expected of all or some organisations participating in this study, and such organisations would therefore be assumed to have confirmed their capacity and capability should they not respond to the contrary, we would ask that these organisations pro-actively engage with the sponsor in order to confirm at as early a date as possible. Confirmation in such cases should be by email to the CI and Sponsor confirming participation based on the relevant Statement of Activities and information within this letter.
4.2	Insurance/indemnity arrangements assessed	Yes	No comments
4.3	Financial arrangements assessed	Yes	No application for external funding has been made and no funding will be available to site to support this study. The statement of activities confirms that NHS organisations will not receive

IRAS project ID	244948

Section	Assessment Criteria	Compliant with Standards	Comments
			funding.
5.1	Compliance with the Data Protection Act and data security issues assessed	Yes	No comments
5.2	CTIMPS – Arrangements for compliance with the Clinical Trials Regulations assessed	Not Applicable	No comments
5.3	Compliance with any applicable laws or regulations	Yes	No comments
6.1	NHS Research Ethics Committee favourable opinion received for applicable studies	Not Applicable	NHS staff only study
6.2	CTIMPS – Clinical Trials Authorisation (CTA) letter received	Not Applicable	No comments
6.3	Devices – MHRA notice of no objection received	Not Applicable	No comments
6.4	Other regulatory approvals and authorisations received	Not Applicable	No comments

Participating NHS Organisations in England and Wales

This provides detail on the types of participating NHS organisations in the study and a statement as to whether the activities at all organisations are the same or different.
The Chief Investigator or sponsor should share relevant study documents with participating NHS organisations in England and Wales in order to put arrangements in place to deliver the study. The documents should be sent to both the local study team, where applicable, and the office providing the research management function at the participating organisation. Where applicable, the local LCRN contact should also be copied into this correspondence. If chief investigators, sponsors or principal investigators are asked to complete site level forms for participating NHS organisations in England and Wales which are not provided in IRAS, the HRA or HCRW websites, the chief investigator, sponsor or principal investigator should notify the HRA immediately at hra.approval@nhs.net or HCRW at Research-permissions@wales.nhs.uk. We will work with these organisations to achieve a consistent approach to information provision.

IRAS project ID	244948

Principal Investigator Suitability

This confirms whether the sponsor position on whether a PI, LC or neither should be in place is correct for each type of participating NHS organisation in England and Wales, and the minimum expectations for education, training and experience that PIs should meet (where applicable).
A local Principal Investigator is not expected as the Chief Investigator will undertake the research interviews. A named contact will help with identifying staff and sending out email invites. GCP training is not a generic training expectation, in line with the HRA/HCRW/MHRA statement on training expectations.

HR Good Practice Resource Pack Expectations

This confirms the HR Good Practice Resource Pack expectations for the study and the pre-engagement checks that should and should not be undertaken
Additional HR arrangements should not be expected (e.g. letters of access) for members of the external research team coming on site to conduct the interviews with staff as no clinical areas should be accessed for the purpose of research.

Other Information to Aid Study Set-up

This details any other information that may be helpful to sponsors and participating NHS organisations in England and Wales to aid study set-up.
The applicant has indicated that they intend to apply for inclusion on the NIHR CRN Portfolio.

Appendix 4 - Service evaluation approval

SURVEY/EVALUATION PROPOSAL FORM [redacted] NHS

PROPOSER:	**Sabinah Janally**	**DIRECTORATE/SERVICE/ TEAM:**	[redacted]
SUPERVISOR:	[redacted]	**Relationship to Proposer:**	**Research field supervisor**

TITLE:	**Reflective Practice Group Evaluation – Learning Disability Service**

SURVEY/EVALUATION OBJECTIVE(S)
The aim of this survey is to evaluate the effectiveness of the reflective practice groups currently being piloted in the [redacted]. The evaluation covers:
Usefulness of the practice
General topics discussed
Establishing what is working and what is not working in the groups – paying attention to structure of the groups

ETHICS SCREENING – Does the survey/evaluation *(delete whichever does not apply)*:			
1. *Infringe any patient's rights or risk breaching any patient's or carer's confidentiality or privacy?*	*No*	***6.*** *Allocate any interventions differently among groups of patients or staff?*	*No*
2. *Pose any risk for or burden on a patient beyond those of his or her routine care?*	*No*	***7.*** *Is there anyone involved with the survey who does not normally have access to patient's records or information?*	*No*
3. *Involve any clinically significant departure from usual clinical care?*	*No*	***8.*** *Collect data directly from any patient or carer?*	*No*
4. *Gather any information about a patient or carer beyond that collected in routine patient care?*	*No*	***8b.*** *If Yes, could the study subject a patient or carer to more than minimal burdens or risks it if is time consuming or requests sensitive information?*	*N/A*
5. *Report any data that could be used to identify any patient or practitioner?*	*No*		

[redacted]

WORK PLAN			
	Planned date:		*Planned date:*
1. Start by:	**01/04/2018**	**3. Data analysed by:**	**01/01/2019**
2. Data collected by:	**01/01/2019**	**4. Report completed by:**	**01/06/2019**
5. Report to be submitted to:			

HELP NEEDED
Is help or support from any other department or service needed to complete the evaluation? No
If yes, describe whose help is needed and the nature of the help:

PLANNED METHODOLOGY (eg. No. of clients, cases, episodes, instances and/or time period to evaluate. Attach any proposed questionnaires)

Observational data will be collected from the reflective practice groups (RPG's) and the planning groups to set up the RPG's. The RPG's and planning meeting of the RPG's will be audio-recorded and field notes will be created whilst these events are being observed the researcher.

The reason for collecting observational data is:
- To gain insight into the topics discussed in the groups
- To learn about how they operate,
- To gain understanding of the difficulties the group and facilitators encounter due to its structure.

The data will be used to develop the groups to help create RPG's that best meet the needs of the service.

The data will also be used for a major research project being run and supervised by the LD service as part of a doctorate in clinical psychology.

Informed consent has been gained and will be sought from future attendees of the RPG's to complete observations.

