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**Interprofessional relationships at work: A  
grounded theory study of the perceptions  
of a stroke care multi-disciplinary team**

L J PARK

PhD

2020



**INTERPROFESSIONAL  
RELATIONSHIPS AT WORK: A  
GROUNDED THEORY STUDY OF THE  
PERCEPTIONS OF A STROKE CARE  
MULTI-DISCIPLINARY TEAM**

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requirements of the University of  
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Doctor of Philosophy

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## *Abstract*

*Introduction:* Integrating interprofessional working (IPW) as a contemporary response to the ever changing needs of the UK population is a 'gold standard' healthcare strategy (including in a stroke care setting). However, difficulties in collaboration remain despite the ubiquity and the barriers being well understood.

*Aim & Methodology:* Effective relationships are important for IPW, yet an in-depth understanding on how relationships are perceived, formed and sustained is limited. This study aimed to address this area of limited knowledge by exclusively exploring interprofessional relationships through the individuals who work within a stroke care MDT context. A constructivist grounded theory methodology influenced by the theoretical perspectives of symbolic interactionism and social constructivism was used to address the study's aim. The constructivist methodology, investigates social behaviour by its ability to interactively link the researcher and the participants under study, while acknowledging that knowledge and reality are not fixed, but are multiple and occur in the social contexts which the participant interacts in. The sample population was selected through purposive sampling, followed by the theoretical sampling strategy. In total, 14 stroke care professionals were recruited. Thirteen of these participants were observed in practice, and out of the 13, 12 were individually interviewed, resulting in data saturation from 25 data collection episodes. Data was analysed using the constant comparative analysis process.

*Findings:* Four interrelated categories emerged from analysis; *Developing a sense of belonging, Rewards and recognition, Inclusive working and learning and Interprofessional compassion.* The grounded theory model of *experiencing growth through interprofessional relationships: a stroke care MDT setting* was constructed to reflect the MDT stroke care participants' relationship perceptions and to support the discussion of the findings. The original model proposes a process for which IPW relationships can be understood, with three overarching theoretical perspectives providing insight into the social process, functions and motives of interprofessional relationships in stroke care. This new theoretical insight offers an original contribution to practice, education and theoretical knowledge, by providing a comprehensive and multi-dimensional interpretation, for understanding the IPW relationships that exist and the process in which they can be developed and sustained. It additionally contributed new research opportunities which includes an interprofessional application of the IOS tool.



## Contents

<i>Abstract</i> .....	1
<i>Contents</i> .....	3
<i>Tables and Figures</i> .....	8
<i>Acknowledgements</i> .....	9
<i>Author's declaration</i> .....	10
<b>Chapter 1: Introduction to thesis</b> .....	11
<b>1.1 Introduction</b> .....	13
<b>1.1.1 The starting point</b> .....	15
<b>1.2 Background and Context</b> .....	15
<b>1.2.1 Team working</b> .....	15
<b>1.2.2 Stroke care working</b> .....	16
<b>1.2.3 Policy context for interprofessional working</b> .....	19
<b>1.2.4 Work relationships in context</b> .....	21
<b>1.2.5 Interprofessional working relationships in context</b> .....	25
<b>1.3 Study overview</b> .....	29
<b>1.3.1 Research question</b> .....	29
<b>1.3.2 Research design overview</b> .....	30
<b>1.4 Structure of the thesis</b> .....	30
<b>1.5 Chapter conclusion</b> .....	32
<b>Chapter 2: The literature review</b> .....	33
<b>2.1 Introduction</b> .....	35
<b>2.2 The literature review approach</b> .....	35
<b>2.3 The search strategy</b> .....	36
<b>2.4 Themes identified</b> .....	40
<b>2.5 Work relationships</b> .....	41
<b>2.5.1 Historical context: the human relations movement</b> .....	42
<b>2.5.2 Work relationships vs other human relationships</b> .....	44
<b>2.5.3 The benefits of work relationships</b> .....	45
<b>2.6 Conceptualising interprofessional working (IPW)</b> .....	62
<b>2.6.1 History of interprofessional working (IPW) in healthcare</b> .....	64
<b>2.6.2 Factors, attributes, and assumptions for interprofessional success</b> .....	67

2.7 <i>Interprofessional relationships</i> .....	79
2.7.1 <i>Defining relationships in IPW</i> .....	81
2.7.2 <i>Unanswered questions from the IPW relationship literature</i> .....	96
2.8 <i>Relationship-centred care (RCC)</i> .....	97
2.9 <i>Clarify the gap in the literature</i> .....	100
2.10 <i>Chapter conclusion</i> .....	103
<b>Chapter 3: Methodology: A grounded theory design</b> .....	105
3.1 <i>Introduction</i> .....	107
3.2 <i>Research question</i> .....	107
3.3 <i>The ontological and epistemological stance</i> .....	108
3.4 <i>Social constructivism</i> .....	109
3.5 <i>Symbolic interactionism</i> .....	110
3.6 <i>The conceptual framework of this study</i> .....	113
3.7 <i>Grounded theory (GT) as an interpretive approach</i> .....	115
3.7.1 <i>Principles of reasoning</i> .....	117
3.7.2 <i>Constructivist grounded theory</i> .....	120
3.8 <i>Core characteristics of grounded theory</i> .....	122
3.8.1 <i>Approaches to reviewing the pre-existing literature</i> .....	123
3.8.2 <i>Theoretical sensitivity</i> .....	124
3.8.3 <i>Theoretical sampling</i> .....	125
3.8.4 <i>Constant comparative analysis</i> .....	126
3.8.5 <i>Reflexivity</i> .....	128
3.9 <i>Chapter conclusion</i> .....	129
<b>Chapter 4: The research process</b> .....	131
4.1 <i>Introduction</i> .....	133
4.2 <i>Recruitment and theoretical sampling</i> .....	135
4.2.1 <i>Defining the sample population</i> .....	135
4.2.2 <i>Recruitment process</i> .....	136
4.2.3 <i>Choosing the first participant</i> .....	140
4.2.4 <i>Theoretical sampling direction</i> .....	140
4.2.5 <i>Sample size</i> .....	143
4.3 <i>Data collection methods</i> .....	144
4.3.1 <i>Non-participant observations</i> .....	145

4.3.2 Interviews.....	148
4.4 <i>Memo writing and the research journal</i> .....	153
4.5 <i>Constant comparative analysis</i> .....	155
4.5.1 Initial coding.....	156
4.5.2 Focused coding .....	159
4.5.3 Theoretical coding.....	161
4.5.5 Determining saturation.....	164
4.6 <i>Using the literature for analysis</i> .....	164
4.7 <i>Reflexivity</i> .....	165
4.8 <i>Ethical considerations</i> .....	167
4.8.1 Ethical approval .....	167
4.8.2 Ethical issues .....	167
4.8.3 Confidentiality and information governance.....	170
4.9 <i>Chapter conclusion</i> .....	171
Chapter 5: The findings: The emerging concepts .....	173
5.1 <i>Introduction</i> .....	175
5.2 <i>Category one: Developing a sense of belonging</i> .....	177
5.2.1 Sub-category one: Having a role.....	177
5.2.2 Sub-category two: The perception of belonging.....	181
5.2.3 Category summary.....	186
5.3 <i>Category two: Rewards and recognition</i> .....	187
5.3.1 Sub category one: Professional rewards .....	188
5.3.2 Sub-category two: Personal rewards.....	198
5.3.3 Sub-category three: Receiving recognition .....	201
5.3.4 Category summary.....	204
5.4 <i>Category three: Inclusive working and learning</i> .....	205
5.4.1 Sub-category one: Interprofessional proximity.....	206
5.4.2 Sub category two: Creating a positive interactive environment.....	212
5.4.3 Sub-category three: Interdependent ownership of collaborative practice.....	219
5.4.4 Category summary.....	223
5.5 <i>Category four: Interprofessional compassion</i> .....	223
5.5.1 Sub-category one: Concern and conduct towards one another .....	224
5.5.2 Sub-category two: Protecting each other .....	229
5.5.3 Sub-category three: Dealing with conflict.....	232

5.5.4 Category summary .....	234
5.6 Chapter summary and conclusion .....	235
Chapter 6: The discussion .....	241
<i>Part 1: The emerging model</i> .....	243
6.1 Introduction .....	243
6.2 A review of the thesis question and findings .....	243
6.2.1 The research question.....	243
6.2.2 Findings summary .....	244
6.3 An overview of experiencing growth through interprofessional relationships model: the stroke care MDT setting.....	247
6.3.1 The four categories .....	247
6.3.2 Interprofessional collaboration: an emotional and physical, professional and personal process.....	250
6.4 Introduction .....	257
6.5 Returning to the conceptual framework .....	257
6.5.1 Valuing the interprofessional exchange of growth .....	259
6.5.2 Growing through interprofessional social capital.....	269
6.5.3 Self-expansion through interprofessional working.....	275
6.6 Returning to existing work relationships models .....	287
6.6.1 The high-quality connection (HQC) model .....	287
6.6.2 The relationship centred care (RCC) model .....	290
6.8 Chapter conclusion .....	292
Chapter 7: Summary and conclusion .....	295
7.1 Introduction .....	297
7.2 Contribution to knowledge .....	297
7.3 Limitations of the thesis .....	301
7.4 Implications for future research and practice opportunities .....	306
7.4.1 Opportunities for policy and practice.....	306
7.4.2 Opportunities for research.....	309
7.4.2 Opportunities for education.....	310
7.5 Dissemination of the thesis findings .....	312
7.6 Chapter conclusion .....	313
Appendices .....	315

<b>Appendix 1:</b> The three key versions of the grounded theory methodology explained .....	317
<b>Appendix 2:</b> University ethical approval .....	318
<b>Appendix 3:</b> IRAS ethical approval.....	320
<b>Appendix 4:</b> Trust ethical approval.....	325
<b>Appendix 5:</b> Recruitment presentation .....	329
<b>Appendix 6:</b> Participant invitation letter.....	338
<b>Appendix 7:</b> Participant information sheet .....	339
<b>Appendix 8:</b> Demographic questionnaire .....	342
<b>Appendix 9:</b> Theoretical sampling table.....	344
<b>Appendix 10:</b> Structured observation proforma.....	349
<b>Appendix 11:</b> Initial interview guide .....	352
<b>Appendix 12:</b> Extract of an interview transcript .....	353
<b>Appendix 13:</b> Exert of mind map.....	357
<b>Appendix 14:</b> Observations consent form.....	358
<b>Appendix 15:</b> Interview consent form .....	359
<b>Appendix 16:</b> Research poster .....	360
<b>References</b> .....	361

## *Tables and Figures*

Figure 1: The literature review process .....	39
Table 1: How the literature themes emerged .....	40
Figure 2: The conceptual framework.....	115
Figure 3: The research process .....	134
Figure 4: Recruitment strategy and sample process .....	137
Figure 5: Participant matrix extract .....	139
Table 2: Theoretical sampling rationale .....	141
Figure 6: Examples of IPW activities observed during data collection.....	147
Figure 7: Example of a memo .....	154
Figure 8: The grounded theory analysis process adopted for this study.....	156
Figure 9: Example of initial coding .....	158
Figure 10: Example to represent the coding process .....	163
Figure 11: The four key categories .....	175
Figure 12: Category one: Developing a sense of belonging.....	177
Figure 13: Category two: Rewards and recognition .....	187
Figure 14: Category three: Inclusive working and learning category.....	206
Figure 15: Category four: Interprofessional compassion category .....	224
Figure 16: Experiencing growth through interprofessional relationships: the core social process for explaining IPW relationships in a stroke MDT. ....	236
Figure 17: How the findings led to the relationship perception of experiencing growth through interprofessional relationships. ....	238
Figure 18: The types of growth experienced from interprofessional stroke care MDT relationships. ....	239
Figure 19: Experiencing growth through interprofessional relationships model: the stroke care MDT setting.....	246
Figure 20: The three theoretical perspectives for understanding the research finding of experiencing interprofessional growth through relationships. ....	258

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**Dedicated to my Family (past, present and future)**

*Author's declaration*

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

Any ethical clearance for the research presented in this thesis has been approved. Approval has been sought and granted from Northumbria University's Ethics Committee (Reference: DHCPark100815), The Proportionate Review Sub-Committee of the East of England – Cambridge South Research committee (Reference: 16/EE/0020) and the Research Development department of the participating hospital trust (Reference: 194431).

I declare that the word count of this thesis is 79,494 words.

Name: .....Laura Park.....

Signature:.....

Date: 29/01/2020

## **Chapter 1: Introduction to thesis**



*“Almost anything is, in principle, possible through collaboration because you are not limited by your own resources and expertise.”* (Huxham & Vangen, 2005, p. 3)

### **1.1 Introduction**

Interprofessional working (IPW) is a contemporary strategy adopted by the majority of healthcare teams as the approach to achieving goals and for keeping up with the complex needs of today’s demographic society (Ferris *et al.*, 2009; Burau *et al.*, 2017). In other words’ being a professional in today’s healthcare sector requires professionals to work interprofessionally (Meads *et al.*, 2005; Manser, 2009; Bajnok *et al.*, 2012). This makes IPW an important health governance issue, which, subsequently, has led to it becoming a prominent topic in research and public enquiry (Huxham & Vangen, 2005; Burau *et al.*, 2017), with a number of scholars aiming to explore the phenomenon that is interprofessional working. To date, this exploration has provided some detailed insight into the factors that influence interprofessional team efficiency, as well as into the conceptual frameworks that aid understanding and give further awareness of the complexities of interprofessional team interplay (D'Amour *et al.*, 2005; Lewin & Reeves, 2011; Hewitt, Sims & Harris, 2015; Beijer *et al.*, 2016; Prystajecy *et al.*, 2017).

Collaborative working as a topic of inquiry is broad and diverse, which presents as a challenge for obtaining a clear overview of the phenomena, which has been found to be clustered around particular disciplinary, theoretical and/or topic interests (King *et al.*, 2017). Given this, it is important to first make clear how I perceive collaborative working. For the purposes of this thesis ‘collaborative working’ is defined as:

*“A relationship between two or more people, groups or organisations working together to define and achieve a common purpose.”* (Hornby & Atkins, 2000, p. 12)

This recognition, that success comes from the organisation and the individuals within it, has led to a long-term drive in policy measures that focuses on improving interprofessional practice (Hudson, 2002; Lewin & Reeves, 2011). As a result of this long-term drive, an extensive amount of literature now exists that establishes the factors required for maintaining effective IPW across both healthcare and education contexts (Collins, 2011; Martin & Manley, 2018; Lindqvist *et al.*, 2019).

Despite the term ‘relationship’ appearing in the above definition and the widely accepted theoretical knowledge base on the importance of effective relationships within IPW (Tschan, Semmer & Inversin, 2004; Ragins & Dutton, 2007; Ferris *et al.*, 2009; Piecuch *et al.*, 2014; Ryan, Emond & Lamontagne, 2014; King *et al.*, 2017; Martin & Manley, 2018; Warren & Warren, 2019). Research exploring the working relationships that exist within interprofessional practice continues to be overlooked. Research predominantly is directed towards understanding how work relationships affect the organisation, the patients and the professionals (Sias & Perry, 2004; Safran, Miller & Beckman, 2005; Pryor, 2008; Weiss & Swede, 2016). This has resulted in research and theory relating to human social behaviours in the context of IPW relationships in the healthcare setting being scarce (Ragins & Dutton, 2007; Lewin & Reeves, 2011).

Whilst IPW relationships as the topic of enquiry has relevance to the field of interprofessional education (IPE) and interprofessional learning (IPL), this thesis focus is on IPW. The intention is to present findings from a constructivist grounded theory study that aims to provide a foundation for exploring IPW relationships, by offering an original contribution to practice for understanding interprofessional relationships within a stroke care multidisciplinary (MDT) setting. To remain consistent and transparent throughout this

thesis, interprofessional collaboration, interprofessional working (IPW) and multidisciplinary team (MDT) working are the terms and abbreviations used to explain, describe and discuss the topic and research findings.

### **1.1.1 The starting point**

As a registered nurse, I worked in a stroke unit that housed a large interprofessional team. I was committed to integrating into the team, interacting collaboratively with other professionals, staff and patients to deliver safe, effective care. However, I was unaware of how these relationships formed or why they perpetuated, accepting their existence as normal practice. As my academic role was established and as my understanding of the complexities of healthcare practice developed through engagement with research, I became aware that not all areas of healthcare had such well-established interprofessional relationships or effective collaborative working. I was interested to gain further understanding of this in the context of a stroke interprofessional workforce to better understand the nature of relationships that influenced the success of IPW. In particular, drawing on my practice experience, I was interested in what it was about the stroke care environment that had supported relationship building and how these relationships were formed within and across professions. I was also interested in how professionals viewed these relationships and their benefits.

## ***1.2 Background and Context***

### **1.2.1 Team working**

Teamwork is commonly recognised as an efficient way to successfully achieve complex tasks and goals (Belbin, 2010), as the team structure offers employers a way to capitalise

upon a multitude of diverse skills, knowledge and abilities (Richter, Dawson and West, 2011). In academic literature, teamwork is described as a social endeavour where two or more people come together and interact in order to achieve common work goals (WHO, 2012; Babiker *et al.*, 2014; Levi, 2017). The relationship between a team's success and the social units that form and exist within them has been highlighted in the literature, with teams and groups being deemed more than just a collection of individuals (Ricketta and Van Dick, 2005; Belbin, 2010; Weiss and Hoegl, 2015, Arnold *et al.*, 2016; Levi, 2017). Researching the social structures and social behaviours of groups and/or teams has therefore become a popular topic, which has led to the development of a number of models and theories (i.e. group dynamics, intergroup and group systems theory) that aim to uncover and explain team behaviours, characteristics, and norms (Levi, 2017). According to Levi (2017) a successful team is not just based on its ability to complete work tasks, but its ability to maintain team relationships. Researching the factors that contribute to effective team working, regardless of the organisation, industry or setting, has become a topic of enquiry, with team success fulfilling the needs of both the organisation and their employees (Richter, Dawson and West, 2011; Arnold *et al.*, 2016; Levi, 2017). Its ability to fulfil needs places teamwork at the centre of all interprofessional endeavours, with every team member being acknowledged as having an integral role in creating a team that practises effectively (Hammick *et al.*, 2009).

### **1.2.2 Stroke care working**

The changing context of IPW has led interprofessional practice to be co-ordinated and managed through multidisciplinary teams (MDT), a strategy that all of today's stroke services employ (Ovretveit, 1997; Royal College of Physicians, 2008, 2012, 2016a; NICE,

2018). This fits with other global and national UK policy, which identifies IPW as a solution for avoiding unnecessary deaths (Kennedy, 2001; Laming, 2003, 2009; Pollard, Thomas & Miers, 2010; King *et al.*, 2017) and promoting high quality care (Hewitt *et al.*, 2015; NHS England, 2016, 2019). Implementing IPW has therefore, become the strategy at the heart of the modernisation of UK healthcare delivery (Meads *et al.*, 2005; Ham, Berwick & Dixon, 2016) with stroke care units being one example that demonstrates this modern NHS approach to care delivery.

Due to the substantial pace of change within the evidence base surrounding stroke care, stroke-specific guidelines are regularly reviewed and updated, with the National Clinical Guidelines of Stroke currently being in its fifth edition (Royal College of Physicians, 2016a). Stroke as a medical condition is categorised as an emergency, with treatments such as thrombolysis needing to be given within hours of symptom onset (Suljic, Mehicevic & Gavranovic, 2013; NICE, 2018, British Association of Stroke Physicians (BASP), 2019). Due to the risks of multi-morbidity, stroke patients are widely acknowledged to have complex needs and require complex care (Burau *et al.*, 2017).