[redacted]

Appendix 5 - Attendees and Non-attendees Information sheet

Participant Information Sheet
Attendees of the RPG

Title of Project: Using grounded theory to explore NHS staff's perceptions on the interaction between Reflective Practice Groups (RPG's) and organisational factors

Researcher name: Sabinah Janally

Invitation and brief summary

I would like to invite you to participate in a research study that involves taking part in an interview to talk about your experience and perception on the use of RPG's.

Before you decide whether you would like to participate or not, please take time to consider the information presented in the Information Sheet carefully and to discuss it with your supervisor, work colleagues, family or friends if you wish, or please feel free to ask the researcher questions.

Purpose of the research

Research has shown that RPG's provide space for collaboration, communication and the development of compassion (Francis, 2013; Lown and Manning, 2010). RPG's have been suggested as a way of developing team-work as it represents a strategy that promotes continual learning, through open discussion, facilitating shared understanding (West et al., 2014). Although, the reason for doing this research is because there is still little understanding about the overall impact RPGs have on team functioning and on the culture of healthcare organisations.

The research is interested in looking at the effects of attending a RPGs on general organisational outcomes such as leadership, trust, team-work, staff wellbeing and people's experience of attending the groups. The research is also interested in understanding the possible barriers or opportunities that exist within organisations that enable the effective implementation and engagement of RPGs.

Why have I been approached?

You have been approached initially by the Supervisor running the RPG's and been provided with information about the study to ask if you are interested in taking part. The Information Sheet contains details of how to contact the researcher. We are interested in interviewing healthcare professionals who have taken part in the RPGs and I would like to gain a better understanding of your experience and perceptions related to RPGs.

What would taking part involve?

It is entirely up to you whether you decide to take part or not. If you decide to take part in this project you will be asked to attend an interview with the lead researcher Sabinah Janally. The interview can take place in a confidential space at your place of work and at a time convenient

to you to reduce any inconvenience of taking part. The interview will take no longer than one hour and you can stop at any time.

In the interview, you will be asked semi-structured questions about your views and experience of attending RPGs. Using semi-structured questions will enable you to elaborate on your answers as much as you need to, which it is hoped will provide more information on your views and beliefs, allowing us a better understanding of how RPG's work for you. The semi-structured questions used for this study have been reviewed by the lead researcher's supervisors. The interview questions have been piloted with the research supervisors to evaluate its suitability to the research.

If you feel that the line of questioning develops in such a way that you feel uncomfortable, please feel that you can stop at any time. You may decline to answer any particular question(s) and you can also withdraw from the study at any stage for any reason, without any disadvantage to yourself of any kind.

Interviews will be audio recorded, transcribed and analysed for themes. Under General Data Protection Rule (2018) you have the right to have full access to your transcript of your interview. You can access this transcript to check your responses, accuracy of the recording, to make changes to your response or for your own requirements.

All the information that you provide will be handled confidentially at all times. The process of confidentiality is covered on page 3.

What are the possible benefits of taking part?

By taking part in the research project it may provide you with opportunity to engage in self-care by taking time to reflect on your work and your personal views on the RPG's. By participating you will be adding to the limited research on RPG's and interventions designed for NHS staff. You will also be adding to understanding how staff-based interventions could improve wellbeing and team-work. In particular, your participation in the research will help to inform whether staff find RPG's beneficial or not and if RPG's have a perceived impact on the organisation. Your participation will also help to provide better understanding to the barriers and opportunities that exist in NHS services that enable or stop staff-based interventions from working.

What are the possible disadvantages and risks of taking part?

The disadvantage to taking part is that you will lose 30 minutes to an hour of clinical time to participate in the project.

It is also important to note that engaging in the interviews may lead to emotional and/ or psychological distress due to talking about your experience of RPGs and the service. The general topics that will be discussed in the interview include discussing your experience of attending RPGs, discussing why you chose to attend or why you chose to stop attending the group as well as discussing your views on the influence of the service on RPGs.

Your welfare will remain a priority throughout the study. If you express feeling distressed due to your experience or because of the interview the researcher will ensure that you are provided with any support you require.

What will happen if I don't want to carry on with the study?

You can stop participating in the project at any time without having to give a reason and without it affecting your employment or legal rights. You have the right to ask to withdraw your data and ask for it to be destroyed if you decide to no longer wish to participate in the study. Your rights to access, change or move your information are limited, as we need to manage your information in specific ways in order for the research to be reliable and accurate. If you withdraw from the study, we will keep the information about you that we have already obtained. To safeguard your rights, we will use the minimum personally-identifiable information possible.

How will my information be kept confidential?

Due to recent regulatory changes in the way that data is processed (General Data Protection Regulation 2018 and the Data Protection Act 2018) the University of Exeter's lawful basis to process personal data for the purposes of carrying out research is termed as a 'task in the public interest'. The University will endeavour to be transparent about its processing of your personal data and this information sheet should provide a clear explanation of this. If you do have any queries about the University's processing of your personal data that cannot be resolved by the research team, further information may be obtained from the University's Data Protection Officer by emailing dataprotection@exeter.ac.uk or at www.exeter.ac.uk/dataprotection

If you have any concerns about how the data is controlled and managed for this study then you can also contact the Sponsor Representative, Pam Baxter, Senior Research Governance Officer, whose details are at the end of the information sheet.

All information which is collected about you during the course of the research will be kept strictly confidential and be held in accordance with the General Data Protection Regulation 2018.The exception to this will be if you disclose risk to yourself or others. The researcher will have a duty to disclose this to your line-manager. This is to ensure that you receive the appropriate support. This exception to confidentiality will be discussed with you prior to the commencement of research.

Your personal information will be stored securely on an encrypted, password protected laptop and all electronic data including audio recordings, field notes and transcripts the interview data will be given a unique code to protect your identity and stored in a separate file. If you decide that you no longer want to participate we can remove it from the data up to the point where the linking key is destroyed and you can no longer be identified.

The research data will be stored securely on a password-protected computer with access to the files restricted to the research team. After the research is finished, the data will be securely destroyed by the chief investigator (who is the Custodian of the study data) at the end of a 3-year period or when the data is published, whichever occurs first. Personal data will be destroyed following the analysis of the data.

Results of this project may be published but any data included will not be individually identifiable to anyone else other than the researcher and the research supervisors. A final report of the study will be given to the service, which will be accessible to staff members of the service. It is important to be aware that the published findings may have direct quote from your interview. Using quotes helps to emphasise a research finding.

The data will be stored for 3 year and destroyed once the data is no longer needed. The data will be destroyed by deleting the electronic records.

Using a third-party transcription service

Devon Transcription service will be used to transcribe some of the interviews. The service has created a document outlining how they will protect your data if your interview is being transcribed. They maintain strict confidentiality measures as standardised by English law and covered by the Official Secrets Act. For further details their data protection document is attached to the information sheet on page 6.

What will happen to the results of this study?

The results of the study will form part of a broader Doctorate in Clinical Psychology. The results of will be written up in an academic paper and submitted to a journal as well as presented at conferences and other research events. The service will be provided with a copy of the thesis if you wish to read the academic report. Please be assured that you, or anyone you discuss in interview, will not be identified in any report or publication.

Who is organising and funding this study?

The research is coordinated by the Doctorate of Clinical Psychology program at the University of Exeter. Sabinah Janally, who is a Trainee Clinical Psychologist at the University of Exeter [redacted] is supervised by Dr Ian Frampton (Senior Lecturer at the University of Exeter), Dr Tony Wainwright (Senior Lecturer at the University of Exeter), Dr Janet Smithson (Senior Lecturer [redacted]

The project is being undertaken as part of the requirements for the Doctorate in Clinical Psychology at the University of Exeter.

Who has reviewed this study?

This project has been reviewed by the University of Exeter Psychology Research Ethics Committee and approved by the Health Research Authority.

Further information and contact details

If you have any questions, either now or in the future, please contact either:

Chief Investigator

Sabinah Janally

Doctorate in Clinical Psychology
University of Exeter

Washington Singer
Perry Road, Exeter, EX4 4QG

Field Supervisor

If you have any complaints about the way in which this study has been carried out please contact the Ethics and Governance office at The University of Exeter:

Gail Seymour, Research Ethics and Governance Manager
g.m.seymour@exeter.ac.uk, 01392 726621

GDPR (2018) queries

If you have any questions about GDPR related to this project please contact:

Ms Pam Baxter
Senior Research Governance Officer at Exeter University
p.r.baxter2@exeter.ac.uk, 01392 723588

Thank you for your interest in this project

Participant Information Sheet
Non-attendees of the RPG

Title of research: Using grounded theory to explore NHS staff's perceptions on the interaction between reflective practice groups and organisational factors

Researcher name: Sabinah Janally

Invitation and brief summary:

I would like to invite you to participate in a research study that involves taking part in an interview to talk about your experience and perception on the use of RPG's.

Before you decide whether you would like to participate or not, please take time to consider the information presented in the Information Sheet carefully and to discuss it with your supervisor, work colleagues, family or friends if you wish, or please feel free to ask the researcher questions.

Purpose of the research:

Research has shown that RPG's provide space for collaboration, communication and the development of compassion (Francis, 2013; Lown and Manning, 2010). RPG's have been suggested as a way of developing team-work as it represents a strategy that promotes continual learning, through open discussion, facilitating shared understanding (West et al., 2014). Although, the reason for doing this research is because there is still little understanding about the overall impact RPGs have on team functioning and on the culture of healthcare organisations. In addition, research into RPG has tended not to include the perspectives of those who chose not to attend the groups. Listening to why you have not attended the groups would provide important insight and understanding to why some staff-based interventions are unsuccessful or not meaningful for all staff members. The research is also interested in understanding the possible barriers or opportunities that exist within organisations that enable the effective implementation and engagement of RPGs.

Therefore, the research is interested in gaining your perspective on RPGs to provide a holistic view on the use of RPG in healthcare settings.

Why have I been approached?

You have been approached initially by the Supervisor running the RPG's and been provided with information about the study to ask if you are interested in taking part. The Information Sheet contains details of how to contact the researcher. You have been approached because we are interested in interviewing healthcare professionals who have **not** attended the RPGs. The reason for gaining the different perspectives is to obtain a rounded understanding on staffs experience and perceptions related to RPGs.

What would taking part involve?

It is entirely up to you whether you decide to take part or not. If you decide to take part in this project you will be asked to attend an interview with the lead researcher Sabinah Janally. The interview can take place in a confidential space at your place of work and at a time convenient to you to reduce any inconvenience of taking part. The interview will take no longer than one hour and you can stop at any time.

In the interview, you will be asked semi-structured questions about your views and experience of attending RPGs. Using semi-structured questions will enable you to elaborate on your answers as much as you need to, which it is hoped will provide more information on your views and beliefs, allowing us a better understanding of how RPG's work for you. The semi-structured questions used for this study have been reviewed by the lead researcher's supervisors. The interview questions have been piloted with the research supervisors to evaluate its suitability to the research.

If you feel that the line of questioning develops in such a way that you feel uncomfortable, please feel that you can stop at any time. You may decline to answer any particular question(s) and you can also withdraw from the study at any stage for any reason, without any disadvantage to yourself of any kind.

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What are the possible benefits of taking part?

By taking part in the research project it may provide you with opportunity to engage in self-care by taking time to reflect on your work and your personal views on the RPG's. By participating you will be adding to the limited research on RPG's and interventions designed for NHS staff. You will also be adding to understanding how staff-based interventions could improve wellbeing and team-work. In particular, your participation in the research will help to inform whether staff find RPG's beneficial or not and if RPG's have a perceived impact on the organisation. Your participation will also help to provide better understanding to the barriers and opportunities that exist in NHS services that enable or stop staff-based interventions from working.

What are the possible disadvantages and risks of taking part?

The disadvantage to taking part is that you will lose 30 minutes to an hour of clinical time to participate in the project.

It is also important to note that engaging in the interviews may lead to emotional and/ or psychological distress due to talking about your experience of RPGs and the service. The general topics that will be discussed in the interview include discussing your experience of attending RPGs, discussing why you chose to attend or why you chose to stop attending the group as well as discussing your views on the influence of the service on RPGs.

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Who has reviewed this study?

This project has been reviewed by the University of Exeter Psychology Research Ethics Committee and approved by the Health Research Authority.