Stroke is the fourth single leading cause of death in the UK, with approximately 100,000 death occurring a year in the UK; costing £1.7 billion a year in terms of NHS and social care and significantly impacting on patients and their families' lives (Stroke Association, 2017, 2018). The greatest phase of recovery following a stroke is usually within the first days and weeks after the stroke (Clarke, 2013), necessitating stroke teams to come together and work effectively. In light of the above figures and the requirement for stroke teams to effectively work together The Department of Health's (DoH) Progress In Improving Stroke

Care Report (National Audit Office, 2010), the 2007 National Stroke Strategy (Department of Health, 2007) and the NICE (2018) Acute Stroke Guidelines all outline that stroke patients are required to be treated in dedicated stroke units by specialist multidisciplinary teams (MDT).

There is a large amount of robust research providing evidence that dedicated stroke MDT's not only save costs for the NHS, but are an integral part of saving lives (Royal College of Nursing, 2016b; Blum, Brechtel & Nathaniel, 2018). Statistics from the Stroke Association provides significant evidence of the impact dedicated stroke units have on patient outcomes, with patients cared for on stroke units being more likely to be alive and living independently than those cared for on other wards (Stroke Association, 2015, 2017, 2018). In 2009, the median number of beds per stroke unit had increased from 24 in 2006 to 26 and, whereas some units have seen an increase in professionals working within the teams, other multidisciplinary stroke teams remain below the suggested minimum levels of staffing (National Audit Office, 2010). In England, Wales and Northern Ireland it is estimated that only 51% of hospitals are adequately staffed with senior nurses (Stroke Association, 2018). Despite this, other stroke statistics are showing an all-time high for patient recovery, suggesting that success is not necessarily based on team numbers, but on their ability to collaborate successfully (Sulch *et al.*, 2000). This assumption has been recognised by the British Association of Stroke Physicians (BASP) (2016) 2017- 2020 strategy. Whilst the strategy infers the need for doctors to be highly skilled and knowledgeable within every aspect of the stroke pathway, it acknowledges that in stroke care doctors need to be able to work successfully alongside professionals from other disciplines (BASP, 2016). This strategy recognises that creating stroke MDTs is simply not enough on its own: professionals need the ability to work interprofessionally.

However, despite research focus being directed towards discovering the factors and concepts which influence successful collaboration (Petri, 2010; Korner *et al.*, 2015; BASP, 2016), this is in conjunction with the accepted recommendation for stroke specialist units and successful interprofessional collaboration within stroke MDT's. The latest BASP (2019) workforce report documents a current shortfall in stroke specialist provisions in the UK, which is estimated to leave 40% of UK stroke units understaffed. This suggests that research for understanding IPW in a stroke setting is incomplete, supporting the need for further research.

### **1.2.3 Policy context for interprofessional working**

Policies and government standards for interprofessional working (IPW) are not limited to the UK (Pollard, Thomas & Miers, 2010; Prystajeky *et al.*, 2017). Globally, effective teamwork is key to enhancing patient outcomes and reducing healthcare costs (Cott, 1998; Clarke, 2010; WHO, 2010; Price, Doucet, & Hall, 2014). A growing international pressure to achieve successful interprofessional collaborative therefore exists (Burau *et al.*, 2017). Although not a new concept (Cladwell & Atwal, 2003), IPW has been noted to be a complex process, with teams experiencing struggles in achieving success (Nancarrow *et al.*, 2013; Morgan, Pullon & Mckinlay, 2015; Prystajeky *et al.*, 2017). Despite, its complexities IPW within healthcare contexts is a concept that has global value (Pollard, Thomas & Miers, 2010; WHO, 2010; Price, Doucet, & Hall, 2014; Wieser *et al.*, 2018). Its high priority in national and local policy makes interprofessional teamwork a near-universal aspiration for all professionals and organisations (Reeves *et al.*, 2010).

Along with its association in reducing healthcare costs, interprofessional collaboration is acknowledged as a way to decrease a patient's length of hospital stay and reduce the

number of medical errors (Safran, Miller & Beckman, 2005; Buring *et al.*, 2009). The beneficial ripple effect of interprofessional collaboration even extends to the workforce, with IPW reducing work-related stress and reports of burnout (Oandasan *et al.*, 2006). The NHS five-year forward view additionally sets out the steps needed to strengthen IPW across the NHS (NHS England, 2014, 2016). Furthermore, the NHS long-term plan highlights a need to improve services for its staff, with attention being directed towards the ways of working and ways to ensure staff are looked after (Ham, Berwick & Dixon, 2016; NHS England, 2019). Initiatives and innovations for improving ways of working have been outlined within the Kings Fund strategy for improving quality in the English NHS (Ham, Berwick & Dixon, 2016) and the NHS Operational Planning Guidance for 2017/18 and 2018/19 (NHS England & Improvement, 2016). These documents provide NHS trusts and commissioners with the workforce development plans, which lay out structures for the future ways of working in healthcare. Innovations within these documents includes the development of multidisciplinary teams and the expansion of multidisciplinary working in order to generate greater integration across healthcare settings (NHS England & NHS Improvement, 2016). In addition reforming the NHS is a process ‘from within’, with innovations directed toward supporting and improving the lives of the workforce (Ham, Berwick & Dixon, 2016).

As discussed, within a stroke context interprofessional working through specialised MDT’s is the cornerstone for providing holistic care and significantly improving patient outcomes following a stroke (Langhorne & Pollock, 2002; NHS England, 2019). The 2016 National Clinical Guidelines for Stroke however, documents the need for these teams to be appropriately staffed (Royal College of Physicians, 2016a). The use of the word

‘appropriately’ within the guidelines to describe the team raises the question as to what factors need to be considered when bringing multiple professionals together, with having the right numbers and the presence of all disciplines simply not being enough. Meyer (2011) agrees and discloses that achieving interprofessional collaboration that is deemed successful is more complex than first initially perceived, as it involves bringing together a number of healthcare professionals from a range of disciplines, all of whom have different levels of expertise (Hewitt *et al.*, 2015). This suggests that further, alternative considerations and factors need to be taken into account when creating collaborative teams, as numbers and disciplinary presence are not enough to determine their success.

Factors influencing interprofessional success include staff attitudes, shared goals, team characteristics, team roles and effective communication (Hall, 2005; Suter *et al.*, 2009; Clarke, 2010; Thistlethwaite, Jackson & Moran, 2013; Korner *et al.*, 2015; Prystajeky *et al.*, 2017). According to Reeves *et al.* (2010), interprofessional activity within the medical and surgical directorates form the core of a team’s daily interactions, suggesting that focusing on daily work interactions could be the key to furthering the understanding of interprofessional success. In addition, findings from Reeves *et al.* (2010) Cochrane review, suggests that successful collaboration does not rely on one single factor. This additionally supports the need for more research, including studies that focus on interprofessional working relationships.

#### **1.2.4 Work relationships in context**

Work psychology or organisational psychology is the study of humans in their work environments, with research perspectives exploring: behaviours and attitudes to work,

leadership, work-related stress and aspects of teamwork, which includes the relations of the team (Newstrom, 2011; Arnold *et al.*, 2016). In addition, investigations of human relationships from a myriad of perspectives and settings, as a topic of enquiry is a core research area within social psychology (Brueller *et al.*, 2019). The work setting according to Chadsey and Beyer (2001) is the most important social unit in an individual's life, after the immediate family context. They are considered to be a vital part of working life that can significantly enhance or diminish the workplace morale and culture (Hodson, 1997; Hill, 2014; Abugre, 2017; Pillemer & Rothbard, 2018). Given a considerable percentage of an individual's life is spent at work, talking and thinking about work, then this is perhaps understandable (Sias, 2009).

From an organisation's perspective, work relationships are of a great significance as organisations are built on and thrive from the people in them (Persson *et al.*, 2018). Engaging healthcare professionals at work has been identified as a predictor for creating a sustainable workforce (Strömgren *et al.*, 2016). Since relations in the workplace can explain the motivations for why individuals remain or leave an organisation and uncover why they are successful or underperform (Abugre, 2017). Despite this and their presence within organisational theory and research (Heaphy *et al.*, 2018), the significance of relationships in the context to working life varies. In Fletcher's (1998) study of engineering firms, work relationships were deemed inconsequential and constructed through 'non work' processes. In the healthcare industry, which is the context of this thesis, work relationships are deemed as important assets that lie at the heart of high quality, effective service provision (Meads *et al.*, 2005; Roncalli & Byrne, 2016; Persson *et al.*, 2018).

The changing nature of work including increasing retirement age, shifts in technology, workforce transition; the changing nature of careers; the increasing cost of living and equal working rights; supports the view that work relationships serve a broader range of functions than just productivity (Colbert, Bono & Purvanova, 2016). This indicates that relational needs at work are likely to alter over time (Heaphy *et al.*, 2018). Whilst there are a number of theories to explain the motivations behind why individuals enter into work relationships i.e. social capital, social exchange, Maslow's hierarchy of needs, attachment theory (Arnold *et al.*, 2016), all relationships, regardless of their nature, initially form from regular social interactions while in the company of others (Argyle & Henderson, 1985). In many work contexts, interaction or collaborative activity is a core feature (Tschan, Semmer & Inversin, 2004). As previously discussed, collaboration is a key feature of contemporary stroke care MDT working. It follows then, that underpinning the work of a multidisciplinary stroke care team will be a network of relationships, influencing team members' experiences at work and potentially the outcomes of the collaboration.

Where they work well, work relationships can enhance an individual's well-being (Coissard *et al.*, 2017) as they can be a valued source for supporting professionals during difficult and emotional tasks (Persson *et al.*, 2018). Social support at work is argued to be of particular value for healthcare workers and the organisations they work for, as work setting characteristics can be stressful and highly pressurised due to heavy workloads and inadequate resources, which have been found to lead to burnout, reduced feelings of job satisfaction and an increase in recorded sick days taken (Ham, Berwick & Dixon, 2016; Eliacin *et al.*, 2018; Persson *et al.*, 2018; Gonzalez-Gancedo, Fernandez-Martinez & Rodriguez-Borrego, 2019). In addition, healthcare workers can work unsociable shift patterns, which can disrupt the ability to access social support outside of their work

environment (Brand & Hirsch, 1990; Gifkins, Louddoun & Johnston, 2017). This highlights the link between work relations and workforce sustainability, which further reiterates the multiple positive effects of work relationships in healthcare and identifies the value that further research will have for understanding the phenomenon within an interprofessional setting.

Arguably, work relationships, unlike other relationships, do not form via the usual mechanisms, since individuals are brought together by circumstance and not out of personal choice (Argyle & Henderson, 1985). Individuals enter into work relationships with limited prior knowledge about each other (Ferris *et al.*, 2009). Furthermore, Cott (1998) suggests that at work, a network of different relationships develop between team members, with each different relationship having its own set of rules and interactions (Argyle & Henderson, 1985; Trefalt, 2013). Workplace relationships are not static, they are on a continuous cycle and are dynamic in nature, meaning they develop and change over the course of time (Sias & Perry, 2004; Harrod *et al.*, 2016; Heaphy *et al.*, 2018). This can hold key challenges for professionals working in a healthcare setting where stable and sustainable relationships are fundamental to successful team working (Meads *et al.*, 2005). Relationships being a dynamic process brings additional challenges to researchers, as it often means they are challenged to uncover how and why work relationships form, develop and then end (Heaphy *et al.*, 2018).

Despite these challenges, the changing nature of work relationships means new types of work relationships are developing and established relationships are evolving, allowing for the possibility for understudied relationships that are richly deserving of inquiry (Heaphy *et al.*, 2018). Establishing effective working relationships across education, health and

social care have been a long-term focus of policy, as understanding how nurses and other healthcare professionals work together is fundamental (Jones, 2006). Although there are studies that explore interprofessional working and collaborative practice, few studies have explicitly explored the interprofessional working relationships of stroke care MDT's.

### **1.2.5 Interprofessional working relationships in context**

In a society where people have many ties, research efforts now need to extend their boundaries of knowledge beyond looking only at the most common human relationships (Milardo & Wellman, 2005). In a healthcare context, this refers to the need to push the research focus beyond exploring the most common dyadic (group of two individuals) healthcare relationships (i.e. the nurse doctor relationship). As collaborative working relationships do not just exist on their own (King *et al.*, 2017) and unlike other work environments, the healthcare context is unique, in that it has the potential for greater catastrophic outcomes, emphasising the need for successful interprofessional practice (Beijer *et al.*, 2016).

While the complexities of IPW relationships are acknowledged in a number of research studies, the rules for their success have been found to be difficult to pinpoint and implement (Freeth, 2001; Barr *et al.*, 2005; Pullon, 2008; Baxter & Brumfit, 2008a; Beijer *et al.*, 2016; Wieser *et al.*, 2019). However, despite its complex nature, researching collaborative practice regardless of whether it is on a macro or micro level, is according to King *et al.* (2017) the exploration of how professionals relate to each other, with collaboration always being enacted in human relationships. This is supported by Pullon (2008) who states that collaborative practice is dependent on effective interprofessional

relationships. This supports the relational approach that this thesis has taken in researching the complex topic that is IPW.

Research into the topic of IPW relationships currently provides an extensive catalogue of knowledge into the importance and the benefits relationships can have on those involved (i.e. patients, the professionals and the organisation) (King *et al.*, 2017). Current research additionally supports the continuing need for further research, with work relationships being deemed as a factor that can determine the success of an interprofessional team. According to D'amour *et al.* (2005), professionals within interprofessional teams cannot collaborate successfully without taking the time to get to know one another. This suggests that getting to know one another is a requirement for interprofessional collaborative success. This is supported by a number of more recent literary sources, whose findings support the concept that when professionals in interprofessional teams made an effort to get to know one another, it resulted in improved work performance (McCallin & Bamford, 2007; Bajnok *et al.*, 2012; Harrod *et al.*, 2016; King *et al.*, 2017; Persson *et al.*, 2018). However, there is conflict since Jones (2006) disputes this finding and posits that caring for patients was the only reason MDT professionals worked amicably together. Martin and Manley (2018) challenge Jones's perspective, by reporting that service integration is not sufficient enough for IPW without the practitioners being active and engaged with one another. Furthermore, D'amour *et al.* (2005) suggests that interprofessional teams will not successfully collaborate if their efforts are based only on benefiting the patient. They put forward the need for further research that seeks to:

*“...understand what transpires within the working lives of a group of collaborating professionals.”* (D'amour *et al.*, 2005, p. 126)

This insinuates that successful collaboration relies on something other than patient care, as its effects extend beyond the realm of the patient and the organisation.

This need to understand the meanings and processes behind work relationships is further strengthened, by the idea that relationships can be more influential than hierarchical structures, with work relationships determining social identities, professional development and team order (Hoskins & Morely, 1991; Makowsky *et al.*, 2009; King *et al.*, 2017). This highlights that the power of interprofessional relationships should not be underestimated, with collaborative practice having more value than simply a way to meet a patient's needs (Ross, 2005). This provides evidence that there are multiple reasons, motivations and benefits as to why professionals collaborate, with developing relationships being one of them. In addition, Ryan, Emond and Lamontagne (2014) and Cunningham *et al.* (2012) both imply that understanding the structures, processes, characteristics and functions of social networks in environments such as those of an interprofessional nature is vital. Cunningham *et al.* (2012) concludes that from gaining this understanding on social networks in healthcare, vital knowledge can be gained on the effectiveness and sustainability of working networks, with 'nurturing' networks being implied as an activity that should be encouraged. This emphasises for the content of this thesis, which aims to contribute to the existing relationship knowledge base, by investigating relationships within the context of IPW. It is predicted that gaining a greater understanding into the complex relationships that exist within IPW, will benefit healthcare professionals, IPW teams and organisations.

Whilst a large body of literature has explored work relationships in healthcare contexts (Freeth, 2001; Baxter & Brumfit, 2008a; Ferris *et al.*, 2009; Reeves *et al.* 2010; Wieser *et al.*, 2019) knowledge surrounding the topic remains incomplete. Whilst no study has aimed to research the interprofessional relationships of a stroke care MDT, there are several recent papers that seek to understand and interpret IPW relationships within various other healthcare settings. However, despite these research efforts, knowledge into IPW relationships are found to be poorly defined with them being broad, inconsistent, ambiguous, with the use of singular descriptive words i.e. trust and/or single theories i.e. social exchange to describe and explain what has already been identified as a complex, dynamic human social process. This indicates that current research does not reflect the relationships realities within IPW and that of an interprofessional stroke care MDT. In order to understand these human relationships and support their existence and efficacy, arguably requires a methodology that can analytically account for and explain these complexities. To act in response to this, this study's constructivist grounded theory methodology, collectively with the conceptual framework can efficiently examine and generate new foundational knowledge for understanding the complex working relationships of an interprofessional stroke care team.

As previously discussed, few empirical studies have specifically focused on exploring the working relationships of stroke care professionals working in interprofessional MDT's. This is despite the known benefits of working relationships, their presence within current stroke report recommendations and their proposed influence on achieving interprofessional success. Instead research has focused on exploring why interprofessional collaborative success is important in stroke working, if collaborative success is achieved in stroke MDT's and exploring popular dimensions of successful IPW such as communication

(Clarke, 2007, 2010, 2013; Hewitt *et al.*, 2015; Burau *et al.*, 2017). Whilst previous research outside of a stroke care setting has provided insightful knowledge, via descriptive definitions of interprofessional work relationships, in uncovering the benefits of IPW relationships and in providing an explanation into the factors influencing interprofessional relationship success. None have put these together to uncover the interactive social process that is occurring between the individuals of an interprofessional stroke team, which motivates and determines their interprofessional relationship perspectives. In this study I intend to contribute to the precedent literature by propositioning a model that moves beyond a single descriptive level to a multi-layered theoretical understanding. I aim to do this by focussing on uncovering the dynamics for how interprofessional relationships specifically within a stroke care MDT are perceived by the professionals, through the conditions of their interprofessional collaborative practice.

### ***1.3 Study overview***

#### **1.3.1 Research question**

A research question was created to provide a clear focus for the study so that the necessary data could be captured and the research gap filled. The research question evolved by drawing upon the principles of the qualitative PICo framework (Problem/Patient or Population, Issue and Context) (Moule, Aveyard & Goodman, 2017). The research question is discussed further in Chapter 3.

*“How do professionals working in a stroke care multidisciplinary environment perceive their collaborative interprofessional working relationships?”*

### **1.3.2 Research design overview**

Collaboration is implicitly or explicitly seen as a social process (Levine & Moreland, 2004). Although individuals upon joining a team become part of the team, working relationships are only a result of the social interactions that occur between the team members. To address the research question posed, a methodological approach that captures the exploration of human perceptions and interactions as a method of understanding needed to be employed. For this thesis, the theoretical framework of symbolic interactionism was selected as the philosophical underpinning for the thesis, as it provides the means to discover how participants' behaviours and perceptions have been shaped through their social interactions (Aldiabat & Navenec, 2011). Within the symbolic interactionist framework, a constructivist grounded theory methodology was used (Charmaz, 2014). The rationale for this approach is provided within Chapter Three.

### ***1.4 Structure of the thesis***

This thesis is presented in seven chapters. The following section summaries the entire work of the thesis by providing a general synopsis of the proceeding 7 chapters.

***Chapter One:*** This introductory chapter provided the rationale and origins for topic choice through the background context of the phenomena of IPW, stroke care MDT working and IPW relationships. The personal context of the researcher was included, with the chapter concluding with an outline of the research gap, the research question and the design overview. This chapter concluded with a brief overview of the thesis and its structure.

***Chapter Two:*** This chapter presents the comprehensive literature review that was undertaken for informing and contributing to IPW relationship understanding. The chapter

begins with the search strategies implemented and a discussion into how the review was approached. The relevant themes that contributed to understanding are then identified. The gaps in the literature, which have informed this study, is discussed.

**Chapter Three:** This chapter outlines and makes explicit the theoretical framework and philosophical stances adopted for this study, with how they directed the selection of the methodological approach of grounded theory being discussed. The versions of the grounded theory methodology are discussed and critically explored (Appendix 1). The chapter ends with a rationale for the use of constructivist grounded theory and an outline of the methodology's core characteristics.

**Chapter Four:** The research process undertaken is rigorously discussed in this chapter. The sampling and recruitment strategy is described, along with the data collection methods and ethical considerations. Extracts from the reflective journal appear within this chapter, which provide evidence and support for the research process decisions. The chapter ends with an explanation of the constant comparative analysis technique.

**Chapter Five:** This chapter presents the four categories that resulted from the constant comparative analysis process. Verbatim quotes from the interviews and data from the observations are used to support the findings.

**Chapter Six:** This discussion chapter first reiterates the research question and provides a summary of the research findings. The theoretical framework that was adopted for the study is then revisited. Following this, a detailed discussion is presented on the original

proposed model that has been created. The model reflects the key findings that emerged from the data analysis process, thus provides a representation of participants' perceptions of IPW relationships within a stroke care MDT context. Reflections are additionally made into how these findings relate to and contribute new knowledge to previous research.

**Chapter Seven:** The final chapter of the thesis provides a summary of the research process and findings, as well as the limitations of the study. The chapter relays the original contribution to knowledge before concluding with the implications and recommendations for further research.

### ***1.5 Chapter conclusion***

This chapter has introduced the thesis by providing an overview of how the research topic came about. This included the personal and professional passion for understanding IPW, which along with the historical and contemporary background context provided the topic impetus. Finally, the research gap was outlined, along with an overview of the research question, and the research design, followed by the thesis structure. The next chapter presents the literature review.

## **Chapter 2: The literature review**



## ***2.1 Introduction***

Building on the discussion in Chapter One, this chapter provides a comprehensive summary and critical analysis of relevant literature reviewed during this research journey. It begins by presenting an overview of the search strategies implemented. Literature themes identified are then presented and discussed. The chapter concludes by reaffirming the gap in the research, which provided the rationale for this study.

## ***2.2 The literature review approach***

The strategy for how the literature was reviewed is outlined next. Boote and Beile (2005) suggest that qualitative research cannot be conducted without first reviewing and understanding the literature. However, within grounded theory (GT), the subject of when to engage with the literature is a matter of debate.

The GT methodology argues that reading existing literature should be avoided, as researchers should enter the field with no predetermined notions (Birks & Mills, 2015). Literature instead should be used as additional data and only reviewed when theory starts to emerge (Heath & Cowley, 2004). This, however, has been deemed unrealistic by others, as no individual is without thoughts and every researcher, especially practitioners, have a background, history, knowledge base, and collection of pre-existing experiences (Dunne, 2011). Rarely, or even if at all, do researchers abandon all prior knowledge in the quest to understand a social world (Kools *et al.*, 1996). In fact, prior knowledge and experience are considered fundamental in developing new theories (Evans, 2013) and, engagement with the literature being about open-mindedness and allowing new ideas to emerge naturally (McGhee, Marland & Atkinson, 2007; Dunne, 2011).

A stepped approach to reviewing the literature was adopted for this constructivist GT study (Figure 1) (Elliot & Higgins, 2012). The first step was an initial review, undertaken prior to data collection to help understand the context and to clarify the research question. In keeping with constant comparative analysis (Glaser & Strauss, 1967), the literature review continued throughout data collection and analysis. This helped to ensure that new literature of relevance was identified. This step of reviewing the literature was important, in that it informed the conceptual framework and prevented pre-existing literature influencing the research findings, allowing the findings to emerge naturally from the data (Charmaz, 2014). A full explanation of the search strategy is provided next.

### ***2.3 The search strategy***

Several online databases (The university library catalogue, CINAHL, EBSCO, PubMed, Science Direct, Web of science, Ethos, and Google scholar) were used. Articles were then filtered for relevance by perusing the abstracts. In addition to searching the online databases, certain journals i.e. the Journal of Interprofessional Care were also searched.

Although the need to synthesise research evidence is widely recognised, explicit methods to capture research have only been developed within the 20<sup>th</sup> century (Grant & Booth, 2009). Since this time, several papers have sought to identify, explain, and review literature typology (Samani *et al.*, 2017). In the initial search, which was the first step to reviewing the literature, date restrictions were not applied. This was so a wide range of seminal findings, found in both contemporary and classic work, which sit specifically in and outside of the research field under investigation can be identified. This method of reviewing the literature is interpreted as a scoping approach. The impetus for this scoping

approach was driven by the literature engagement debate within the GT methodology. Scoping reviews as a literature search strategy are recognised as useful, as they can provide an overview of a topics that has a limited knowledge base (Brien *et al.*, 2010; Vickers, 2016), and in developing a new understanding for areas like human relationships, which are thought of as complex, or topics not yet extensively reviewed (Levac *et al.*, 2010; Vickers, 2016). In this sense, the scoping review as a process evaluates a topics size and scope enabling a strategy that can identity broad themes (Vickers, 2016; Samani *et al.*, 2017) and unearth the already discovered as well as the undiscovered (Rumrill, Fitzgerald & Merchant, 2009).

During this step in the search strategy, the only exclusion/inclusion criteria used was for all publications and sources to be in English. Examples of key terms used in the initial search of the literature included:

- *'Interprofessional working'* OR *Multidisciplinary working'*
- *'Teamwork in stroke care'* AND *'Stroke care working'*
- *'Work relationships'* OR *'Employee relationships'*
- *'Collaborative teamwork'* AND *'Stroke care'*
- *'Interprofessional relationships'* OR *'Healthcare relationships'*

From imputing the key terms, eligible research included:

- Studies that have explored relationship perceptions in workplace settings.
- Studies that investigated contextual factors for interprofessional success.
- Studies that identified the outcomes of work relationships.

- Studies that explored current contextual factors and practices for understanding IPW relationships.
- Studies that addressed the relational dynamics of healthcare professionals.

Research was excluded for the following reasons:

- Studies not published in the English language.
- Studies concerned with only examining patient practitioner relationships.
- Studies that investigated the relationships between undergraduate professionals.

The network approach was also adopted to further identify relevant literature sources. The network approach involves tracing references from references list so further relevant citations are located (Timmins & McCabe, 2005). This strategy enabled the identification of relevant literature that was not always detected through searching the electronic databases.

As previously explained during data collection and analysis, the databases were revisited on several occasions. Figure 1 outlines when the literature was re-visited throughout the PhD journey. Revisiting the literature allowed for a diverse range of sources to be identified and reviewed beyond mere description (Grant & Booth, 2009). This step in the review is where theoretical work relating to the findings can be located.

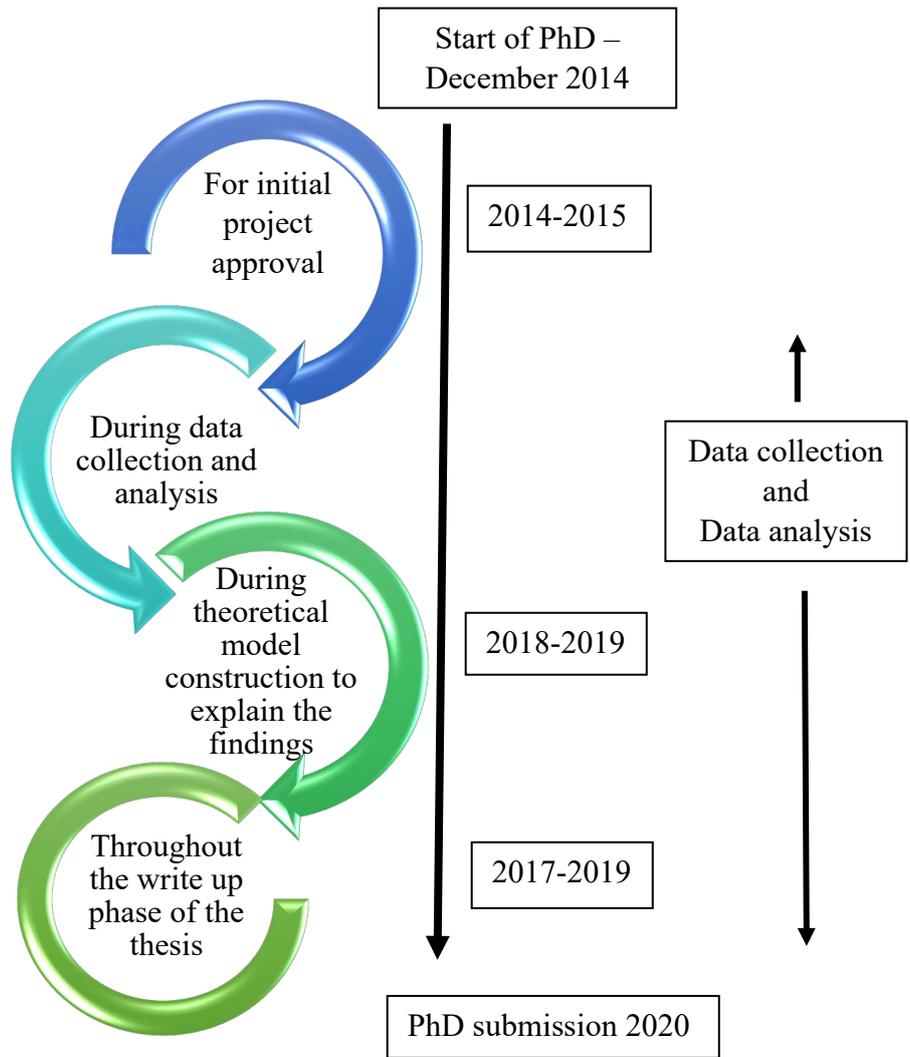


Figure 1: The literature review process

## 2.4 Themes identified

The following section presents the themes identified in the literature that were pertinent and relevant to the conduct of this thesis. Table 1 provides an overview of why and when the literature themes included in this thesis were arrived at.

Table 1: How the literature themes emerged

<u>Literature themes</u>	<u>When they emerged</u>
Interprofessional relationships and the RCC model	These articles were reviewed at the start during the initial project approval to ensure originality. However, as data collection and analysis progressed, these articles were re-addressed.
Work relationships	Literature surrounding work relationships was reviewed for the initial project approval, with work relationship literature aiding the rationale for the study and supporting the methodological approach.
Contextualising IPW <ul style="list-style-type: none"> <li>• History of IPW.</li> <li>• Factors attributes and assumptions.</li> </ul>	Contextualising IPW and exploring the history of IPW commenced early in the thesis process. This was to ensure that gaps in the literature existed and to formulate a clear rationale for the choice of topic for project approval. However, factors for interprofessional success were known due to professional experience working in an interprofessional stroke setting. Success factors were explored further when their links to IPW relationships emerged in analysis i.e. role, characteristics, attributes.
Benefits of working relationships: <ul style="list-style-type: none"> <li>• Social exchange.</li> <li>• Social capital.</li> <li>• Growth and development.</li> <li>• Self-expansion.</li> </ul>	I had some prior knowledge of the basic principles of the social exchange and social capital theories before commencing my PhD journey, and the benefits for entering into work relationships were acknowledged in the initial project approval literature review stage. These theories and concepts were not explored in depth until the principles of the theories emerged in the data through the methodology's constant comparative analysis process.

## ***2.5 Work relationships***

This section of the literature review will introduce a range of literature to contextualise work relationships in both a general and a healthcare context. As this thesis aims to understand and contribute to the knowledge of interprofessional working (IPW) relationships in a stroke multidisciplinary team (MDT) context, it seemed appropriate to start the review by exploring work relationships.

Part of getting a job or joining a profession is to become part of the community of people who are also part of it (Gersick, Bartunek & Duttin, 2000). Relationships at work have been described by Newstrom (2011) as complex social systems, which have direct or indirect influence over the behaviours of the individuals who work within them. This can lead to negative or positive individual and organisational outcomes (Abugre, 2017). Throughout an individual's working life, multiple jobs and work locations may be experienced (Newstrom, 2011). However, while jobs differ in their responsibilities and duties, they are all said to be based on relationships of some description (Sias, 2009). For Gersick, Bartunek and Duttin (2000) and Abugre (2017), our work relationships with individuals and groups constitute the environment in which we live our professional lives in, with relationships stimulating employee commitment and harmonious working environments.

Workplace relationships refer to any relationship an individual has with a colleague (Abugre, 2017). Therefore, they develop among all types of co-workers and employees in all occupations, irrespective of hierarchical level or role (Sias, 2009). While relationships in the workplace have been said by some to be avoided, most empirical research advocates

and encourages their development due to their perceived individual and organisational benefits (Morrison, 2004). Popular phrases that describe the types of work relationships include co-worker relationships, team relationships, mentor relationships, work mates, work connections, work ties, friendships, supervisor relationships, and work relationships that develop into romantic relationships (Kram & Isabella, 1985; Higgins, 2000; Ragins & Verbos, 2007; Sias, 2009; Arnold *et al.*, 2016; Abugre, 2017). Current organisational models and theories of work relationships are useful, yet the differences in defining and describing work relationships are confusing, leading to a fragmented understanding of their nature, meaning, and impact. This suggests that current work relationship knowledge is bounded by theories that potentially do not account for every individual working in the same context (Kahn, 2007). The next section provides a historical overview of how work relationship significance transpired in the work place.

### **2.5.1 Historical context: the human relations movement**

Early research studies examining the importance of human relations and views towards peer relationships at work were called the Hawthorne studies (Hollway, 1991; Statt, 2004; Kahn, 2007; Sias, 2009; Arnold *et al.*, 2016). The term '*human relations*' is used to describe how individuals at work think about and deal with others (Gellerman, 1966). Although this is a simple description, Hollway (1991) argues that understanding the process of human relations is important as it is foundational in understanding organisational behaviour. Heaphy *et al.* (2018) agrees by adding that relationship knowledge has become the driving force for how organisations manage and approach human resources (HR).

Conducted in the 1920s, the Hawthorne studies formed part of a nine-year research project at a large Chicago Western Electric Company (Sias, 2009). Originally, the Hawthorne studies sought to understand the effects of illumination on productivity, however, unforeseen initial findings led to further studies being conducted (Arnold, Cooper & Robertson, 1995; Arnold *et al.*, 2016). It was from these additional studies that drew scholarly attention to employee behaviour, as they broke new ground by challenging previous assumptions for understanding the motivations of individuals at work (Sias, 2009; Kurtz, 2017). In particular, the social psychological factors that can influence and even determine an individual's motivation, productivity, and commitment.

The 1930s bank wiring room study was one of these additional studies that indicted the intrinsic nature of social needs on employee behaviour, with social relationships being found to be influential sources of work motivation over organisational policy and financial gains (Arnold *et al.*, 2016). This led to the seminal finding that productivity is generated from work satisfaction, which ultimately is dependent on the informal social patterns that occur between working groups (Hollway, 1991).

Although the finding and conclusions of the Hawthorne studies have been subject to criticism (Sias, 2009; Paraddis & Sutkin, 2017), they provide researchers with the knowledge that human relationships at work matter and are greatly influential on work behaviours and interactions (Arnold *et al.*, 2016). Hollway (1991) additionally argues that it was the Hawthorne studies that discovered that workers were not simply hands to complete tasks, but individuals who have social and emotional needs. These studies highlight that relationships formed while working are complex and varied, suggesting that

there is still more to be learnt, with particular reference to the human interactions that occur in various workplace settings. The next section highlights the significance of work relationships by comparing them to other significant human relationships.

### **2.5.2 Work relationships vs other human relationships**

Work relationships are connections found at the core of working life (Dutton & Heaphy, 2003; Kahn, 2007). Even with evidence indicating their significance, it is suggested that they are often valued less than other types of human relationships (Ragins & Dutton, 2007). Researchers have argued the value of working relationships, with claims that they like other close human relationships. Argyle and Henderson (1985) believe this low value associated with work relationships is based on work relations not developing in the usual sense, as individuals do not necessarily choose to spend time with the individuals they encounter at work. Individuals instead are brought together by work circumstance. Argyle and Henderson (1985) suggest that it is the lack of choice that means work relationships carry lower value.

Duck (2011) proposes that the assumption of choice in romantic relationships, for example, is (to an extent) restricted like work relationships, with social and demographic forces influencing and restricting their development. While individuals choose their profession (i.e. nurse or doctor) and their location of employment (i.e. hospital, GP surgery), who else is employed and in what capacity is a social and demographic factor that is out of their control. However, as healthcare social demographics are vast, it could still be argued that the demographics of professionals with whom we come into contact with is restricted via the location of where one chooses to work, i.e. the speciality areas individuals choose to

enter. This suggests that work and romantic relationships are more alike than first considered, as they share similar formation principles.

Ferris *et al.* (2009) support the view that work relationships share qualities with relationships outside of the work context. Arnold *et al.* (2016, p. 268) further propose that “*people seek meaningful social relationships at work*”, reaffirming the significance of work relationships in an individual’s life. These similarities indicate that theories to explain non work relationships (i.e. marriages, friendships) have the potential to aid the explanation of work relationships, including relationships within interprofessional healthcare environments.

### **2.5.3 The benefits of work relationships**

In western societies, the main social driver to seek and form relationships is to fulfil personal and psychological needs (Duck, 2011). Several studies have investigated how the different relationships that individuals are exposed to benefit their physical, social and psychological health (Argyle & Henderson, 1985; Badr *et al.*, 2001; Milardo & Wellman, 2005; Overall, Girme & Simpson, 2016; Persson *et al.*, 2018). Similarly, work relationships are not perceived as a means to an end (Yeoman, 2014), as they can inform our identity, shape careers, and inform value (Gersick, Bartunek & Dutton, 2000; Trefalt, 2013). This indicates that work relationships, regardless of their occupational setting, can be sources of physical, social, and psychological benefit (Sias, 2009; Price, Doucet & Hall, 2014; Arnold *et al.*, 2016; Persson *et al.*, 2018; Pillemer & Rothbard, 2018).

Elton Mayo, in the early 1930s, wrote the first work management book, bringing wide attention to work relationships and the social needs that can influence and determine employee behaviour (Morrison, 2004). Need theories in work contexts are based on the idea that human behaviours and interactions are determined by the needs of the individual (Newstrom, 2011; Arnold *et al.*, 2016). Created to understand the motivation behind why people work (Statt, 2004), it follows that work relationship development and sustainability can be explained through the accomplishment of needs via the benefits work relationships provide.

Maslow's hierarchy of needs is arguably one of the most well-known need theories, which has been researched from a variety of perspectives within the field of psychology and sociology, including that of a work context (Arnold *et al.*, 2016). Maslow's (1943) interest in the concept of self-actualisation led to the development of a theory that is relevant for understanding work relationships. His definition of the five basic human needs that make up the hierarchy of needs theory contributed first to humanistic psychology, but it can be connected to understanding work relations (Maslow, 1943). Within the five classes of human needs, Maslow included the need for belongingness (to receive support, affection, and interpersonal warmth) and self-actualisation (to fulfil one's potential to develop) (Arnold *et al.*, 2016). While Maslow's model, like other need theories (i.e. Alderfer's ERG Model and Herzberg's two-factor model), has been widely criticised and defended (Newstrom, 2011), it belongs to the idea that work relationships shape individuals' organisational lives, as they shape who gets asked for help and whose career blossoms (Trefalt, 2013). This is further supported by Dutton and Heaphy (2003), who summarise that the connections made at work, whether brief or long-term, all result in indelible traces and conclusions made from the Hawthorne studies, in that individuals are emotionally

involved at work and seek to fulfil their interpersonal needs (Hollway, 1991). This supports the popular concept that employees and employers enter relationships to reap the benefits (Staniuliene & Kucinskaite, 2017).

The literature review will now explore theories and frameworks that currently underpin the understanding of work relationships through the potential benefits for individuals.