Further information and contact details

If you have any questions, either now or in the future, please contact either:

Chief Investigator

Sabinah Janally

Doctorate in Clinical Psychology
University of Exeter

Washington Singer
Perry Road, Exeter, EX4 4QG

Complaints

If you have any complaints about the way in which this study has been carried out please contact the Ethics and Governance office at The University of Exeter:

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Ms Pam Baxter
Senior Research Governance Officer at Exeter University
p.r.baxter2@exeter.ac.uk, 01392 723588

Thank you for your interest in this project.

Appendix 6 - Consent Form

UNIVERSITY OF EXETER

[redacted]

IRAS ID: 244948

Centre Number:

Study Number:

Participant Identification Number for this trial:

CONSENT FORM

Title of Project: Using grounded theory to explore NHS staff's perceptions on the interaction between reflective practice groups and organisational factors

Name of Researcher: Sabinah Janally (Trainee Clinical Psychologist)

Please initial box

1. I confirm that I have read the information sheet dated 17/09/2018 (version 1.0) for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily. ☐
2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason, without my medical care or legal rights being affected. ☐
3. I understand that taking part involves an interview which will be audio-recorded and transcribed. The information collected about me, the audio recording of the interview and the transcription will be kept strictly confidential and be held in accordance with the GDPR (2018). ☐
4. I understand that my confidentiality may need to be broken if I disclose risk to myself and/or others. The researcher will have a duty to disclose this information to my line-manager. ☐
5. I understand that my personal information will be stored securely on an encrypted, password protected NHS laptop and all electronic data including audio recordings, field notes and transcriptions of interview data will be given a unique code to protect my identity and confidentiality. ☐
6. I understand that the research data will be stored securely on a password-protected computer with access to the files restricted to the research team. I have the right to have complete access to my data at any point in the research. ☐
7. I understand that after the research has finished, the data will be securely destroyed by the chief investigator at the end of a 3-year period or when the data is published, whichever occurs first. ☐

8. I understand personal data will be destroyed following the analysis of the data. ☐

9. I understand that I can withdraw my interview data and consent up until the point of data analysis from the project. I understand that I will not be penalised for withdrawing my data and consent. ☐

10. I understand that relevant sections of my data collected during the study, may be looked at by individuals from the University of Exeter regulatory authority or from the NHS Trust, where it is relevant to my taking part in this research. I give permission for these individuals to have access to my data. ☐

11. I understand that my interview data may be transcribed by Devon Transcription service. I understand the procedures they will take to protect my data. ☐

12. I understand that the research findings will be published in a doctorate thesis and possibly in a scientific journal. I understand that within these publications, identifiable information will not be used. All research findings will be anonymised. I also understand that direct quotations from my interview maybe used in the published reports. ☐

13. I agree to take part in the above study.

Name of Participant	Date	Signature

Name of Person taking consent	Date	Signature

When completed: 1 consent form for participant and 1 for the researcher site file.

Appendix 7 - Attendees and non-attendees Interview Schedule

Interview Schedule for Attendees

This study is being carried out to explore and understand the experience of RPGs from the staff member's perspectives.

Context setting

1. Tell me about yourself and your clinical role and your work.

Clinical role/professional discipline;
level of responsibility;
What values or what first drew you to healthcare;
Age and gender.
Number of years working for the team.

2. Can you tell more the current context that the team is working in at the moment?
   a. Any changes? Policy or procedures
   b. External influences – CQC or governmental policies
   c. Current pressures?

Reflective practice and reflective practice groups

3. What is you understanding of reflective practice?

4. How does your profession view reflective practice?

5. Tell me about your understanding of RPGs
   a. How you first heard about RPGs and introduced to RPGs;
   b. understanding of what RPGs are, aims and origin.

6. Tell me about your own experience of becoming involved in RPGs.
   a. What made you want to take part in the RPGs?
   b. Internally or externally motivated?
   c. When you took part in the RPG?
   d. Theme of the RPG.

7. Tell me about your expectation of the RPGs before attending
   a. Was it what you anticipated?
   b. Did the RPG meet your expectations? Anything that surprised you?

8. Describe the process of participating in the RPGs.
   a. Any observations about yourself, other attendees or the workplace.
   b. What did you notice?
   c. What was it like for you to telling others about your experiences?
   d. What was it like listening to other people's reflections and experiences?
   e. What were your thoughts and feeling you had, and now have, around your experience?
   f. Did you record or discuss your experience in the RPG in any way? How, where, who with?

9. Did the RPGs seem different to other staff group-based meetings or supervision?

10. How, if at all, did the experience of attending the RPGs influence how you saw or see yourself now as an individual or professional?
   a. Any effect on personal or professional identity?
   b. Any effect on sense of values, ethics and/or responsibility?
   c. When did you notice this change in personal or professional identity? During the RPGs or after?

11. Was there anything you particularly appreciated or found difficult about the experience and/ or process of the RPG?
   a. Was there anything that particularly stood out you from the group(s)?
   b. Difficult experience: what factors do you think made this experience difficult or challenging?

Clinical Practice

12. What were your thoughts/feelings towards your work throughout the process and now?
   a. Views towards patients? Colleagues? Own clinical practice? General clinical practice in your workplace/s?

13. How, if at all do you think RPGs influence or has influenced your clinical practice?
   a. With patients? Or with colleagues?

14. What does your experience of attending the RPGs personally mean to you?

Organisational factors

15. How are RPGs seen and understood in the workplace/service?
   a. How did colleagues view your experience and participation in RPGs?
   b. Any similarities or differences between peers, managers, senior or junior colleagues.
   c. What did it mean to them (if anything)? What did that mean for you? How did you respond?

16. How do you see RPGs affecting the team?

17. How do you see RPGs affecting organisational functioning? Could you give me an example?

18. Were there any factors that facilitated or hinder the experience/attending (of) the RPGs?
   a. Felt supported through or pressured, or neither?
   b. Was there anything that got in the way of attending? – time, parking, location, other priorities
   c. What needs did the RPGS meet and what needs did it not me?

19. Would you recommend RPGs to others?

20. Is there anything else you would like to say that we have not covered?

21. Any questions?

Thank you for your participation.

Interview Schedule for Non-Attendees

This study is being carried out to explore and understand the experience of RPGs from the staff member's perspectives. People choose not to attend for sensitive reasons. Important to say that the interview is confidential.

Context setting

22. Tell me about yourself and your clinical role/your work.

Clinical role/professional discipline;
level of responsibility;
What values or what first drew you to healthcare;
Age and gender.
Number of years working for the team.

23. Can you tell more the current context that the team is working in at the moment?
   a. Any changes? Policy or procedures
   b. External influences – CQC or governmental policies
   c. Current pressures?

Reflective practice and reflective practice groups

24. What is you understanding of reflective practice?

25. How does your profession view reflective practice? Do you do it as part of your role?

26. Do you think RP has any impact on you, individually or as a team?

27. Tell me about your understanding of RPGs
   a. How you first heard about/introduced to RPGs;
   b. understanding of what RPGs are/aims/origin;
   c. Have you ever attended an RPG before?

28. One of the key things about RPGs is to de-robe…could you tell me what that might feel like for you?

29. What factors meant that you did not get involved with the RPGs?
   a. Where there any factors that hindered this experience?

30. Have you discussed with any group attendees about their experience of the RPGs?

31. Could you tell me about your views on self-care? Have you had any experience of engaging in self-care at work?

32. Could you tell me whether self-care is valued and encouraged in the service?

33. Could you tell me, from your experience what the barriers are to self-care?

34. How are RPGs seen and understood in your workplace/service?
   a. Any differences/similarities between frontline staff/leaders/managers

35. Is there anything else you would like to add that we have not covered?
Thank you for your participation.

Appendix 8 - Initial coding and focused coding example

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Appendix 9 - Memo-writing

Memo-writing: Observational data, facilitator data and non-attendee data

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Appendix 10 - Reflective diary - Extract

Interesting initial themes regarding management pressures and perceived restrictions on attending RPG are emerging. Together, with increased role clarity, an increased appreciation of other roles and personal pressures have been noted in many transcripts. In addition, the value of having an open space to reflect in the absence of judgment was also viewed as positive. The limited attendance from other professional groups appears to be related to in-group reflective practice taking place within their professional meetings. Whereas those who attended regularly (controlling for psychology representation) do not have this opportunity, thus the RPG met their professional need. This finding has led me to think about the value of multi-professional RPGs, what need is the current group not meeting at the moment but also what is the influence of external forces from organisational factors acting upon the group. For instance, the primary hindrance to attendance appears to be work pressure and a sense that RPGs are viewed as a 'luxury' not a necessity.

Strong team cohesion has also emerged from the data, which I feel is a huge credit to the service. The attendees and non-attendees both spoke about the importance of having a reflective space but preventing its success I believe is related to a few factors including continued encouragement, fear of management presence, time, work priorities, and location. Also, I wonder whether there may be something related to organizational change, possibly trying a new approach of developing a multi-disciplinary reflective practice culture may require time and persistence as well as learning what works and does not work.

Appendix 11 – Reflexivity

Personal characteristics and relationship with participants/the service

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Appendix 12 - Themes and supporting quotes – Extract Example

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Appendix 13 - Focused codes and Theme development

Stage 1 – initial focused codes and Themes

Themes	Focus codes
Social bonding	• Shared connection • Group atmosphere • Understanding of others • Reduced personal and professional isolation • "To stop and think together" • Sense of psychological safety • Rejuvenating • Meeting an unmet need
Challenges of RPGs	• Hierarchy/ control/ power • Cost of clinical time • RPG understanding • Values of self-care • Personal challenges in engaging in RPGs • Current organisational climate
Different identities	• Professional identity development • Personal identity development- understanding self • Professional identity alliance • Team identity development • Conflict in identities • Roles within the team • Differences between professional identities in RPG

Stage 2 – introducing the idea of ingroup – outgroup dimensions

Ingroup- outgroup dimensions

- Understanding of RPG
- Inter-professional reflective practice engagement
- Alliance with professional identity
- Conflict in roles and identities within RPG

Stage 3 – Revising categories and focused codes to incorporate ingroup and outgroup dimensions

Themes	Focused codes
Possible factors influencing initial engagement in RPGs	• Shared connection • Group atmosphere • Understanding of others • Reduced personal and professional isolation • "To stop and think together" • Sense of psychological safety • Rejuvenating • Meeting an unmet need
Ingroup dimension	• Hierarchy/ control/ power

	• Cost of clinical time • RPG understanding • Values of self-care • Personal challenges in engaging in RPGs • Current organisational climate
Conflict and enhancement of multiple collective identities in RPG	• Professional identity development • Personal identity development-understanding self • Professional identity alliance • Team identity development • Conflict in identities • Roles within the team • Differences between professional identities in RPG
Beyond the RPG - outgroup	• Power/hierarchy • Inter-professional reflective practice engagement • Personal challenges in engaging in RPGs • Costs of clinical time • Self-care vs Clinical time

Stage 4. Further development of themes

Themes	Focused codes
Possible factors influencing the initial engagement in RPG	• Organisational climate • Perceived benefits of RPGs • Meeting an unmet need
The development of an RPG ingroup	• Shared connection • A restorative experience • Personal identity development • Negative experience
Conflict/Enhancement of multiple collective identities	• Professional identity development • Psychologists role within the team • Conflict in roles and identities within the RPG • Intergroup comparison
Impact on teamwork and the service	• Improved duty of care • Teamworking and connection • Organisational development • Improved staff wellbeing and resilience
Beyond the RPG – The outgroups	• Power and hierarchy • Interprofessional RP engagement
Challenges in engaging in RPGs	• Personal challenges • Cost of clinical time and organisational pressures

Stage 5. Refinement of themes and focused codes

Themes	Focused codes
The development of an RPG ingroup	• Shared connection • Observant colleague • A restorative experience • Meeting an unmet need
Conflict/Enhancement of multiple collective identities	• Professional identity development • Professional roles within the team • Conflict in roles and identities within the RPG • Intergroup comparison • Personal identity development
Beyond the RPG – The outgroups	• Power and hierarchy • Intra-professional and Interprofessional reflective practice engagement • Expert vs non-expert • Value of self-care vs the cost of clinical time • Historical past and present realities