### **2.5.2.1 Social exchange theory**

A prominent organisational theory that examines and underpins work relations is the theory of social exchange (Blau, 1964; Emerson, 1976; Cropanzano *et al.*, 2017). Rooted in social psychology and sociology, social exchange claims that individuals enter and sustain work relationships through interactions and behaviours of reciprocal exchange (Sousa-Lima, Michel & Caetano, 2013; Soklardis *et al.*, 2016; Abugre, 2017). Blau's (1964) discussion of social exchange holds the premise that if a series of voluntary beneficial reciprocal exchanges occur it can cause individuals (i.e. healthcare professionals) to become emotionally committed to others and/or the organisation in which they work (Cropanzano *et al.*, 2017). This emotional commitment from reciprocal exchanges triggers feelings of care and a willingness to care about the welfare of the organisation and the other individuals who make up the workforce (Rocha & Chelladurai, 2011). Its ability to cultivate a committed workforce has resulted in the exchange theory being widely researched in the domain of organisational and employee relationships (Gould-Williams, 2007; Rocha & Chelladurai, 2011). As this study's focus is to explore the working relationships between the individuals of a healthcare interprofessional team, the literature presented next, while including studies and models from a general work

relationship perspective will also focus on studies that have explored how the theory of exchange provides an understanding of work relations in healthcare settings.

The concept of social exchange is perceived as valuable, as it provides an understanding of the complex process of relationship formation. The theory views relationships via their perceived level of quality, with quality perceived as high if individuals are satisfied with their workplace exchanges (Xerri, 2013; Tanskanen, 2015). From Dutton and Heaphy's (2003) high-quality connections (HQC) at work concept, resources acknowledged as valued commodities available for exchange in the work setting include: money, support, knowledge, power, advice, opportunities, and even positive feelings (Dutton & Heaphy, 2003). The theory's presence within work relationship literature is wide, with it being intertwined within several models, theories, and concepts for providing an underpinning framework for the motives and actions involved in work relationship formation.

Several IPW studies have applied the theory of social exchange to their findings, with collaborative practice being successful due to the exchange of knowledge, time, and emotional support (Wang *et al.*, 2005; Xerri, 2013; King *et al.*, 2017). Examples include Gitlin, Lyons and Kolodner's (1994) five-stage model of collaboration. They used social exchange in their analysis of a healthcare team's ability to collaborate, with the process of reciprocal exchange between the professionals being found to aid the success of the team. This reciprocal exchange process for influencing the success of collaborative practice is additionally seen in Mavronicolas *et al.* (2017) research, which implemented a quantitative approach for understanding the interprofessional drivers for collaboration in HIV care. Their Likert scale survey collected data from 212 healthcare professionals working in HIV

care within New York. Through analysis, they found that collaborative relationships were dependant on social exchange factors, with social exchange factors relating to types of social interactions and behaviours such as trust, initiation behaviour, and conflict resolution.

While the above studies provide evidence of the theory's presence in IPW, the research focus is on how interactions of exchange aid successful collaborative practice. The theory's influential narrative for specifically understanding work relationships is however, detailed within several investigative studies (D'Amour *et al.*, 2005; Xerri, 2013; Sims, Hewitt & Harris, 2015a). Examples include Gersick, Bartunek and Dutton's (2000) research into the significance of work relationships within a business school faculty. They found, during interviews, that faculty members identified colleagues who provided them with resources of personal and professional support to aid them in the achievement of work goals to be central figures to their working life. Wellman and Wellman's (1992) 20 participant Toronto study that, focused on women working together to care for each other's children, despite them not liking each other, found the theory of social exchange to be the core reasoning behind their behaviour. Their study indicated that the women helped and supported each other, despite not liking each other, to receive the valued resource of support. The study concluded that relationships can be successful and exist in the work setting even where individuals dislike each other. This promotes the view that work relationships are complex, with the behaviours and interactions found within them being the driving force for understanding them.

In a healthcare context, Xerri's (2013) 104 participant survey study researched the relationship quality between nurses and their supervisors, as their relationships were presumed to affect the wider team. This study found interactions of social exchange to be the motivation behind an increase in engagement activities between the nursing participants. Supervisors were concluded to be resources for nurses to access knowledge and other resources deemed valuable (Xerri, 2013). The study, however, claims that even though interactions of social exchange occurred (an acknowledged framework for determining quality relationships), supervisor relationships were not perceived as significant by participants (Xerri, 2013). This suggests that individuals enter into relationships for reasons beyond the process of exchange.

The social exchange theory holds the assumption that relationships will only be sustained if the exchange of value resources continues, with relationships ending once behaviours of exchange stop or the resources for exchange have no value to the individuals (Blau, 1964; Scarnera *et al.*, 2009). However, unlike non-work relationships where individuals leave friendships or reduce interactions when a relationship ends, unless they resign, individuals will not leave the work environment and will continue to work with others (Sias & Perry, 2004) who no longer provide them with valued resources for exchange. This indicates limitations within the social exchange theory, with it not necessarily reflecting how individuals working in interprofessional healthcare context perceive their relationships. It was previously mentioned that interactions are the basis for relationships to occur (Argyle & Henderson, 1985), which would suggest that even after behaviours of exchange stop, relationships will still exist because interactions will continue. This has relevance to IPW settings, as professionals need to interact continuously and work together to meet the needs of their patients. This highlights the limitations of the social exchange theory, in being able

to fully explain IPW relationships and the perceptions individuals have of them through their interactions.

Social exchange was not explicit within all the IPW literature reviewed. However, concepts of trust and trust relationships feature as being significant in influencing successful IPW. Many conceptualisations of trust view it from a social exchange perspective, with trust being posed as a key mechanism in the social exchange process. Mutual trust, as a concept in the social exchange theory, represents loyalty and an expectation that contributions made to a relationship i.e. resources given will be equitably paid back (Konovsky & Pugh, 1994; Pratt & Dirks, 2007; Park, Lee & Lee, 2015; Aburge, 2017). This would suggest that social exchange is present within every IPW relationship described as 'trusting'. Others, however, disagree, with suggestions made that trust is instead an attribute of a relationship's strength (Pratt & Dirks, 2007). This is seen in Park, Lee and Lee's (2015) 126 participant survey study, which found characteristics of the social exchange process i.e. interactions of knowledge sharing to be fundamental in fostering collaboration, as it led to feelings of trust. While their study supports the notion that social exchange explains the role of trust in IT work relationships, its focus is on how they are needed to develop and maintain work relationships. This therefore refutes the point that trust and social exchange are not relationship perceptions but, instead the interactions that occur within relationships that determine their perceived levels of quality and/or strength. This is supported by Aburge, (2017) who proposes that despite the influential role of social exchange as a significant conceptual paradigm for understanding workplace behaviour. Researchers have argued that the theory is a frame of reference, with critics arguing that the theory is an oversimplification of human interaction, as it is temporal and based on self-interested exchanges. Trust as a current relationship

definition/understanding in interprofessional practice is discussed in further detail later in this chapter.

Ragins and Dutton (2007) have contributed to the debate on social exchange and its ability to explain work relationships. They state that the social exchange perspective uses an economic model of exchange, with it failing to address shared social norms. Thus, it adopts a selfish perspective on an individual's motivation for seeking relationships at work.

Additionally, they note that the theory assumes resources are fixed and fails to acknowledge relationships that generate and create new resources that expand individuals.

Thistlethwaite, Jackson and Moran (2013) also disagree with successful collaboration being reliant solely on the exchange of resources. They question this notion that workers will only work together and remain so when gains are made. They reflect on whether this goes against the whole professional code and philosophies by which healthcare professionals stand. However, as mentioned previously, successful collaboration, especially in interprofessional teams, will not be successful if efforts are based on only benefiting the patient (D'amour *et al.*, 2005; King *et al.*, 2017). Again, this indicates the complexities of IPW relationships and the limitations to the current framework that underpins them.

Schofield and Amodeo (1999) and Payne (2000) suggest that team relationships in healthcare contexts have become so ingrained in our consciousness that it has resulted in research focus being too focused on describing the benefits, with questions surrounding their meaning being missed or forgotten. While the social exchange theory is insightful for understanding the perceptions of quality in work relationships, the theory alone cannot

provide a complete explanation of work relationships, in particular, how professionals working in a specific context (i.e. a stroke MDT) perceive them.

### **2.5.2.2 Social capital**

Exploring social capital has become increasingly popular in healthcare, with workplace resources gained from social capital being a beneficial influence for quality care and a predictor of staff well-being (Kouvonen *et al.*, 2008; Strömberg *et al.*, 2016; Eliacin *et al.*, 2018). In this study, workplace social capital refers to the idea that networks of social relationships create valuable resources for individuals and organisations to possess (Bourdieu, 1986; Bourdieu & Wacquant, 1992; Hean *et al.*, 2013; Read, 2014; Strömberg *et al.*, 2016). Social capital, as a concept has been studied from multiple perspectives and levels, leading to the concept having a wide range of definitions (Strömberg *et al.*, 2016). While the multiple perspectives of social capital means it can be seen as an ‘umbrella’ or ‘overarching’ concept, common key features of social capital cover social support, trust, recognition, and reciprocity (Rydström *et al.*, 2017).

Social capital, as a concept in healthcare settings, is acknowledged to be a social process which can increase levels of job satisfaction, with the theory giving individuals access to valued resources that can help them to cope with work stress and burn out (Kowalski *et al.*, 2010; Strömberg *et al.*, 2016; Rydström *et al.*, 2017; Eliacin *et al.*, 2018). Eliacin *et al.*'s (2018) investigation into episodes of burnout in mental healthcare providers, found the absence of social capital from the lack of social cohesion and social relationships contributed to staff burn out. Their 40 interview study linked staff burn-out to the absence of social capital in work relationships. When participants were faced with an increase in

productivity demands, it led to feelings of isolation as interactions with co-workers were reduced, depriving participants of valuable social resources i.e. social capital. These findings were similar to Strömgren *et al.*, (2016) and Rydström *et al.*, (2017), who found that the benefits of job satisfaction stemmed from the social capital gained from the individuals work ties.

Most social capital research at the organisational and inter-organisational level tends to be from the organisation's perspective i.e. performance and access to resources, as opposed to outcomes such as interprofessional collaboration (Tsasis, Cooke-Lauder & Evans, 2015). Furthermore, much of the emphasis has been on a single level of analysis (i.e. individual, organisational), even though individual and collective behaviours are situated within social organisational contexts, rendering multilevel analysis approach to enquiry (Payne *et al.*, 2011). Colbert, Bono and Purvanona (2016) state that the concept of work has changed since task and emotional support were identified as the primary function of work relationships. They believe that as the context of working life has expanded and evolved, work relationships are valued more than just a resource that provides social support. A study that explored work relationships within Lithuanian companies found employees who had working relationships used them to benefit career progression (Staniuliene & Kucinskaite, 2017). They did this specifically by seeking out material gains, by having a greater involvement in work activities and from gaining feedback from peers. This is a clear example that individuals are motivated to seek capital from their work relationships, for development and growth purposes.

Pursuing opportunities of growth has additionally been found in Feeney and Collins' (2015) work, with them contributing that relationships are sought after and entered into to actively pursue resources that give individuals opportunities to grow. Ragins and Dutton (2007) argue that this desire for growth as a concept is not exclusive to work relationships, since other positive relationships have similar views on a relationship's ability to enable an individual to thrive and flourish. This highlights the similarities between work relationships and other close relationships, with them being explained via the same social theory.

Social capital, however, has been criticised with its varied use among multiple research contexts, resulting in the argument of it being poorly understood. Mouw (2006) believes that this ambiguity stems from researchers being too simplistic when explaining the concept. Alternatively, Gaddis (2012) points out that the problem with social capital is the over-emphasis on the explanation of the positive outcomes, with the literature lacking clarity in its explanation of what is important for the creation of social capital. He concluded that social capital in a work context fails to incorporate the multiple dimensions found to influence human relationships. While research suggests that time, trust and social class are factors for creating social capital, no research examines these influencing factors simultaneously (Gaddis, 2012). Furthermore, Mouw (2006) states that social capital is not a relationship perception but a resource that resides in relationships, with the levels of social capital and/or the amount to which an individual has access, instead being a measure of relationship strength, i.e. access to social capital is dependent on the strength of a relationship (Gaddis, 2012).

### 2.5.2.3 Growth and development

The concept of growth and development as a benefit received through working relationships is prominent in many literature sources. Arthur and Kram (1989) report that relationships which contribute to growth in both a personal and professional capacity are essential for determining an individual's quality of work life, with their potential impact influencing well-being and personal development. However, they believe that these relationships are difficult to research. The theories of social capital and exchange, as discussed above, have limitations in fully explaining working relationships. Other theories that explore relationship benefits were examined in this review, in particular the theory of self-expansion (Aron & Aron, 1986), as it bases its explanation of human relationships via the concept of individuals benefiting from the ability to expand.

Experiencing growth at work is not a new concept. Herzberg, Mausner and Snyderman (1959) found that growth in work settings is experienced when individuals are given the ability (such as the skills, knowledge and responsibility) to achieve. In addition, experiencing growth is a factor within several need theories (theories which aim to explain work behaviours) i.e. Maslow's hierarchy of needs and Alderfer's ERG theory (Statt, 2004; Newstrom, 2011). Developing, thriving, flourishing, and expanding are words found throughout the literature that describe growth at work (Dutton & Heaphy, 2003; May, Gilson & Hartner, 2004; Newstrom, 2011; Manley *et al.*, 2016; Pillmer & Rothbard, 2018). Specifically, in health and social care, interprofessional contexts that provide learning and development opportunities are a known strategy for addressing the progression needs of interprofessional team members (Manley *et al.*, 2016). Interprofessional education (IPE) is a strategy, internationally endorsed, for developing professionals and creating interprofessional success (Martin & Manley, 2018). However, different countries have

experienced uneven outcomes with IPE for improving collaborative practice (Barr, 2015). This suggests that alone, simply creating episodes of IPE is not enough to cause individuals to experience growth and development. This is in keeping with Higgins' (2000) view, with opportunities for advancing within a profession in today's work context being facilitated through the work relationships of an individual.

Individuals experiencing development and growth at work can be linked to the relationships of individuals, with the supervisor-trainee relationship being found to be significant (Weatherston & Osofsky, 2009). While Weatherston and Osofsky's (2009) focus was on dyadic relationships (between two people/groups), they make the interesting point that part of the learning process is through emotions, which are awakened when sharing knowledge. This suggests that there is more to developing at work than merely developing professionally. Although it is unclear what else is involved in developing at work, Marvin, Lee and Robson (2010) support the above suggestion by stating that learning is only one aspect of development. From investigating work relationships of business and law professionals, Burkitt (2008) notes that in professions where activities include continuous learning (i.e. law, education and healthcare), both personal and professional benefits, such as growth may be experienced by individuals.

Over the years, social psychologists have developed the idea that the 'self' develops via social relationships, with the idea that individuals selectively use and are used through their human relationships. This is relevant to the workplace setting with social scientists continuing to maintain that work relationships enable individuals to develop and grow throughout their personal lives and professional careers (Kram & Isabella, 1985).

Examples within the research include D'Amour *et al's.* (2005) work on the core concepts and theoretical frameworks for interprofessional practice. Their analysis revealed that collaborative processes are developed with two purposes in mind; one to serve the patient's needs and the other, to serve the needs of the professionals.

In their examination of rural dyadic interprofessional relations between GP's and Nurses, Blue and Fitzgerald (2002) found that relationships were co-dependent, with the perception that neither the nurses nor the GP's could not be successful without the other. Their GP participants specifically indicated that this success was from the vital support nurses provided in encouraging them to develop their skill set and clinical abilities. In Bajnok *et al's.* (2012) mixed-method study, personal and team growth was described by participants through collaborative interactions. The 32 participants stemming from five different Canadian interprofessional teams (A&E team, rehabilitations team, community care team, wound care team, and a team within a regional health sciences centre) described how being involved in interprofessional team projects gave them unexpected increased levels of confidence and self-awareness (personal growth). This was experienced alongside increased levels of understanding for other professionals (team growth), as the project gave them time to get to know one another beyond their professional roles. While Bajnok *et al's* study concludes that growth occurs from collaborative practice, the process was not related specifically to explaining the working relationships of an IPW team such as that of stroke MDTs.

Colbert, Bono and Purvanova (2016) and Feeney and Collins (2015) explore extensively the notion of thriving and flourishing from close relationships and workplace relationships. While thriving and flourishing from entering into relationships is acknowledged, how these close relationships are perceived, what they consist of and how they develop remains relatively unknown. Perhaps the next logical step to take, for a complete understanding of the phenomena of work relationships, is to investigate both the functions (i.e. thriving) relationships serve (Colbert, Bono & Purvanova, 2016; Pillmer & Rothbard, 2018), how these functions come about, and how they develop and sustain work relationships.

#### **2.5.2.4 Self-expansion theory**

Self-growth, expansion, and development are perceived as fundamental human processes (Dansereau *et al.*, 2013). These concepts in relation to relationship enquiry have been described within Aron and Aron's (1986) self-expansion theory. This theory explains relationship phenomena via the individual's motivation to form and sustain romantic relationships. Linked to motivational, self-efficacy, and interdependence theories (Aron & Aron, 2006), the self-expansion theory bases itself on the concept that individuals have a basic desire towards expanding their sense of self, i.e. to broaden, grow, and improve the self through their close relationships (Aron & Aron, 1996; Mattingly & Lewandowski, 2013).

Self-expansion, therefore, is positive with outcomes benefiting individuals, as it proposes that humans are motivated to enhance their personal efficacy by acquiring new resources, perspectives, and identities that facilitate the achievement of present and future goals (Xu, Lewandowski & Aron, 2016). According to their original model, the motivation for

expansion stems from four human areas of interest and include physical and social influences, cognitive complexity, and identity (Aron & Aron, 1986). Furthermore, interactions that occur in close relationships that result in self-expansion were identified and defined as novel, challenging, exciting, and interesting activities (Aron & Aron, 1986; Mattingly & Lewandowski, 2013).

Over the last two decades, research on the theory of self-expansion has been conducted in the area of social psychology (Dansereau *et al.*, 2013). While researchers have provided a well-structured account of the self-expansion theory (Aron *et al.*, 2011), nearly all self-expansion research has been done in the context of close, romantic relationships and undertaken via a quantitative approach (Mattingly & Lewandowski, 2013). Despite this, Xu, Lwandowski and Aron (2016) claim that while romantic relationships are one way to achieve self-expansion, they are not the only way, with almost any relationship being likely to provide some degree of self-expansion. While some preliminary research has been done on non-relational forms of self-expansion, there is little that looks at self-expansion in the realm of friendships and other close, social relationships, such as those formed in the workplace (Wages, 2016).

Self-expansion theory has two key principles. The first is the motivational principle that articulates that humans have a motive to self-expand. It is important to clarify that the motivation is not always simply to achieve a desired goal but to attain resources to achieve a goal (Aron, Aron & Norman, 2008). Previously, this motivation was described by others as self-improvement, efficacy, competence, and broadening of one's perspective (Xu, Lwandowski & Aron, 2016). The second principle is that individuals achieve self-

expansion through their close relationships, which allows for the inclusion of others in the self (Aron *et al.*, 2011). This inclusion of the other in the self enables individuals to gain something from the other (i.e. gain resources and perspectives) (Weidler & Clark, 2011). Resources gained from including others in the self are experienced to some extent as the individual's own (Xu, Lewandowski & Aron, 2016). This lays the foundation for rewarding exchanges that see benefits associated with an increase in self-efficacy (Burriss *et al.*, 2013; Dys-Steenbergen, Wright & Aron, 2016) and improving relationship quality (Mattingly & Lewandowski, 2013).

According to Dansereau *et al.* (2013), self-expansion can occur within groups as opposed to merely between two individuals. They suggest that when the group succeeds, group members attach the success to the self (the group success is the individual's success). This is further supported by Mattingly and Lewandowski (2013), who state that the achievements and success of a close other are treated as belonging to the self of an individual. This suggests that within the second premise of self-expansion, an individual can include a group in the self and not only a single individual, with expansion being caused by the achievements of others. This is relevant for teamwork in healthcare practice.