Stage 6. Final Themes and focused codes

Themes	Focused codes
The development of an RPG ingroup and bonding processes	• Shared connection • Observant colleague • A restorative experience • Meeting an unmet need
Bridging- Conflict and enhancement of multiple collective identities	• Professional identity development • Conflict in roles and identities within the RPG • Intergroup comparison • Personal identity development
Beyond the RPG: The outgroups – barriers to bridging and linking	• Power and hierarchy • Intra-professional and Interprofessional reflective practice engagement • Expert vs non-expert • Value of self-care vs the cost of clinical time

Appendix 14 - Model development

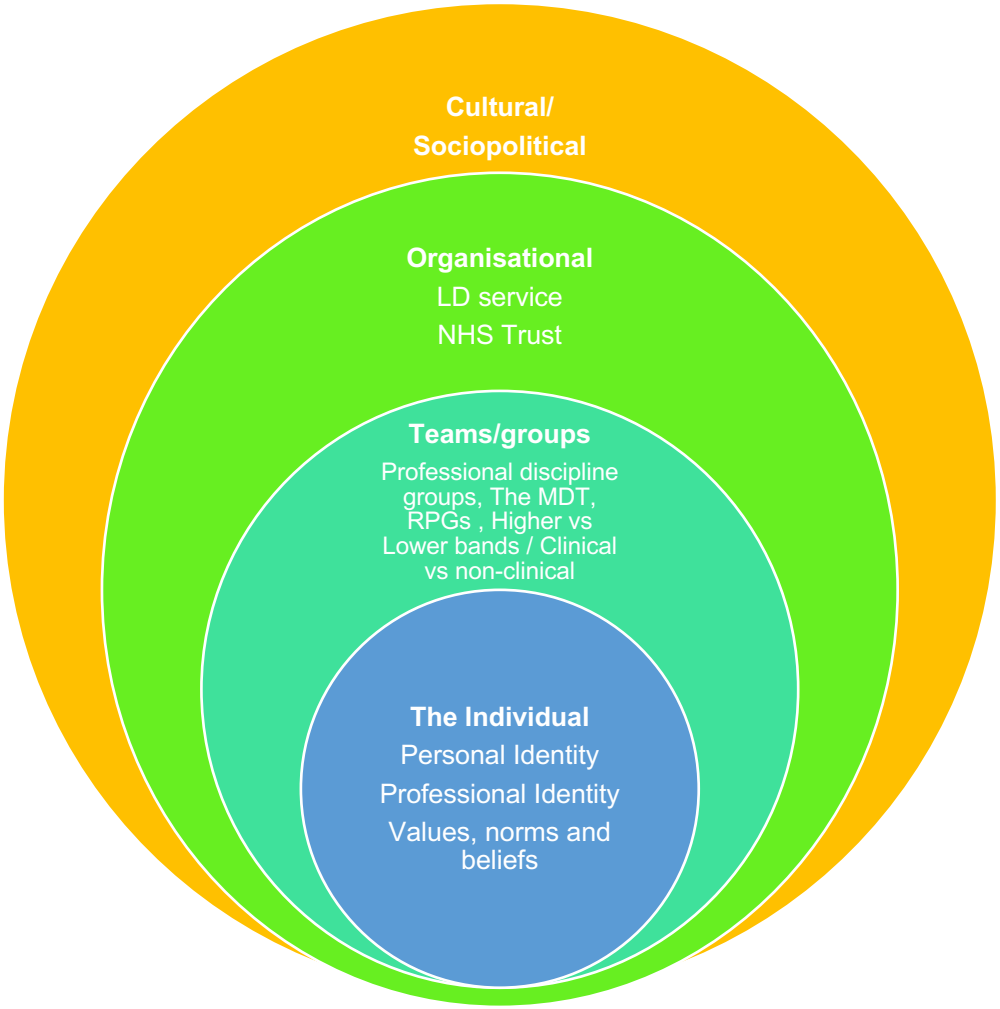

Figure 1. Initial model development

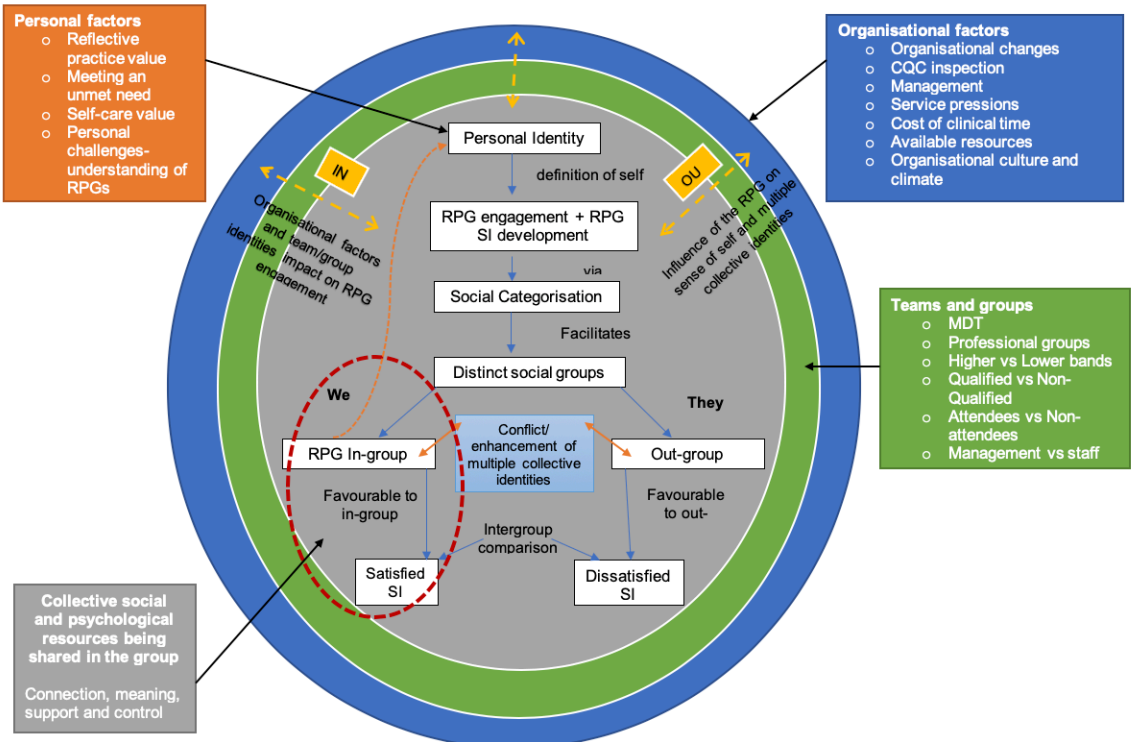

Figure 2. Considering the themes and focussed codes in relation to social identity theory