Moreover, as when entering into a romantic relationship, or at the beginning of a new friendship, having multiple work relationships is the process which introduces individuals to multiple new resources, perspectives, and identities (Reissman, Aron & Bergen, 1993). This would suggest that if people seek relationships as a means of self-expansion, those who share the same resources, perspectives, and identities provide little that is new and should be less appealing (Dys-Steenbergen, Wright & Aron, 2016). This is further

supported by Aron *et al.* (2006) study into same sex friendships, where individual differences were found to be as desirable as similarities for relationship development, with differences offering individuals greater opportunities for expansion, through the second principle. In IPW, professionals from different disciplines and backgrounds are dissimilar and bring new resources and knowledge that others can use for self-expansion.

Dansereau *et al.* (2013) also apply the self-expansion theory to leaderships and leader-follower relationships. They suggest that followers gain much (expand their self) from including the resources of the leader in the self. The theory of self-expansion can therefore inform leadership development, with leadership viewed as most effective when followers are motivated to develop 'self-expanding' relationships with their leader. Wright, Aron and Tropp (2002) support the concept of self-expansion being present in IPW with their work on cross group relationships. Wright, Aron and Tropp (2002) propose that because outgroup members (i.e. different professional disciplines) by definition hold resources, perspectives, and identities not currently available to the self (i.e. professionals from the same discipline), forming relationships in the IPW context offers an especially attractive opportunity for self-expansion. This supports the discussions previously regarding the application of the theory to an IPW context (i.e. a stroke care MDT) for understanding how they perceive their working relationships with others.

## ***2.6 Conceptualising interprofessional working (IPW)***

There are multiple variations in the structures and practices of collaborative working in healthcare (Barr, 1998). According to Barr's (1998) work titled competent to collaborate, interprofessional models and structures are continuously changing, as a result of new

professionals, specialists and organisations. These changes have led to a shift in the traditional perspective of a healthcare team's infrastructure, with it enabling certain professional groups to grow in confidence, competence, credibility and power. Barr concludes that these changes have made '*the web of working relations more complex*' (Barr, 1999, p. 2).

Terminology that describes interprofessional working practices is at times used interchangeably, however this has been met with criticism and debate as there are differences between how interprofessional teams function (Mahler *et al.*, 2014; Pollard, Sellman & Thomas, 2014 ). Interprofessional working (IPW) and multidisciplinary team (MDT) working are two variations to describe interprofessional collaborative working. IPW refers to when two or more healthcare professionals from different disciplines and diverse backgrounds interact together to make decisions and to complete work issues and/or goals (WHO, 2010; Keeping, 2014; Morgan, Pullon, & McKinlay, 2015). Whilst MDT working refers to a team that is similar in structure to IPW, the team can include individuals who identify as non-professional (Nancarrow *et al.*, 2013). In addition, in an MDT structure interactions do not need to be direct. Professionals who make up the team instead can work and achieve goals alongside one another independently (Galvin, Valois and Zweig, 2014; Pollard, Sellman & Thomas, 2014). The different prefixes often seen in research, books and articles to describe collaborative practice (i.e. multi and inter), therefore, refer to the intensity of collaboration (Mahler *et al.*, 2014).

Although there are similarities and differences in how professionals within different interprofessional team structures achieve goals and care for patients, Barr (1998) outlines

that interprofessional collaboration is an interactive practice that requires all professionals involved to be competent in their role. Within this article Barr (1998) elaborates on collaborative competence with his reference to competence in IPW extending beyond skill and knowledge.

The literature reviewed in this section of the thesis adds to the preliminary insight given on IPW that was introduced in Chapter One.

### **2.6.1 History of interprofessional working (IPW) in healthcare**

Despite professionals, organisations, and researchers supporting the drive to sustain and enhance collaborative practice healthcare professionals have not always practised the interprofessional approach for care delivery (Babiker *et al.*, 2014), with the UK's National Health Act 1946 and the National Assistance Act 1948 being known to have made interprofessional collaboration difficult (Day, 2013). However, gone are the days when healthcare professionals would work as separate entities to meet all the needs of a patient (Babiker *et al.*, 2014). This transition from independent working to a more interprofessional team approach transpired as a response to the rapid changes in healthcare delivery (Mitchell *et al.*, 2012). Ideologies of holistic care have led to the recognition that the needs of patients are beyond the remit and expertise of one single professional, with superior clinical outcomes being found to be achieved through IPW (Freeth, 2001; Sayah *et al.*, 2014).

The change for a more interprofessional infrastructure started with the reform of the National Health Service (NHS), which began in the late 1990s (Clarke, 2007; Pollard,

Thomas & Miers, 2010). The reform increased interprofessional activity, with almost every Department of Health publication in the 1990s calling for the implementation of collaborative practice (Day, 2013). ‘*The New NHS, Modern and Dependable*’ white paper (DoH, 1997) is attributed with triggering the biggest NHS transformation since its 1948 inauguration, with its aim to break down organisational barriers for collaborative practice (Day, 2013). In addition to improving care there was also an imperative for efficiency (Mickan & Rodger, 2000; Finn, Learmonth & Reedy, 2010).

On average, over 60% of hospital-based staff reportedly work in formal teams (West *et al.*, 2002), indicating that the ability to work successfully with others is an important trait needed when entering any healthcare profession (Suter *et al.*, 2009). Having the skills to work successfully in interprofessional teams is reaffirmed throughout policy, including more recent policy for integrated health and social care (Department of Health and Social Care, 2013). Significant focus has been placed on workforce development to equip practitioners with the skills and flexibility to deliver high-quality care, in interprofessional teams, at the right time and to those who need it (Scholes & Vaughan, 2002; Van Der Vegt & Bunderson, 2005). However, IPW is not without its constraints (Adamson, 2011). Opie (2000) and Scholes and Vaughan (2002) posit that IPW requires professions from different disciplinary backgrounds, who are often trained and socialised to work independently within well-established hierarchies, to overcome professional boundaries and collaborate harmoniously within a team. They state that this request to work harmoniously is often done without the individual receiving prior preparation.

Globally, empirical evidence shows that successful interprofessional collaboration between healthcare professionals is an essential principle underpinning effective care (D'Amour *et al.*, 2008; WHO, 2010; Bajnok *et al.*, 2012; Morgan, Pullon and McKinlay, 2015; Lindqvist, Gustafsson & Gallego, 2019). Specifically, within stroke care, interprofessional collaboration is paramount. The benefits of IPW in a stroke care context has prominent focus, with most studies reporting the benefits of specialist stroke units compared to stroke care delivered in general medical wards (Langhorne & Pollock, 2002; McNaughton *et al.*, 2003; Walsh *et al.*, 2006; Clarke, 2013; Blum, Brehchtel & Nathaniel, 2018). This includes improvements in patient mortality, patient safety rates, faster processing of referrals, earlier discharges home, and timely care (Baxter & Brumfit, 2008b; Blum, Brehchtel & Nathaniel, 2018). Several audits have been carried out (The National Sentinels Stroke Audit (NSSA), 1998-2010; the Stroke Improvement National Audit Programme, 2010-2012 (SNAP); and the Sentinel Stroke National Audit programme (SSNAP)) (Royal College of Physicians, 2011, 2013, 2014, 2015, 2016b, 2017), leading to the improvement of stroke care services and the development of their interprofessional workforce.

While reaching policy targets and delivering certain services may be indications of effective care, it does not necessarily mean that professionals and teams function efficiently (Belanger & Rodriguez, 2008). Historically, research suggests that tensions exist between the different groups of healthcare professionals (Baxter and Brumfitt, 2008a; Price, Doucet & Hall, 2014; Van Der Lee *et al.*, 2014). Even when there was an awareness of the benefits of collaborative practices and an acknowledgement that team members needed to work collaboratively, it did not necessarily result in team success (Suter *et al.*, 2009). A New Zealand stroke unit study by McNaughton *et al.* (2003) acknowledges the complexities of the interprofessional context. This was reiterated in another study of stroke

care (Luker *et al.*, 2016), which concluded that the complexities inhibit evidence-based practice where IPW is poorly managed. The factors that make a stroke team successful are ambiguous, making them difficult to identify; however, team structure, enthusiasm, commitment, effective relationships, communication, leadership, and management were commonly identified as enablers of IPW (Molyneux, 2001; McNaughton *et al.*, 2003; Pullon, 2008; Tapper, 2011; Hustoft *et al.*, 2018). Other factors identified to influence IPW include: team characteristics, attitudes, role awareness, competence, and shared goals (Day, 2013; Burau *et al.*, 2017; Salsbury *et al.*, 2018). However, no single factor has been identified as the key to successful IPW (Suter *et al.*, 2009). The next section considers the influencing factors in more detail.

### **2.6.2 Factors, attributes, and assumptions for interprofessional success**

A range of research methodologies has been used to uncover the human interactions and behaviours that contribute to the success of IPW (Hudson, 2002; Newstrom, 2011; MacArthur, Dailey & Villagran, 2016; Sim, Hewitt & Harris, & 2015a; Hewitt, Sims & Harris, 2015; Hustoft *et al.*, 2018). This has resulted in some resources identifying ‘success factors’ (Huxham & Vangen, 2005; Morgan, Pullen & Mckinlay, 2015). These success factors in the research, however, vary between IPW contexts and in their presence or order of significance. Notable from examining the literature surrounding the individual success factors for interprofessional success was the concept of relationships being present in the background. This indicated that its value for IPW success is undervalued, supporting the conduct of this study and the need for further research, as understanding relationship perceptions can have implications for interprofessional success.

### 2.5.2.1 Effective communication

Effective communication is the most cited factor or assumption needed for successful IPW (Gibbon *et al.*, 2002; McCallin, 2004; Mahmood-Yousuf *et al.*, 2008; Suter *et al.* 2009; Cioffi *et al.*, 2010; Day, 2013; Hewitt, Sims & Harris, 2015; Hustoft *et al.*, 2018).

Communication, as an influencing factor for collaborative success, is an extensive topic that covers a wide range of verbal and non-verbal interactions and behaviours (Day, 2013). High-profile fatality cases due to errors and failures of communication in the health care sector are well-documented and public (Kennedy, 2001; Laming, 2003, 2009; Day, 2013; Hewitt, Sims & Harris, 2015).

Different studies have described the importance and difficulties of communication in IPW (McCallin, 2004; Clarke, 2010; Hewitt, Sims & Harris, 2015). Some studies suggest that effective communication does not only aid successful IPW among healthcare professionals, but may act as a bridge that aids social connections, enabling relationships to form (Nicholson *et al.*, 2000; D'amour *et al.*, 2005; Mahmood-Yousuf *et al.*, 2008; King *et al.*, 2017; Hustoft *et al.*, 2018) and team members to be understood. According to Adamson (2011), gaining an understanding of one another provides the basis for relationships, with the process initiating trust (Morin, Desrosiers & Gaboury, 2018). McGinn (2007) also suggests that communication is a method of forming connections at work, with spoken language being the catalyst that provides meaning beyond work tasks. Bajnok *et al.*, (2012), in their IPW mixed-methods study, similarly found the need for participants to understand one another for collaboration to be successful. It is understandable, then, that a call for adaptations in communication tools has been made, with adaptations being aimed at promoting better interprofessional team relationships (Beijer *et al.*, 2016).

Mahmood-Yousuf *et al*'s. (2008) interview-based study explored how relationships between GPs and district nurses affected the quality of communication about patients' palliative care needs, following the implementation of the '*Gold Standards Framework*'. This is a programme aimed at facilitating primary palliative care that emphasises the importance of an anticipatory multidisciplinary approach to primary palliative care. Findings from the 38 participants highlighted how the introduction of the framework led to an increase in informal and formal interactions, strengthening the perceived working relationships by breaking communication barriers. Clayton, Isaccs and Ellender's (2016) study of perioperative nurses' experiences of communication in a multicultural operating theatre study, although similar in nature, found relationships to come before effective communication. From their 14 interviews, they found that when increased levels of social integration were implemented, relationships developed, enabling effective communication rather than communication coming first and enabling relationships.

IPW involves the actions of bringing professionals together with differing work cultures, shared goals, language, and problem-solving strategies (Sheehan, 1996). Acts of social integration in Clayton, Isaccs & Ellender's (2016) research led to relationship formation and mutual understanding in a professional and personal capacity, with interactions enabling participants to get to know one another. This resulted in feelings of comfort, which broke down communication barriers surrounding discussions of difficult topics. While this study only explored nurses' experiences, it did acknowledge the multi-professional working environment in which the study was conducted. Although the two studies discussed above did not examine relationship perceptions per se, they clearly

identify the importance of relationships for effective communication and improving collaborative practice.

### **2.5.2.2 Shared goals and responsibilities**

Differing goals and responsibilities among professionals in IPW are unavoidable (Prystajecy *et al.*, 2017). Nevertheless, goals and responsibilities should not be underestimated within IPW, since interprofessional cohesion is believed to be reinforced by shared goals and a shared common purpose (Edelmann, 1993; Belbin, 2010). Shared goals and responsibilities provide professionals with focus, direction, and meaning (Reeves *et al.*, 2010; Day, 2013; Sayah *et al.*, 2014; Prystajecy *et al.*, 2017). According to Heaphy *et al.* (2018), work relationships are embedded within work roles, with shared tasks and responsibilities found in work roles often dictating who and how we interact with others at work. This results in professionals becoming physically and emotionally invested in the team and with one another (Petri, 2010). This is further supported by Gittel, Godfrey and Thistlethwaite (2013), whose inquiry into the application of relational coordination in healthcare settings identifies that quality relationships are enhanced by the degree of shared goals.

A shared sense of individual investment aids collaboration by offering a sense of support in sharing work responsibility, while maintaining a strong sense of individual professional purpose (Hewitt, Sims & Harris, 2015), all of which are attributes found in positive relationships. Gibbon *et al.*'s (2002) quasi-experimental study and D'Amour and Oandasan's (2005) concept framework development work both described the power of shared goals within interprofessional collaboration for enabling staff to work together.

With shared goals connecting individuals through a united stance to achieve goals both inside and outside of profession specific tasks (Gittell, 2003a, 2003b).

### **2.5.2.3 Role awareness**

Mutual role awareness is identified in research as a significant requirement for successful IPW, including in stroke teams (Orchard Curran & Kabene 2005; Suter *et al.*, 2009; Petri, 2010; Sayah *et al.*, 2014; Harrod *et al.*, 2016; Burau *et al.*, 2017; Tang *et al.*, 2018). In a stroke care setting, role blurring is a key feature (Gibbon *et al.*, 2002). Role blurring allows for knowledge and skills to be shared, allowing for a crossover of roles and flexibility in the interprofessional team (Baxter and Brumfitt, 2008a; Sim, Hewitt & Harris, & 2015a; Harrod *et al.*, 2016). Role blurring however, is also a potential cause of conflict (Hall, 2005; Jones, 2006; Fear & de Renzie-Brett, 2007; Suter *et al.*, 2009).

Sim, Hewitt and Harris's (2015a) realist synthesis study found tensions within the team when boundaries were crossed, with team members feeling threatened and jealous, often leading to moments of rivalry and conflict. However, within a stroke MDT context Burau *et al.*'s. (2017) qualitative multiple-case design study of five stroke teams challenged the expectation that role blurring led to negative behaviours. Their findings describe a mono-professional stance when it came to caring for patients, in that the professionals within the team acknowledged the mixed skills and expertise of the different team members. This resulted in supporting behaviours, with stroke professionals demonstrating repeated actions of them stepping in when needed on behalf of other team members. Harrod *et al.* (2016) had similar findings in their qualitative study, which examined the process for successful interprofessional team interplay. They identified role flexibility as being significant in team

functioning, in particular in the actions of stepping in to help one another to improve clinic outcomes.

This acknowledgement of role understanding and the flexibility of role within IPW has additionally been linked to interprofessional relationships and the behaviours associated with relationship development and sustainability. Barker and Oandasan (2005) and Weller *et al.* (2008), both state how understanding each other's roles led to positive changes in behaviour, with professionals being open-minded when considering the views of others. Barker and Oandasan (2005) further report that mutual role awareness led to team members feeling that they were not alone when completing work tasks, which consequently led to increased feelings of safety in the workplace. This feeling of not being alone suggests the presence of interprofessional relations, through a sense of team cohesion and solidarity. Similarly, Orchard, Curran and Kabene (2005) and Sayah *et al.* (2014) both found that respecting and understanding roles led to increased levels of trust being felt between the professionals. As discussed earlier trust is a behaviour associated with work relationships.

Finally, Morgan's (2017) hermeneutic phenomenology study for understanding the influence of professional role on interprofessional practice specifically made links to interprofessional relationships. From its 18 participants who spanned across six professions (nurses, midwives and therapists), the New Zealand study found that negotiating roles during collaborative activities caused interprofessional relationships to be more flexible. Similarly, understanding the role of others through experience or a history in either a personal or professional perspective, were cited by King *et al.*'s. (2017) participants for

facilitating good working relationships. This signified, to the 78 participants, that there was mutual understanding, between professionals who knew each other. King *et al.* (2017) further reported that a lack of consideration for the role of others caused interprofessional relationships to breakdown. This again highlights the presence of relationships in IPW and the impact they can have on its success.

#### **2.5.2.4 Team characteristics**

Team characteristics play an important role in team performance (Williams & Sternberg, 1988). According to Hudson (2002), the scale and intensity of disagreement within team characteristics that shape an interprofessional team and the relations within it. Salsbury *et al.*'s. (2018) study found the importance of professional, interprofessional, and organisational qualities when implementing new members into an interprofessional team. While the study specifically looked at adding chiropractors to established MDTs, the study indicated the importance of qualities in the successful integration of staff. The inclusion of the organisation's perspective additionally indicates a wider appreciation for team qualities outside of the chiropractor profession, with the findings of being a good listener being listed as a desired quality for integration and team success (Salsbury *et al.*, 2018).

Due to the variations within IPW with regards to team infrastructure, it is unrealistic to believe or assume that they all will or should have the same shared team characteristics and understanding when it comes to how the team should be (McCallin, 2006). Accepting both individual and disciplinary differences has been reported to be fundamental in collaborative functioning (Poulin, Walter & Walker, 1994). Learning to understand each other, which would include the differing characteristics between professionals, was

reported in several studies to be important for successful collaboration (D'amour *et al.*, 2005; King *et al.*, 2017; Persson, *et al.*, 2018). However, according to Hall (2005), this has its challenges, as values are largely unspoken. IPW is a process that does not happen merely because professionals come together, with collaboration first involving a stage where professionals need to discover and find understanding in each other's values and behaviours (Thistlethwaite Jackson & Moran, 2013). This supports the previous comments made that professionals need to understand each other first before successful collaboration can be achieved, all of which is a basis for relationship development.

Popular IPW values, qualities, behaviours and attitudes found in the literature for interprofessional success include being motivated, enthusiastic, respectful, trusting, supportive, committed, empathetic, a good communicator, and competent (Sayah *et al.*, 2014; Hewitt, Sims & Harris, 2015; Smith *et al.*, 2017; Salsbury *et al.*, 2018). A review by Sims, Hewitt and Harris (2015a) found that when team characteristics were absent, collaboration suffered. Their study specifically examined the values of respect and trust in IPW. They found that when these values were missing, professionals avoided collaborative interactions. However, Sayah *et al.* (2014) in their Canadian study on factors influencing IPW, found that team characteristics such as respect, trust, team morale and individual listening skills were identified and linked to their team relationship category. While the study focusses on influencing factors for IPW from a nurse's perspective only, Sayah *et al.* (2014) are clear in their comments regarding the significance of team relationships, in facilitating and hindering IPW, with the participants acknowledging the importance of team relationships outside of the nursing profession.