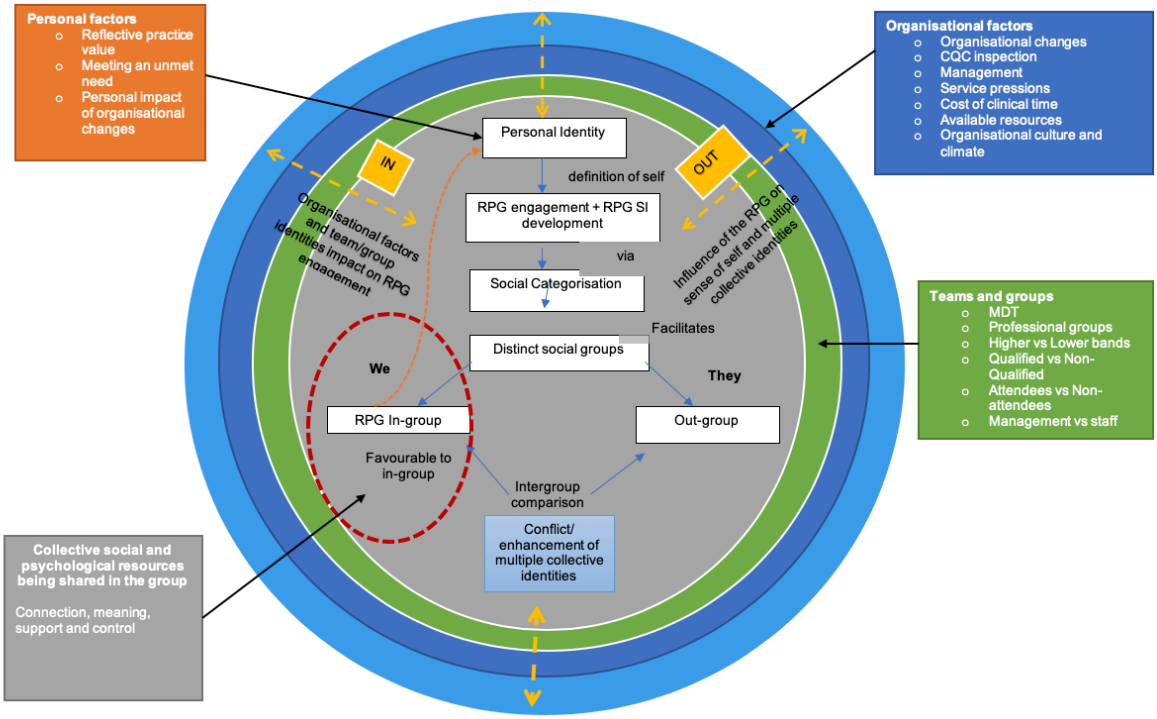

Figure 3. Consideration of the complexity of implementing an RPG within a healthcare service