### 2.5.2.5 Professional socialisation

Professional socialisation refers to the process in which an individual acquires the knowledge, skills, perspectives, behaviours, attitudes, and values of a profession to function effectively in that role and environment (Khalili *et al.*, 2013; Price, Doucet and Hall, 2014; Arnold *et al.*, 2016). Professional socialisation can occur at multiple stages of an individual's career and is a powerful determinant of behaviour, with it being associated with integrating individuals into a profession's community (McCallin, 2006; Khalili *et al.*, 2013; MacArthur, Dailey & Villagran, 2016). Zwarenstein and Reeves (2006) suggest that a possible explanation of poor team cohesion in interprofessional working (IPW) is the effect of professional socialisation.

Orchard, Curran and Kabene (2005) draw similar conclusions with their model which reported that while professionals work in teams, they only identified with their own professional group, a process they found to block their ability to consider the opinions and perspectives of others. They added that profession-specific worldviews can influence IPW, in that difficulties arise when professionals are expected to collaborate. Part of professional socialisation is the concept of belonging and identity (Khalili *et al.*, 2013; Morgan, 2017), with how professionals identified themselves varying within the interprofessional research. Baxter and Brumfit (2008a) found this variation in identity within their work on professional differences. During their interviews, they saw variations among their participants, with some identifying as a stroke team member, while others identified as a member of their own professional group. Interestingly, they conclude that regular contact and interactions were more important in establishing successful IPW than the concept of professional identity (Baxter & Brumfit, 2008a). It again highlights the continued

appearance that the concept of work relationships has in the IPW literature. Although seen as key authors Baxter and Brumfit (2008a) are not explicit in defining work relationships, their conclusion that regular collaborative contact and interactions are key to interprofessional success. This conclusion was similar to Morgan's (2017), who found that regular collaborative activity aided professionals IPW capability, with participants, reporting increased feelings of being interwoven among the professions after six months, compared to when they first graduated into their profession. This complements the relationship literature, as relationships are founded on regular interactions with others (Argyle & Henderson, 1985).

Regular contact for improving a team's ability to work successfully together is detailed in Allport's (1954) intergroup contact theory. The theory highlights the need for frequent interpersonal contact, with regular contact being the means for different groups (i.e. professions) to have the opportunities to interact and learn about their differences and more importantly, their similarities. According to Allport (1954), regular contact that is managed can reduce issues caused by professional socialisation such as stereotyping, prejudice, and discrimination. (Mandy, Milton & Mandy, 2004; Reeves *et al.*, 2010). This suggests that as relationships are a consequence of regular contact then effective, positive work relations may be key to reducing the issues that professional socialisation can cause in IPW.

The encouragement of personal contact and interprofessional socialisation via IPE and IPL has created a context to bring learners from across different professional programs together. To learn with, from, and about each other has encouraged professionals to have

dual identities when aiming to reduce the negative effects of professional socialisation (Khalili *et al.*, 2013). Despite this, conflict in IPW remains in the literature. McCallin and Bamford (2007) make a significant suggestion that health care professions are educated to work therapeutically with patients, with very few actually being educated in the art of interprofessional relationships. Teams who work interprofessionally are more focused on task achievement than the social factors that influence their ability to collaborate. Interprofessional relationships are identified in Khalili *et al.*'s. (2013) framework for understanding interprofessional socialisation. However, although they discuss the importance of trusting relationships and generating 'affective ties' in IPW, they fail to elaborate on what these affective ties are or how trusting relationships are formed. This reiterates the gap in knowledge about relationship perspectives in the context of IPW.

#### **2.5.2.6 The relevance to interprofessional relationships**

It is clear from reviewing the literature that researchers have provided a comprehensive, multi-dimensional picture of the influencing factors or assumptions for successful interprofessional functioning (Huxham & Vangen, 2005; D'Amour & Oandasan, 2005; Day, 2013; Khalili *et al.*, 2013; Hewitt, Sims & Harris, 2015; Hustoft *et al.*, 2018). Despite this, there is still literature which describes failures in IPW (Zwarenstein, Goldman & Reeves, 2009). Freeth (2001) considers the difficulties in sustaining IPW, arguing that difficulties experienced in collaborative practice cannot always be overcome, even when collaboration is desired. Wilson (2000) proposes that focusing on the presence or absence of desirable characteristics represents an oversimplification of the processes involved in IPW, because of the complexity and changing nature of contemporary IPW. Therefore,

more research is needed that further explores the social processes involved in IPW, including relationship development and sustainability.

Research suggests that interprofessional teams have complex, historical social positioning and factors that influence their ability to be successful (D'Amour *et al.*, 2008; Price, Doucet & Hall, 2014; Sims, Hewitt & Harris, 2015b). Findings within Suter *et al.*'s. (2009) seven-site Canadian study into core competencies for collaborative practice confirm that social factors can have an impact. In their study, some professionals felt there was limited social and professional interaction between the different disciplines, which they saw as a disadvantage. Baxter and Brumfitt, (2008b) had similar findings in their study into staff perceptions of teamwork within specialised stroke teams. Participants in their study raised concerns for team success due to the lack of time interacting with team members, as time was instead prioritised to patient care. In addition, Bajnok *et al.* (2012) found that when participants invested time in getting to know one another beyond a professional level, it affected their ability to work interprofessionally, further supporting the importance of the relational aspect in IPW. Finally, D'Amour *et al.*'s. (2008) typology model for explaining interprofessional collaborative practice consists of four dimensions, two of which are described as relational dimensions. While D'Amour *et al.*'s. (2008) objective was not to explore interprofessional relationships, their model clarifies the importance of relationships in collaborative practice, by concluding their equal importance alongside their model's organisational dimensions for analysing interprofessional collaboration. While D'Amour *et al.* (2008) were identified as key authors for understanding relations within interprofessional teams. Their relational dimension only provides insightful knowledge of the relationship qualities and behaviours for determining whether collaborative practice

was active, developing, or potential/latent and not the relationship perspective professionals have from interprofessional practice.

While relationships themselves were not discussed explicitly in these studies, it is clear they can influence human behaviours in an interprofessional context and therefore, have the potential to affect collaborative success. In addition, the theory of relational coordination (Gittell, 2003b) suggests that work, which is regarded as highly interdependent can be successfully co-ordinated through mutual respect, high-quality communication, and shared goals, all of which are found in work relationships. All healthcare environments are places in which people work interdependently. This includes stroke care settings, where the case for interprofessional working has already been made.

### ***2.7 Interprofessional relationships***

The discussion in the previous section focused on the importance of interprofessional working (IPW) in healthcare settings such as in stroke care, with the multiple concepts for what makes IPW successful being articulated. This next section explores current research and knowledge that informs the current understanding of IPW relationships in both a general and stroke care MDT context.

According to Day (2013), the last 15 years have been dedicated to creating an environment that enhances interprofessional collaboration, with key conceptual frameworks like those developed by Reeves *et al.* (2010) and D'Amour *et al.* (2005) providing insightful understanding of the interprofessional interactions within the context of successful IPW. Given the growing empirical evidence that poor interprofessional relationships can have an

adverse effect of healthcare outcomes (Bajnok *et al.*, 2012), it was anticipated that research efforts would have been made to explore IPW relationships. These efforts can be seen in Reeves *et al.* (2010) and D' Amour *et al.*'s. (2005) conceptual framework reviews, as they include the concept of team relations as factors for successful IPW. However, while these frameworks, like, other explanations, include the concept of working relations within them, they often only highlight their existence, importance, and levels of quality and /or strength, with practitioners' relationship perceptions and meaning not acknowledged or included (Reeves *et al.*, 2010).

Research trends into the working relationships of healthcare professionals are either from the perspective of determining whether they exist within certain settings or between certain professionals. From the perspective of uncovering the interprofessional relationship benefits and the dimensions and/or factors that impede their formation (Onyett, 1997; Ferris *et al.*, 2009; Reeves *et al.*, 2010; Hill-Smith, 2012; Bajnok *et al.*, 2012; Edgren & Barnard, 2012; Xerri, 2013; King *et al.*, 2017; Hustoft *et al.*, 2018), or from the perspective of researching the experiences of dyadic relationships, with the changing nature of the nurse-physician relationship being a dominant interprofessional healthcare relationship research focus (Stein, 1967; Svensson, 1996; Wicks, 1999; Blue & Fitzgerald, 2002; Price, Doucet & Hall, 2014; Gleddie, Stahlke & Paul, 2018).

While highlighting the growing ubiquity of relationship research in healthcare, these trends do not explore perceptions of interprofessional team members, particularly in stroke care, in terms of IPW relationship processes, features, and motives. This thesis aims to contribute to the knowledge base in this respect. The remainder of this section explores the

literature that currently aims to understand IPW relationships through terms and definitions.

### **2.7.1 Defining relationships in IPW**

Defining work relationships in both a general and an interprofessional sense is a complex process, with human relationships consisting of multiple entities. It is, however, clear from the literature reviewed that human relationships, including those of a work capacity, are governed by the social interactions that occur within them (Argyle & Henderson, 1985; Heaphy *et al.*, 2018).

While the importance of working relationships in collaborative practice is widely recognised (King *et al.*, 2017; Persson *et al.*, 2018), research trends as discussed within healthcare settings, have favoured researching relationships within specific contexts. (Stein, 1967; Blue & Fitzgerald, 2002; Price, Doucet & Hall, 2014; Gleddie, Stahlke & Paul, 2018). Moreover, focus is on examining the effects IPW relationships can have on interprofessional practice and uncovering the benefits, qualities, and behaviours found in IPW relationships, as opposed to the relationship perceptions of practitioners. As alluded to, studies on the topic of IPW relationships have focused their investigations on relationship types, with examples including the nurse-to-nurse relationship, the doctor-nurse relationship, supervisor relationships, and the relationships between professionals and their students (Blue & Fitzgerald, 2002; Pryor, 2008; Bajnok *et al.*, 2012; Moore *et al.*, 2013; Price, Doucet & Hall, 2014; Gleddie, Stahlke & Paul, 2018).

While many of these studies investigate the behaviours found in these relationships, several studies have attempted to provide relationship understanding by describing and contextualising the working relationships between professionals within interprofessional teams. Popular terms and/or definitions found refer to relationship quality (i.e. positive and negative relationships, and weak or strong ties), function (i.e. trusting, respectful, supportive relationships) and structure (i.e. power relations and loyalty) (D'Amour *et al.*, 2005; Baxter & Brumfit, 2008a, 2008b; Barczak, Lassk & Mulki, 2010; Bajnok *et al.*, 2012; Thistlethwaite, Jackson & Moran, 2013; de Jong, Curseu & Leenders, 2014; King *et al.*, 2017; Pillemer & Rothberd, 2018; Khazanchi *et al.*, 2018; Gleddie, Stahlke & Paul, 2018). However, despite these proposed definitions/terms existing from empirical research, research relevant to the study of working relationships within interprofessional stroke teams is limited in scope. Current IPW relationship literature indicates inconsistencies, with research reporting multiple variations in the terms used to describe IPW relationships and the underlying dimensions that frame relationship behaviours and perceptions. It is problematic then, that these terms currently do not provide a clear, realistic interpretation into the working relationships perceptions of interprofessional teams, in particular the IPW relationships within a stroke care MDT context.

As discussed in Chapter One, human relationships, regardless of their context, are dynamic. Thus, to gain a realistic relationship interpretation, researchers are challenged with uncovering how and why work relationships come to form, develop, and then end (Heaphy *et al.*, 2018), a challenge which is not always completed within the IPW context. It follows then that the current interprofessional relationship terms are simplistic, ambiguous, and one-dimensional. The commentary that follows provide an explanatory overview into the prominent healthcare IPW relationship descriptions and perceptions that

currently exist for providing interprofessional relationship understanding. Arguments are presented for how these current terms, although provide insightful knowledge of IPW relationships, fail to provide a complete understanding of the interprofessional relationships perceptions of stroke MDT working, thus rendering the need for further investigatory works.

### **2.7.1.1 Trusting relationships**

Trust in a team work context is important to its success and in indicating relationship quality, with trust signifying a sense of togetherness (Ferris *et al.*, 2009; Thistlethwaite, Jackson & Moran, 2013; Arnold *et al.*, 2016; Persson *et al.*, 2018). Trust as an IPW relationship concept is often associated with respect (Pullon, 2008; Bajnok *et al.*, 2012; King *et al.*, 2017; Persson *et al.*, 2018). While respect is discussed alongside trust in a number of IPW relationship sources, its presence is linked to the underpinning knowledge of IPW relationship characteristics. Trust or trusting have been found in several IPW resources as a concept that aims to describe the relationships between professionals from the same discipline as well as between professionals from different disciplines (D'Amour *et al.*, 2005; D'Amour *et al.*, 2008; Pullon, 2008; Makowsky *et al.*, 2009; Bajnok *et al.*, 2012; Sims, Hewitt and Harris, 2015a; King *et al.*, 2017; Lindqvist, Gustafsson & Gallego, 2019).

McCallin and Bamford's (2007) and Pullon's (2008) New Zealand studies both suggest that trusting relationships occur when healthcare professionals perceive others to be competent at doing their job. This is like Beijer *et al.* (2016) 12-participant interview and focus group study into staff perceptions of IPW. Their findings indicated that trusting

relationships formed within an orthopaedic Danish unit enabled successful interprofessional collaboration. Participants voiced how they were able to concentrate, on their own role as they trusted other team members, through perceiving them to be competent in delivering care and providing information according to their professional standards. Beijer *et al's*. (2016) study, although giving insight into relationships from the practitioners' perceptions, provides a limited explanation, failing to elaborate further on these 'trusting relationships'. Instead, Beijer *et al's* discussion focuses on how IPW improved in the orthopaedic clinic under study, because relationships of trust along with other IPW success characteristics i.e. communication and professional identity, developed when a re-design for collaborative practice was introduced. This suggests that trust, along with effective communication, are properties of IPW relationships and not a relationship perception per se.

The idea that trust is a quality found in IPW relationships is supported by a number of key studies, King *et al.* (2017) and Persson *et al.* (2018), both describe how interprofessional relationships are facilitated and underpinned by many factors, with one being trust. In addition, D'Amour and Oandasan's (2005) discussion of the emerging concept of 'interprofessionality' in interprofessional practice and educational settings, supports trust as a relationship quality. They found that trust was a consequence of the 'bonds' that professional team members form and their willingness to work collaboratively. D'Amour and Oandasan furthermore describe trust to be created out of interactions beyond perceived professional competence expectations. They describe how trust is built from interactions of professionals taking the time to know each other personally and professionally.

This is supported further by D'Amour *et al.* (2008), whose typology for collaborative practice study showed that professionals must know each other personally and professionally if they are to develop a sense of belonging to a group and succeed in setting and achieving common objectives. Placed within their relational dimension of their model for indicating collaborative practice, actions of mutual acquaintanceship and trust are described as relational actions, which if present can indicate levels of collaborative practice. This further indicates their position as relationship qualities and/or behaviours that influence the success of IPW and not the relationship perspectives professionals hold. McDonald, Jayasuriya and Harris, (2012) contribute to the discussion of trust being a relationship quality by providing further evidence that confirms that trust is a feature of IPW relationships, with it being a relationship concept that is earned over time. They expand further by detailing that trust is a type of behaviour, for handling uncertainty and risk in the delivery of collaborative healthcare. This involves the expectation that others will behave in ways that are predictable, fair and refrain from opportunistic behaviour. This is supported by Pullon (2008) and Feitosa, Grossman and Salazar (2018), who both indicate trust as an earned quality and categorise it as a collaborative relationship behaviour.

Pullon's (2008) study additionally indicates the complexities of trust, with it being made up of multiple components, and developing for other reasons than competence (i.e. through respect, time, shared values and the equality in power). Trust was also found to be the product of loyalty and allegiances within IPW environments (Baxter & Brumfitt, 2008a; Freeth, 2001). Team loyalty and commitment were seen in several studies via professionals trusting each other to step in for one another or to 'have each other's back' (Barker & Oandasan, 2005; Bjnok *et al.*, 2012; Burau *et al.*, 2017; Harrod *et al.*, 2016). Persson *et*

*al's.* (2018) study found trust to develop in an alternative way, with it being a product for creating feelings of belonging, which in their study contributed to creating positive healthcare employee relationships, as it acted as a resource for maintaining wellbeing. This reiterates the simplicity of trust being used alone to explain IPW relationships and the ambiguity of the term within the IPW literature.

Thistlethwaite, Jackson and Moran (2013) however, argue that trust is attributed to the profession rather than the individual professional, for example, 'I trust you because you are a doctor' and 'in my experience doctors are trustworthy'. This suggests that trusting relationships, to some degree, will pre-exist in every healthcare team. D'Amour *et al.* (2005) reported a similar view, with professionals needing to trust one another before collaborative practice can be established. The concept of trust being automatically present is disputed by McCallin and Bamford (2007) and Pullon (2008). They both assert that despite team members having a professional title, competence should never be assumed or taken for granted, with trust being earned only when professional competence is proved. This indicates that trusting IPW relationships are entered into from a task-accomplishment perspective and not from a social perceptive. This concept contradicts what has been previously discussed within this chapter. Park, Lee and Lee's (2015) however, explain trust within their IT relationship study to be a social process, with trusting relationships being a product of reciprocal actions of social exchange. Finally, D'amour *et al's.* (2005) suggestion that interprofessional teams will not collaborate if efforts are based only on benefiting the patient is supported by several other studies that too report work relationships to be motivated by individual physical, social and psychological benefits (Argyle & Henderson, 1985; Badr *et al.*, 2001; Milardo & Wellman, 2005; Overall, Girme & Simpson, 2016; Persson *et al.*, 2018).

The multiple reasons for entering into work relationships are evident in Feitosa, Grossman and Salazar's (2018) work, which found that while individuals in China based their trusting relationships on team members' competence levels, Americans demonstrated trusting behaviours towards individuals they perceived to be in their friendship group. In an IPW context, Bajnok *et al.* (2012) found trust along with other relationship characteristics such as respect is gained through social interactions of getting to know one another. This supports the idea that alone trust as an IPW relationship explanation is ambiguous, with trusting relationships occurring outside of task accomplishments or from perceived competence levels.

Finally, a key conclusion from McCallin and Bamford's (2007) study was the feelings created from forming trusting relationships in interprofessional contexts. Participants described increased feelings of safety and comfort at work from trusting others to complete tasks successfully. They conclude, however, that little appreciation is given to the social and emotional factors that influence team success. This indicates a need to move beyond simple relationship descriptions of 'trust', with the emotional aspects created from IPW relationships needing to be taken into consideration when providing a clearly explanation of IPW relationships. Interactions for creating safe, positive environments were not exclusive to McCallin and Bamford's (2007) research. Similarly, Salas, Reyes and McDaniel's (2018) article also describes how feelings of safety at work stem from trusting behaviours and interactions, which were found to occur from the shared belief that it is safe to take interpersonal risks.

The review of the literature highlights the ambiguity surrounding relationships in IPW defined as 'trusting'. This is seen in the varying way trusting relationships in IPW develop,

their variation in status of being a relationship quality and behaviour, as opposed to being a relationship perspective and the varying emotional and social effects trust has on individuals. This supports the argument made by this thesis that 'trust' as a relationship perspective, definition and/or term alone does not capture the reality of IPW relationships in stroke care MDT working.

### **2.7.1.2 Power relations**

Collaboration is based on the premise that professionals want to work together. However, when collaborating professionals do have their own interests and a desire to retain a degree of autonomy and independence; the main instrument for negotiating such autonomy is power (D'Amour *et al.*, 2008). Power as a term used in the literature for understanding and defining interprofessional relationships refers to the power imbalances and power differences found between professionals (McDonald, Jayasuriya & Harris, 2012; Price, Doucet & Hall, 2014). From this review, power relations in interprofessional settings are studied from the perspective of how power dynamics can influence professional relationships, patient care and the ability for professionals to work together (Baker *et al.*, 2011; McDonald, Jayasuriya & Harris, 2012; Tang *et al.*, 2018; Naylor & Foulkes, 2018). While the concept of power has been examined in a number of different human dyadic relationships and work contexts, in the interprofessional literature, power is often only alluded to, and rarely explored in-depth in terms of relationship understanding. Power in the IPW literature was found to vary, depending on healthcare setting and was discussed in terms of how authority, status, role, power distribution and territory can affect collaborative practice, interprofessional learning and relationship development (Baker *et al.*, 2011; Tang *et al.*, 2018; Naylor & Foulkes, 2018).

Although a number of studies present evidence for the existence of power relations in IPW, power within these studies is a type of behaviour or a dimension of the relationships. This was evident in Tang *et al's.* (2018) study which found that interpersonal working relationships were influenced by power imbalances between the professionals, which caused unhappiness in the team and impacted on their collaborative ability. While their study was conducted from an interprofessional dyadic relationship perception, with the 19 participants being made up of only junior doctors and nurses. Their interview data identified strategies to help build interprofessional relationships that were not constrained, by power differences, which have been found historically to exist between nurses and doctors. Strategies included creating more opportunities for engaging in social interactions and knowing each other beyond their professional identities. However, despite these strategies being identified from the data, Tang *et al.* (2018) fail to elaborate on what relationships they are building. By removing the behaviour of power, they are not specific as to what social interactions need to be created. They also do not give insight into what information beyond 'professional identities' needs to be known.

Interprofessional relationships in a labour and delivery setting were additionally, found to be characterised and shaped by the 'push and pull' of power. Power, however, was not the only characteristic mentioned in this study with trust, respect and credibility all being included in the findings as interprofessional relationship influencers (Gleddie, Stahlke & Paul, 2018). In Harrod *et al's.* (2016) article, although power was not explicitly referred to, participants discussed how ward clerks were perceived to 'work' for the doctors and not the nursing team. This indicates power imbalances that were found to affect team relationships and their ability to function, as nurses did not feel like they had the authority

or status to delegate work. This resulted in them feeling isolated and unsupported.

Similarly, in Sims, Hewitt and Harris (2015a), the influence of power on relationship status was alluded to, with team rapport being acknowledged as ‘good’ when strong hierarchical structures were absent. This supports the argument that power is a relationship behaviour, and/or a determiner of relationship strength and not an overall IPW relationship perception.

Power relations, however, were not always deemed as being negative in the IPW literature.

Gleddie, Stahlke & Paul’s (2018) participants reported that their IPW relationships were ‘good’, despite experiencing daily power struggles. King *et al.’s*. (2017) qualitative study on collaborative working through the lens of personal relationships, found collaborative working to be infused with power issues. They propose that actions and behaviours of being willing to try to get to know one another, was in response of power in IPW. They concluded that the willingness to make an effort with one another, despite the power dynamics highlights the value placed on good relationships within IPW teams. This supports the thesis position, of power not being a relationship perception, but a set of behaviours that influence IPW relationships, with power being linked to team functioning, team building, relationship development and creating positive work environments. This indicates the term’s inability alone to provide an understanding of the IPW relationship perception of a stroke MDT team.

### **2.7.1.3 Positive relationships**

Defining working relationships or connections as positive was found in several IPW papers (Bajnok *et al.* 2012; Coissard *et al.*, 2017; Gleddie, Stahlke & Paul, 2018; Persson *et al.*, 2018). This definition of relationships was found to explain IPW relationships via the positive behaviours, outcomes and/or benefits (Moore *et al.*, 2017; Gleddie, Stahlke &

Paul, 2018). The review of the literature uncovered positive relationships in both general and IPW work contexts to be linked to perceived levels of relationship strength and quality, with positive relationship behaviours, outcomes, and benefits being embedded in actions that aid wellbeing, achievements, development, and progression (Ferris *et al.*, 2009; Persson *et al.*, 2018). They are, however, like trust relationships ambiguous with behaviours, outcomes and benefits varying between the literature that deems IPW relationships as positive. Besides, human relationships as already discussed can be described as positive regardless of their context, with individuals entering into relationships to reap the positive benefits and not the negatives (Hodson, 1997; Ragins & Verbos, 2007; Arnold *et al.*, 2016; Persson *et al.*, 2018; Pillemer & Rothbard, 2018).

While negative behaviours in work relationships such as conflict, has been widely researched (Hodson, 1997; Ariza-Montas *et al.*, 2013; Hesse-Biber, 2016; Abugre, 2017). Research into negative relationships as a term to describe the working relationships of interprofessional teams like ones of a stroke MDT have not been undertaken. However, despite, empirical research discussing the negative effects of conflict on work relationships the positive effects of conflict have been alluded to. Todorova, Bear and Weingart's (2014) survey found positive emotions to be experienced at work from episodes of task conflict. This, therefore, questions the collaborative interactions that are included for IPW relationships to be positive and the validity of the single term of 'positive' for providing a realistic reflection of the interprofessional relationships of interprofessional healthcare teams, such as those of a stroke care MDT.

Positive work relationships in a healthcare setting were contextualised by Coissard *et al.* (2017) as being essential to working life. Their French-based study, which aimed to explore the wellbeing of hospital employees after the reorganisation of work teams, found positive work relationships to be strongly linked to an individual's wellbeing and perceived quality of life. They concluded from their four self-administered questionnaires, completed by a sample population of 444 that included all professional disciplines, that positive relationships in interprofessional settings are created via interactions of belonging and cohesion. These actions were found to offer professionals access to social and emotional support, which helped them achieve tasks, maintain their well-being, and help them feel fulfilled. Others have reported similar findings, with positive IPW relationships being underpinned by the behaviours of support, commitment, loyalty, trust, respect and good communication (Freeth, 2011; Baxter & Brumfitt, 2008a; Clarke 2010; Mahood-Yousuf *et al.*, 2008; Gittell, Godfrey & Thistlewaite, 2013; King *et al.*, 2017; Persson *et al.*, 2018). Bajnok *et al.*'s. (2012) article titled '*Building positive relationships in healthcare*', again identified a number of components that were perceived to be involved in creating positive relationships. In their study, they again discussed trust, respect and support as a positive relationship attribute, with support for experiencing team and personal growth being a factor in the development of positive IPW relationships. While these studies are insightful for gaining knowledge of the characteristics and collaborative interactions that determine positive IPW relationships, they highlight the confusion for understanding IPW relationships, with trust being a property of positive IPW relationships and a relationship definition on its own.

Although IPW relationships were not explicitly defined as positive, a number of IPW studies alluded to its presence, with discussions and findings describing supportive

behaviours that aided individuals to feel connected and thrive (McCallin, 2006; Baxter & Brumfitt, 2008a, 2008b; Sims, Hewitt & Harris, 2015a; Martin & Manley, 2018). Baxter and Brumfitt's (2008a) grounded theory (GT) study of the professional differences within an interprofessional stroke team found connections to form via strong team allegiances between the professionals, when working and completing tasks together, despite belonging to different professional groups. Martin and Manley's (2018) work in developing standards for integrated facilitation in supporting growth within the workforce, additionally, makes links to positive IPW relationships through supportive collaborative actions. They identified that the driving force for critical thinking, reflection and learning among integrated team members is through relationships that are not just supportive but inclusive.

Interactions of support were evident in several ways, however, the most popular was the support given to complete tasks by sharing knowledge, learning new skills and looking after and supporting one another while at work (Chadesey & Beyer, 2001; Stenner & Courtenay, 2008; King *et al.*, 2017; Martin & Manley, 2018). This is supported by the literature that examined interprofessional conflict, which reported conflict to stem from relationships deemed unsupportive, as they led to negative behaviours of mutual suspicion, hostility and territoriality (Ariza-Montas *et al.*, 2013; Hesse-Biber, 2016).

Support as a positive relationship attribute in IPW contexts was also seen in other literature sources to extend beyond a physical capacity of just supporting individuals to achieve work tasks. A key author which found evidence of this was Persson *et al.*'s. (2018) 23-participant Swedish study, which explored healthcare employees' experiences of work relationships with patients and their colleagues. Conducted in a community setting, Persson

*et al's.* interprofessional sample found that professionals supporting other professionals to achieve their emotional needs was just as important as supporting others to achieve their physical needs, with employee relationships developing from a sense of togetherness being felt when professionals from different disciplines supported each other in meeting their physical, social, and emotional needs. While Persson *et al's.* (2018) phenomenology study describes the experiences of interprofessional relationships as positive entities and provides insight into collaborative interactions that provide support, i.e. being open, honest, providing advice, and not being judged. Their perspective of interprofessional relationships understanding is via the positive effects they had experienced on their professional wellbeing and not, directed towards uncovering professionals' perspective of working relationships through collaborative practice.

The importance of social support as discussed above was found in Coissard *et al's.* (2017), with their research linking social support to relationship quality via social support creating feelings of belonging, which aided professionals to feel fulfilled. However, despite these important links made by Coissard *et al.* (2017), their study does not provide explicit details of what collaborative interactions establish feeling of belonging beyond simple descriptions of social support, feeling relaxed, trust and respect. Despite Coissard *et al's.* (2017) sample being interprofessional, it does not clarify which professional's, actions of support occurred between, i.e. between individuals of the same professional group of between professionals from different disciplines. In addition, the sample population consisted of professionals within an entire hospital location. As discussed, relationships form out of regular social interactions (Argyle & Henderson, 1985). Although Coissard *et al.* (2017) did not confirm within their study whether all 444 participants had regular social contact with one another, it would not be unrealistic to suggest that every professional

working in a hospital setting knows and interacts with every other professional regularly. This questions the reliability of the positive relationship concept discussed within Coissard *et al.* research. This further supports the purpose and need for this thesis, with the current proposed definitions such as the positive relationship concept being too broad a term to capture and explain the social processes of the working relationships of interprofessional teams such as that of a stroke care MDT.

Although not explicitly related to positive relationships, emotional support through acts of empathy and compassion were found within the IPW literature. Adamson *et al.* (2018a, 2018b) found that acts of empathy in interprofessional settings influenced relationship formation, quality and strength. Emotional support was also found in the IPW relationship literature through acts of emotional intelligence and compassion, with them being processes for successful IPW and the formation of bonds and ties (McCalin & Bamford, 2007; Adamson *et al.*, 2018b; Persson *et al.*, 2018). Adamson *et al.*'s. (2018a, 2018b) interprofessional empathy model confirms that empathy, as a method of compassion, exists between professionals working interprofessionally. Adamson *et al.*'s. (2018b) study of Schwartz Rounds (SR) found that emotional support was a significant aspect to IPW life, with the SR rounds enabling supportive communication and experience sharing to occur, allowing professionals, from different disciplines to form ties, by getting to know one another.

While positive IPW relationships literature provides insightful knowledge of behaviours, interactions, and characteristics found in IPW relationships, the literature highlights the inconsistencies with the benefits, behaviours, interactions, and characteristics varying

between research studies. Moreover, while the concept of support was prominent in the literature, the links to how they create IPW relationships are sparse, with limited insight into the practitioners' perspective with the focus being on the presence/absence of relationship behaviours that create positive interprofessional relationships. This thesis aims to provide IPW relationship clarity and add to the knowledge base in this respect.

### **2.7.2 Unanswered questions from the IPW relationship literature**

The discussed relationship terms/definitions provide insight by confirming that interprofessional healthcare relationships exist and are important for sustaining the healthcare workforce (Persson *et al.*, 2018). The significance of interprofessional relationships in healthcare contexts was reflected in the research via their ability to influence collaborative ability, individual and group motivation, job performance, job satisfaction, individual wellbeing, organisational success, and patient safety. Furthermore, the above discussions confirm that IPW relationships are embedded in the social interactions and collaborative behaviours of the professionals, who work in the interprofessional setting.

The review, however, identified that the current IPW relationship definitions/terms and perspectives that provide understanding of IPW relationships are inconsistent, simplistic, and unclear, with multiple behavioural and interactional dynamics being discussed and referred to. While the interactions or properties that make up the interprofessional relationships of trust, positivity and power are discussed, the collaborative process of how these translate to relationship formation is often absent or unclear, with current literature failing to elaborate whether IPW relationships ended or diminished if certain relationships

qualities and behaviours, i.e. trust or respect were absent. This suggests that the current understanding of interprofessional relationships is one-dimensional, with the reviewed studies not considering or accounting for relationships processed in their entirety. This questions whether the current terms and definitions that provide understanding present a true reflection of the relationships within IPW, which can be transferable to an interprofessional stroke care MDT. The interprofessional relationship terms and definitions identified within this review clarify the absence of research exploring IPW relationships from the perspective of the individual, with it instead being based on identifying the benefits, behaviours, and qualities of IPW relationships. Thus, while the review into the current literature surrounding interprofessional relationships is insightful, it does not provide a clear and complete understanding of what relationship perceptions, professionals have from collaboratively working within an interprofessional stroke care MDT.

### ***2.8 Relationship-centred care (RCC)***

A critical model in understanding healthcare relationships is the 1994 Pew-Fetzer Task-Force report titled '*Relationship-centered care (RCC)*' (Pew Task-Force, 1994; Suchman, 2010). The RCC model is a theoretical concept and a salient framework in healthcare management (Nundy & Oswald, 2014), seen as an extension of the Patient Centred Care model. The RCC includes the relationships between patients and clinicians, clinicians and clinicians, and clinicians and the community. The RCC model situates working relationships as central components for providing a context for successful healthcare working (Safran, Miller & Beckham, 2005; Suchman, 2010). While the RCC model places relationships at the centre of care delivery, it does not make explicit the nature of the

relationships, explain how they work, or how they apply to specific working contexts, i.e. stroke care MDT working (Suchman, 2006).

Since its inauguration several scholars have dedicated literary work to further explore, understand and extend the model, aiming to fully understand the varied relationships that affect healthcare outcomes (Beach & Inui, 2005; Safran, Miller & Beckman, 2005; Suchman, 2006; Gaboury *et al.*, 2011; Suchman, 2011; Soklaridis *et al.*, 2016). However, like social exchange theory and the high-quality connection (HQC) concept, the RCC model focuses on the quality of relationships, with the model providing knowledge of the characteristics needed in the healthcare sector that contribute to relationship quality (Safran, Miller & Beckham, 2005).

The RCC model is founded upon four principles: (1) relationships in healthcare need to include the personhood of the participants, (2) the effect and emotions of relationships are important, (3) all relationships occur in the context of reciprocal influence and (4) the formation and sustainability of relationships are morally valuable (Beach & Inui, 2005). While the focus of the RCC model is on patient clinical relationships, the relationships between practitioners are emphasised. As this aspect of the RCC model is key to this thesis, the remainder of the discussion is based on the ‘clinician-clinician’ relational aspect of the RCC model.

The clinician-clinician element of the model recognises that practitioners in healthcare form relationships with one another, which contribute meaningfully to the organisation, their patients’, and their own health and well-being (Beach & Inui, 2005). This relationship aspect of the model, compared to the other relationship aspects, is understudied (Safran,

Miller & Beckman, 2005). The view that practitioner relationships within the RCC model are under-researched is additionally held by Beach and Inui (2005). They indicate an additional element within the clinician relationships, with the concept of the ‘self’ being important. The concept of the self includes having self-awareness on one’s own knowledge and personal integration. However, due to it being the least explored element of the model, the clinician-clinician relationship description in Beach and Inui’s (2005) work is vague, with arguments suggesting that it is up for interpretation as to what specifically can be included within the relationship dimension.

Gaboury *et al.* (2011) who researched the RCC model within a Canadian interprofessional context, found the model useful for investigating the complex dynamics of interprofessional working. While perceptions of relationships were not disclosed within their work, they found outputs of relationships to include personal growth and increased levels of job satisfaction. Safran, Miller and Beckman’s (2005) work on the RCC model focussed on the practitioner relationships aspect. They created a separate model to complement the RCC model, titled ‘*Organizational Dimensions of Relationships-Centred Care*’. This model focuses on how a web of relationships in a collaborative context results in organisational success. While the model explains relations from an organisational perspective, it does articulate seven relationship characteristics (i.e. trust and respect), which they conclude need to be present if an organisation wishes to change its culture and be collaboratively successful. Although the model does not give an overall relationship perception of clinician-clinical relationships, nor make explicit that it can be applied to IPW contexts, it does include the process for how the seven characteristics found in the model came about, with them occurring through cycles of actions, reflections and

storytelling (Safran, Miller & Beckman, 2005). This reaffirms that understanding healthcare relationships relies on the collaborative interactions of individuals.

The focus of relationships characteristics to determine the quality of relationships and help define working relationships in healthcare is not new, with it being previously uncovered and addressed in this review. It does, however, further suggest and support that there is a need to move beyond describing the multiple characteristics of work relationships in an interprofessional context.

While this thesis aims to discover new knowledge by researching the interprofessional working relationships perceptions of a stroke care MDT, the researcher is aware that researching the daily collaborative interactions and behaviours in which these characteristics lie is key for discovering an overall relationship understanding of stroke care MDT professionals. This allows for a move towards a more nuanced understanding of the working relationships within interprofessional settings, such as that of a stroke care MDT.

## ***2.9 Clarify the gap in the literature***

The literature reviewed in this chapter, along with the personal and professional rationale outlined in Chapter One, are the driving forces of this thesis. Through this review, the originality and distinctiveness of this thesis is identified. This was achieved by the review outlining the current contemporary understanding of IPW relationships, which, in turn, provided insight into the questions surrounding the topic that remain inadequately addressed. It is important to recognise that the review illustrates that work relationships in both a general and interprofessional context do not exist because professionals work in the same environment, but are instead a product of the social interactions that occur between

professionals. However, there is a shortage of studies that exclusively explore interprofessional stroke care relationships from the perspective of the individuals and the perspective of interprofessional relationship construction, being a process that is socially influenced by collaborative interactions. The call for further empirical research is therefore necessary, for a more complete understanding of interprofessional workplace relationships (Xerri, 2013; Persson *et al.*, 2018).

This review has demonstrated that, despite recent advances in research on the subject of IPW, there is still a need for a better understanding of the collaborative processes that occur between interprofessional teams i.e. IPW relationship perceptions and for the development of conceptual tools that help understand collaboration in complex systems, such as in a stroke care MDT. The range of research specifically exploring IPW relationship perspectives is limited, despite the scoping review exposing the concept of work relationships being an undertone for collaborative success. Limitations in the literature are found partly in the dyadic focus, with popular research focus being on exploring dyadic interprofessional relationships perspectives, i.e. relationships between nursing teams and medical professionals. In addition, the only model found within the literature that looks at interprofessional relationships (the RCC model) focuses on explaining the characteristics needed in IPW relationships and not how professionals perceive their interprofessional relationships from the interactions that occur within their collaborative practice.

The review and introduction chapter highlight the significance of achieving successful IPW in stroke care MDT working (i.e. for the patients, professionals and organisation) and

the NHS has a long-term plan to improve IPW services, with particular focus being given to how staff are cared for (NHS England, 2019). Furthermore, the 2016 National Clinical Guidelines for Stroke call for stroke teams to be appropriately staffed (Royal College of Physicians, 2016a) and having the right professional numbers and the presence of all disciplines in a stroke MDT is simply not enough to warrant collaborative success (Meyer, 2011; Hewitt *et al.*, 2015). Yet, no research as a result of this review has specifically explored the IPW relationships of a stroke care MDT, despite their links to interprofessional collaborative success and their benefits for the individual, team, patient, and organisation.

Gaining a complete understanding of IPW relationships is compounded further because this scoping review highlights that IPW literature, in both a general and in a stroke MDT context, describes the working relationships in ways which are considered to be simplistic, ambiguous and one dimensional. Current interprofessional relationship descriptions are expressed as singular terms, which can be argued as not being relationship perceptions, but the characteristics and/or qualities that IPW relationships should possess. The wider review of the literature exposed relevant concepts and theories, which are referred to throughout this thesis, yet alone they fail to explicitly enhance understanding of how individuals working interprofessionally in stroke care perceive their IPW relationships.