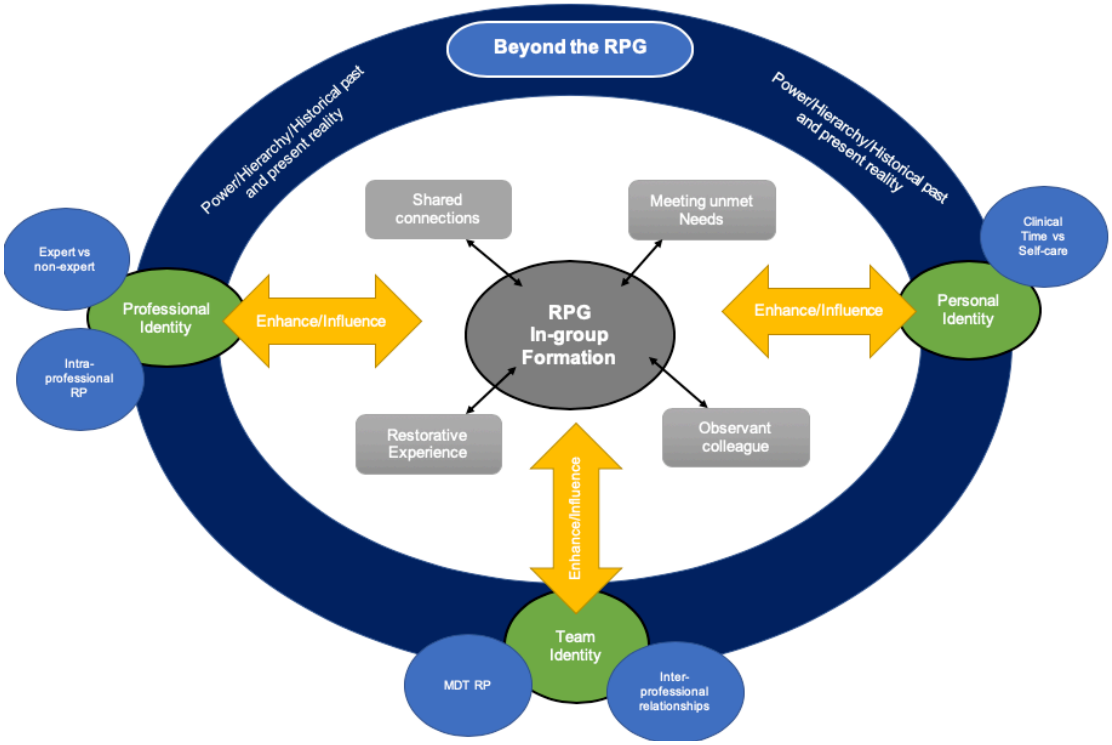

Figure 4. Simplifying the model to fit with the data

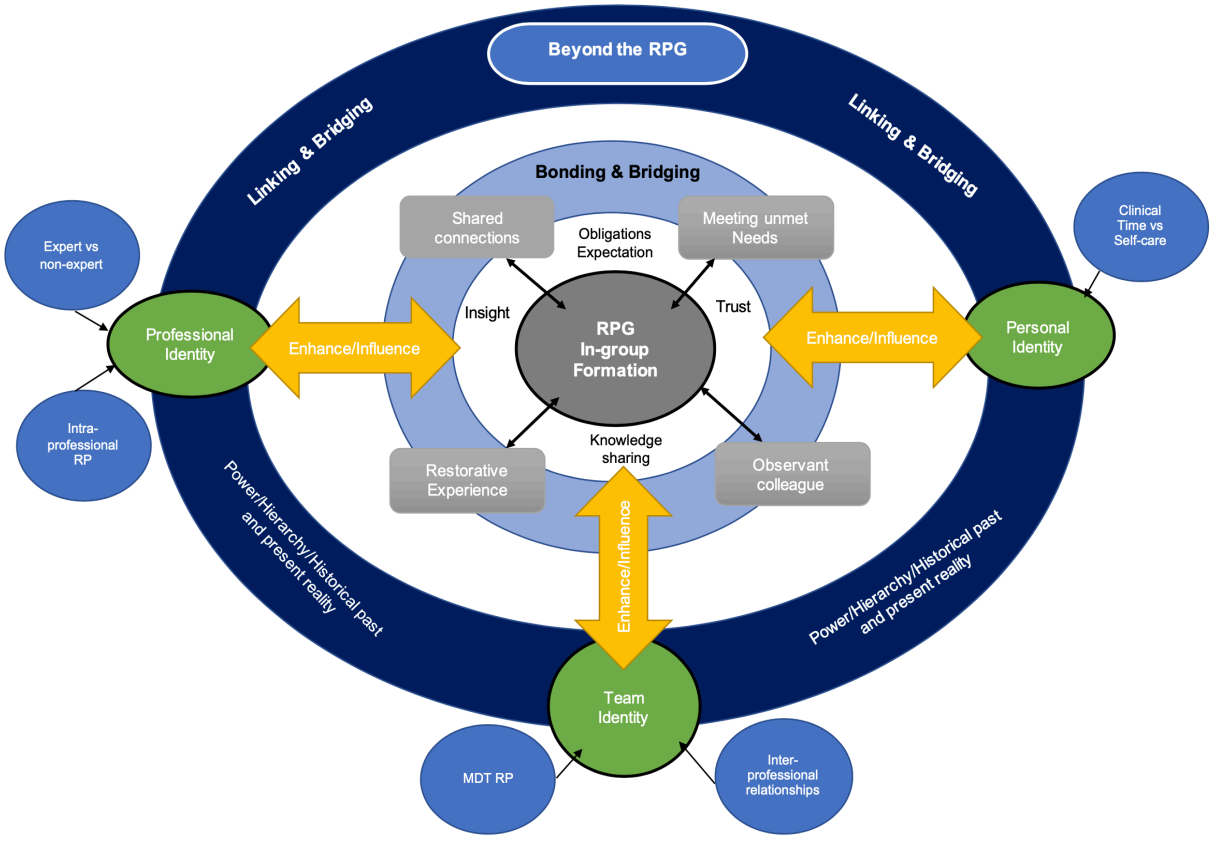

Figure 5. The final model

Appendix 15 - Dissemination statement

The systematic review will be written in accordance to the key journal identified in study one. The aim will be to submit the systematic review to the Journal of Interprofessional Care.

The findings from the research will be reported in the doctorate thesis. Once the thesis has passed the research will be adapted for journal publication in the Reflective Practice, International and Multidisciplinary Perspectives Journal.

The LD service and the participants will be offered a copy of the results. Discussions with the service manager will take place after the completion and pass of the project. A presentation of the finding will also be offered to the service. The project findings will be presented to peers and research tutor in June 2019.

Appendix 16 - Reflective Practice, International and Multidisciplinary Perspectives

Instructions for authors

About the Journal
Reflective Practice is an international, peer-reviewed journal publishing high-quality, original research. Please see the journal's Aims & Scope for information about its focus and peer-review policy.
Please note that this journal only publishes manuscripts in English.
Reflective Practice accepts the following types of article: original articles.

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Structure
Your paper should be compiled in the following order: title page; abstract; keywords; main text introduction, materials and methods, results, discussion; acknowledgments; declaration of interest statement; references; appendices (as appropriate); table(s) with caption(s) (on individual pages); figures; figure captions (as a list).

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Please include a word count for your paper.
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Please refer to these quick style guidelines when preparing your paper, rather than any published articles or a sample copy.
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Please use single quotation marks, except where ‘a quotation is “within” a quotation’. Please note that long quotations should be indented without quotation marks.

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References
Please use this reference guide when preparing your paper.
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Checklist: What to Include

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An unstructured abstract of no more than 200 words. Read tips on writing your abstract.
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This work was supported by the [Funding Agency #1] under Grant [number xxxx]; [Funding Agency #2] under Grant [number xxxx]; and [Funding Agency #3] under Grant [number xxxx].
Disclosure statement. This is to acknowledge any financial interest or benefit that has arisen from the direct applications of your research. Further guidance on what is a conflict of interest and how to disclose it.
Biographical note. Please supply a short biographical note for each author. This could be adapted from your departmental website or academic networking profile and should be relatively brief (e.g. no more than 200 words).
Data availability statement. If there is a data set associated with the paper, please provide information about where the data supporting the results or analyses presented in the paper can be found. Where applicable, this should include the hyperlink, DOI or other persistent identifier associated with the data set(s). Templates are also available to support authors.
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Figures. Figures should be high quality (1200 dpi for line art, 600 dpi for grayscale and 300 dpi for colour, at the correct size). Figures should be supplied in one of our preferred file formats: EPS, PS, JPEG, GIF, or Microsoft Word (DOC or DOCX). For information relating to other file types, please consult our Submission of electronic artwork document.
Tables. Tables should present new information rather than duplicating what is in the text. Readers should be able to interpret the table without reference to the text. Please supply editable files.
Equations. If you are submitting your manuscript as a Word document, please ensure that equations are editable. More information about mathematical symbols and equations.
Units. Please use SI units (non-italicized).

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