Through the implementation of a constructivist GT research approach, this study addresses these failings and contributes new original knowledge by propositioning a model that provides a conceptualised explanation of the interplay between collaborative practice and the working relationship perceptions of interprofessional stroke care MDT professionals. It achieves this by acknowledging the multi-layers involved in interpreting work

relationships, which include the influences of the social collaborative context in which they are situated. By answering the research question posed in Chapters One and Three, a contribution of a more authentic and comprehensive exploration of the working relationships of an interprofessional stroke care MDT is made.

### ***2.10 Chapter conclusion***

The literature discussed provides an indication of interprofessional working, its significance within healthcare, and what perceived factors make it successful. While the chapter demonstrates the importance of IPW relationships and the attempts made to define them, knowledge remains ambiguous and limited, particularly with understanding how professionals, collaborating interprofessionally in stroke care, perceive their working relationships. What the literature review has uncovered is the need to fill the knowledge gap, especially as interprofessional relations have been implicated in the assumptions and factors that elicit successful IPW. By conducting further in-depth qualitative research, a multi-layered understanding that represents the realities of IPW relationships in stroke care can be found. The next chapter will provide a detailed explanation into the methodology that this thesis is based on.



## **Chapter 3: Methodology: A grounded theory design**



### ***3.1 Introduction***

This chapter presents the theoretical and conceptual frameworks which informed the grounded theory methodological design of the research. Firstly, this chapter will clarify the research question posed. It will then outline the ontological and epistemological stance linked to the theoretical perspective of symbolic interactionism, which was fundamental to the approach undertaken. The rationale for constructivist grounded theory as a methodology to address the research question will be discussed and the core characteristics of grounded theory explained. It concludes with an outline of reflexivity and the approach taken during the study.

### ***3.2 Research question***

Corbin and Strauss (2008) suggest that philosophical positions should not influence the research approach, but be driven by the research question. The decisions made surrounding the choice of methodology and methods were therefore, based upon the study's research question. The central research question that the study addressed was;

*“How do professionals working in a stroke care multidisciplinary environment perceive their collaborative interprofessional working relationships?”*

As outlined in chapter one, the research question evolved from clinical experience, initial engagement in the pre-existing research literature and from drawing upon the principles of the qualitative PICO framework. Formulating a focused research question is essential, with it guiding the research process in its entirety. Lack of focus can result in insufficient depth or incomplete research (Moule, Aveyard & Goodman, 2017).

### ***3.3 The ontological and epistemological stance***

Within empirical research the way in which the social world is viewed and understood, or the ideas of how it can be understood, impacts the choices and conclusions that are drawn upon when considering which philosophical and methodological stance to adopt (Blaikie, 2007). An important part of conducting research is to decide on the philosophical position to adopt, as perceptions of reality, how reality exists and how knowledge of these realities are obtained often differ between researchers (Silverman, 2017). Chamberlain-Salaun, Mills, and Usher (2013) state that researchers enter the research world with a set of beliefs and ideas about the nature of reality and truth, which in turn raises questions about knowledge and the relationship of the knower towards the known. This directs the researcher to their philosophical stance. It is this unique philosophical stance that defines what is considered to be real and how we can justifiably acquire knowledge about the world we live in (Birks & Mills, 2015).

The ontology assumptions relate to the nature of what exists within the social science realm. The ontological question posed is “*What is the nature of social reality?*” (Blaikie, 2007, p.13). The epistemology assumption reflects the theory of knowledge and addresses how humans or research participants come to know about their lived social worlds (Creswell, 2013). In the social science realm, the epistemological question posed is “*How can social reality be known?*” (Blaikie, 2007, p.18).

The philosophical stance of social constructivism and the theoretical and conceptual frameworks underpinning this thesis will be explained next within this chapter.

### ***3.4 Social constructivism***

Social constructivism, or interpretivism as it is often described, or referred to, is a philosophical perspective on how individuals attempt to make sense of the social world within which they interact (Creswell, 2013). Knowledge is constructed, as opposed to being created or discovered (Andrews, 2012). These constructed meanings that individuals have towards objects, things, behaviours or situations are constructed from the individual's reality and experiences in everyday life (Charmaz, 2014). As Steedman (2000) notes, most of what is known and most of the knowing that is done is concerned with trying to make sense of what it is to be human, as opposed to scientific knowledge. Thomas *et al.* (2014) furthermore adds that reality and meanings are not static. Individuals or groups of individuals co-construct this reality and it is through this reality that meanings are socially negotiated, which at times are varied, multiple and dependent on the individual (Creswell, 2013; Thomas *et al.*, 2014). Thus, if social realities and beliefs change, so do the attitudes and behaviours of individuals. The goal of the social constructivism approach is to understand and learn how individuals create knowledge and social reality, focussing on the process and not the product (Sias, 2009). From this perspective, organisations such as the NHS, the context for this thesis, do not exist in a physical sense, but exist in the interaction of its members (Sias 2009).

Given its context and the focus on human interaction, relationships and the influence of collaboration, the ontological position taken in this study was that meanings are socially constructed via the existence of multiple intangible realities as opposed to a single truth (Urquhart, 2013). Epistemologically, knowledge and realities do not exist independently of one another but are constructed socially by individuals (Schwandt, 2007). To put it in context for the topic under enquiry, the philosophical stance was that the meanings of IPW

relationships in stroke care settings are not abstract realities but exist through the constructed meanings of professionals and their interactions with each other simultaneously in the context in which they occur.

### ***3.5 Symbolic interactionism***

Symbolic interactionism (SI) as a theoretical framework is linked to the social constructivism perspective taken in this study. With its origins lying within sociology, it too takes the stance that reality and or knowledge exists in the meanings individuals interpret from their social interactions and the context in which they occur (Mead & Morris, 1934). SI is a social psychological approach and is influenced by pragmatism and the theoretical perspective that views human affairs as the process of developing a complex set of symbols that construct meaning (Charmaz, 2014).

It was philosopher George Herbert Mead whose initial ideas and concepts are considered to be the foundations from which SI is derived (Lauer & Handel, 1977). Herbert Blumer, however, is the social scientist and student of Mead who created the term 'symbolic interactionism' and who played a major role in establishing it as a sociological social psychology (Charmaz, 2014). Blumer (1969) implies that symbolic interactionism rests on three premises:

- Firstly, human beings interact with objects (including physical objects, social objects and abstract objects) that occur within their lived environments, on the basis of the meanings they have attributed to them.
- Secondly, these perceived meanings are generated through social interaction.

- Thirdly, the individual interprets and constructs these meanings in light of the situation in which they are living.

Both Mead (Mead & Morris, 1934) and Blumer (1969) emphasise that human beings are thinking and purposive (not simply responding) organisms. The symbolic interactionist perspective, therefore, identifies that one acts in response to how one sees or understands their lived contexts. In turn, the actions of individuals and actions of others around them affect these contexts and subsequently the individual's interpretation of meaning (Charmaz, 2014). In other words, individuals interact socially with each other based on the social meanings they have with objects or in terms of the situations they are in (Aldiabat & Navenec, 2011). This indicates that the most important predictor for human behaviour is the meanings individuals instil in the objects that exist within their social world (Chenitz & Swanson, 1986).

Furthermore, these meanings that arise from human interaction are deemed to be flexible, modifiable and open to review (Chamberlain-Salaun, Mills & Usher, 2013). Charon (1979) goes even further with this flexibility, by stating that meanings attached to social objects are never permanent, as they are ever changing due to the nature of being defined and redefined as individuals interact. This is in keeping with human relationships and how they change over time, with their perceptions being underpinned by the interactions that occur within them (Argyle & Henderson, 1985; Sias & Perry, 2004). Within the three premises, Blumer (1969) additionally proposes that the meanings humans attach to objects and each other arise not only from the interactions but from the way one prepares oneself to act in

relation to the object or person in question. It is suggestive then, that interactions towards other individuals and objects can potentially be predicted.

This suggestion relates to the research topic, as interactions that occur within relationships are dependent on the relationship perceptions individuals have. According to Duck (1994), parties to human relationships act on the basis that words and symbols have meanings and that they also act in the belief that a relationship can be understood on the basis of these meanings. For example, a hug or a symbol of affection may be given to a family member, whereas a handshake or smile may be offered to a work colleague. However, again this is entirely dependent on the relationship perception the individual has, since relationships with family members and work colleagues can vary. A hug may not necessarily be an action given to an individual's mother because their relationship perception gained through agreement does not warrant that symbol of affection. These relationship meanings that individuals have are dependent on how they interpret the actions that occur in response with an object or a certain individual(s).

According to Blumer (1969), interpretation is a significant characteristic within the symbolic interaction perspective as meanings constructed from interactions can only be understood and learned through interpretations. This makes understanding human actions complex because they are not a direct response to an object or situation, but instead are dependent on an interpretive process that generates meaning (Aldiabat & Navenec, 2011). This process of interpretation and action is seen as a reciprocal process, with each process affecting the other (Charmaz, 2014). Furthermore, this reciprocal process has the ability to change an individual's interpretation, which has already been alluded to by Blumer (1969),

whose notion is that meanings can be redefined. This provides further support of SI within this thesis, as it complements the social constructivism perspective in that social realities such as human relationships are not static by nature.

Building on this concept that meanings can be redefined, individuals have the potential to change object meanings by changing the actions that come with achieving desired goals (Charon, 1979). Blumer (1969) takes this one step further with the interpretation of meaning not being inherent in the object (in this thesis, the relationships professionals from different disciplines have with one another). Objects can change for individuals, not because the object changes, but because the individual changes their definition of the object as a result of their social interactions, supporting the concept of perceptions being flexible (Charon, 1979).

### ***3.6 The conceptual framework of this study***

The terms conceptual framework and theoretical framework are often misunderstood or ignored by authors (Ngulube, Mathipa & Gumbo, 2015). The misunderstanding of the differences between the terms is compounded by the fact that they are used interchangeably by scholars, with no common language being found (Green, 2013).

However, Ngulube, Mathipa and Gumbo (2015) argue that although both can be used as interpretative frameworks, conceptual and theoretical frameworks are separate entities.

This highlights the intellectual requirement to make distinctions between the two notions when carrying out empirical research.

Conceptual frameworks are simply lenses through which researchers can look to offer an understanding or explanation into the world (Ngulube, Mathipa & Gumbo, 2015). Other authors (Maxwell 1996; Jabareen, 2009; Ravitch & Riggan, 2012) support this definition, all suggesting that conceptual frameworks are a number of interlinked concepts or assumptions (which may be taken from a theory) that support, inform and direct the research. Conceptual frameworks within qualitative research are therefore, integral to enhance rigour, credibility, trustworthiness and to clarify the structured approach and perspective of the researcher (Ravitch & Riggan, 2012; Straughair, 2019). Glaser (2005), one of the founders of grounded theory, has criticised researchers for making their philosophical lens explicit as the classic grounded theory methodology is ontological and epistemological neutral. However, within social research, there is an expectation that the philosophical and conceptual lens that underpins a qualitative research project is acknowledged and explained (Breckenridge *et al.*, 2012; Straughair, 2019). In this thesis, a conceptual framework (Figure 2) was developed to propose an understanding of my starting point, following engagement with literature and relevant theoretical perspectives (as outlined above) and in the development of ideas through the research findings (Vithal & Jansen, 2012) rather than a theoretical explanation per se (Jabareen, 2009).

The theories of social exchange, social capital and self-expansion are the relevant key theories which, collectively, along with the methodological approach, make up the conceptual framework on which this thesis bases itself upon, in order to support the generation of new knowledge

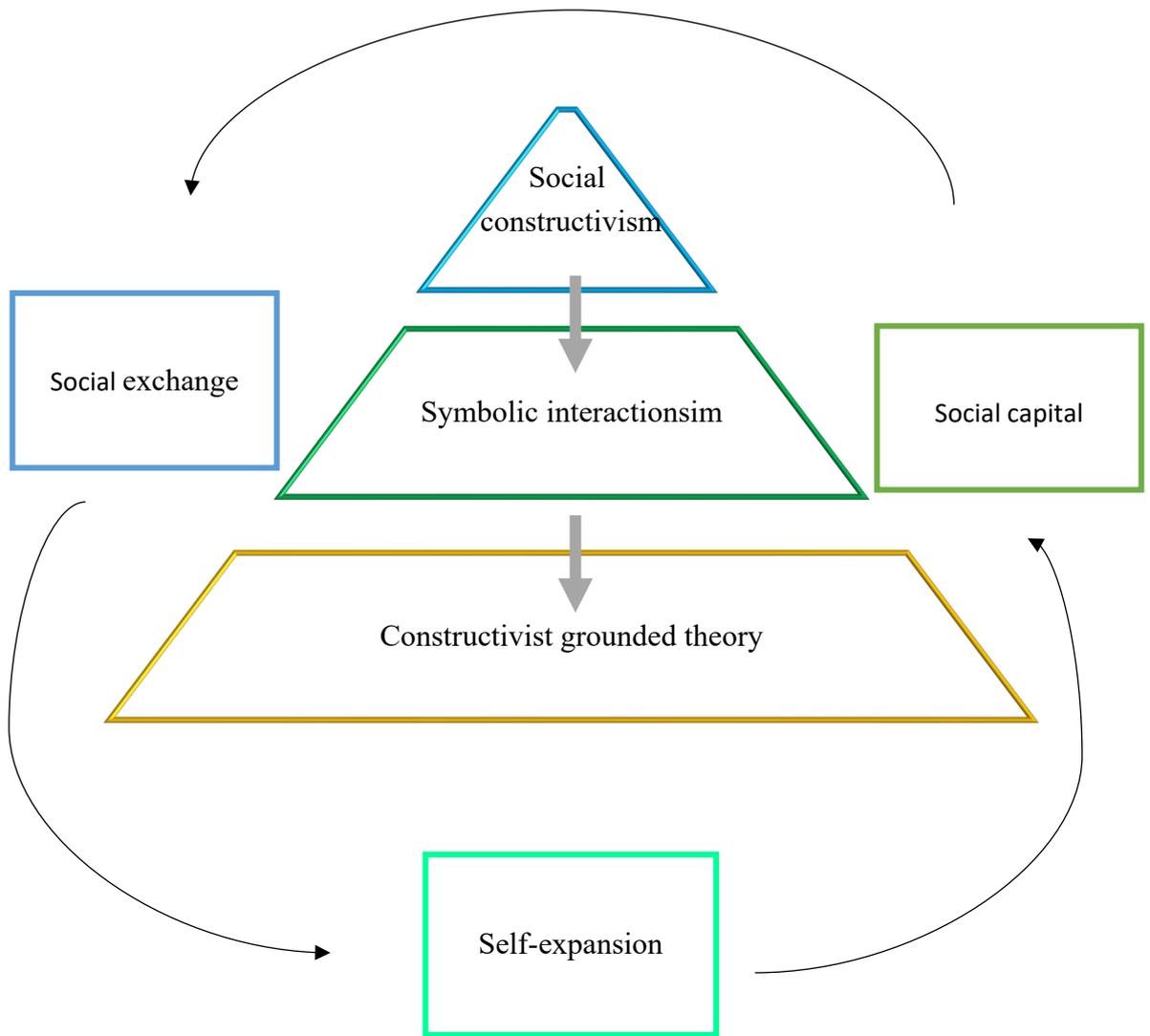


Figure 2: The conceptual framework

### ***3.7 Grounded theory (GT) as an interpretive approach***

As a methodology rooted in the theoretical perspective of symbolic interactionism, grounded theory (Glaser & Strauss 1967) was chosen for this study. The grounded theory methodology (Strauss & Corbin, 1997) has become perhaps one of the most influential paradigms within social science and health researcher (Patton, 2015; Charmaz & Bryant, 2011). Consequently, the method and its ability to capture human behaviour have become

increasingly popular, particularly for carrying out qualitative nursing research (Polit & Beck, 2012; Lewis-Pierre, Kovacich & Amankwaa, 2017). The grounded theory methodology is the original work of Barney Glaser and Anselm Strauss, who described the methodology in their influential 1967 book about death and dying '*The Discovery of Grounded Theory*'.

Glaser and Strauss's work is regarded as a qualitative revolution, as it was presented at a critical time when few qualitative research method books were available (Hallberg, 2009). With the creation of the grounded theory methodology, Glaser and Strauss provided a detailed inductive framework to assist researchers in developing theories from empirical data that unveiled an understanding of human social behaviour (Parahoo, 2014). Their book, additionally, provided a strong case for how credible and rigorous the qualitative methodological approach is (Charmaz, 2014) and that quantitative research was not the only usable approach to inquiry (Hallberg, 2009). Grounded theory (GT) is distinguished from other qualitative methods due to its ability to move beyond description, placing explicit emphasis on constructing a theory from the data (Aldiabat & Navenec, 2011; Parahoo, 2014; Patton, 2015), which provides an explanation into what actually happens in the reality of the participants under study (McCalin, 2003c).

Grounded theory (GT) is an inductive approach that involves generating theories to understand basic psychosocial issues, in particular, investigations into social problems, social processes and social meanings (Glaser, 1978; Cooney, 2010). Given that the research question for this study is about understanding what is happening in the real world

of participants working in a stroke care MDT setting, from their perspective, there is a clear fit with the GT approach.

### **3.7.1 Principles of reasoning**

An inductive approach assumes that the principle behind locating understanding is via the emergence of discovery, a concept which suggests that data and facts already exist within the social world, yet simply need to be discovered (Flick, 2018). Glaser and Strauss highlighted the centrality of predictions, in that a good theory must be put to work and should work in the sense of predicting future phenomena (Timonen, Foley & Conlon, 2018). This inductive principle, however, has been criticised as being naïve, as the role of the methods used as part of the research process are ignored or interpreted as obstacles to discovery (Kelle, 2007, 2014). Since the various developments within the GT methodology, further investment and thinking for the underlying principles of reasoning have taken place (Flick, 2018).

This investment in the development of methodological instruments is evident within Strauss and Corbin's later work (1990). While they emphasise an inductive approach to understanding in the initial stages of analysis, they found that the inductive principle of reasoning is not sufficient to analyse phenomena and in developing theory, thus they increasingly make reference to including deductive elements of reasoning (Flick, 2018). The principles of reasoning have been taken into further consideration by the constructivist grounded theory approach. While the approach accepts that the methods are comparative and inductive, it includes the researcher and participant standpoints, with reflexivity taking a forefront position in developing theory. The role of the researcher within constructivist

grounded theory is to actively search for knowledge, as opposed to the discovery stance (inductive approach) which is to simply uncover it (Flick, 2018).

This has led to the inclusion of a third principle, namely reasoning of abduction, which has become a prominent view in recent grounded theory dialogue (Charmaz, 2014; Kennedy & Thornburg, 2018). Abduction allows for the limitation of induction to be overcome, as the principle focusses on how the researcher, the research methods and methodological choices inform what is identified as relevant data, which aids the development of theory (Flick, 2018). Additionally, in abduction, data is examined by researchers to see how it supports existing theories or calls for modifications in the existing understanding of phenomena (Kennedy & Thornburg, 2018).

On this basis, the methodology has not been selected to tell participants' stories, but rather to identify and explain, conceptually, the ongoing patterns of behaviour that individuals engage in (Breckenridge *et al.*, 2012). The emergence of theory within the methodology arises from both the interpretations of the individuals within their context under study and those of the researcher (Parahoo, 2014). Therefore, within the GT methodology, in order to move successfully through the process of discovery, an open and creative mind in terms of what is happening within the context is required. This is so original knowledge of the investigated social world can be gained (Hussein *et al.*, 2014). The aim of this study was to produce a novel explanation to define and understand how professionals working in a stroke care environment perceive their collaborative MDT working relationships: to understand what was happening in the social world of participants.

The GT methodology allows for direction when gathering and analysing data, enabling data to be gathered by what is sensed, as well as what is seen and heard. This allows a theory to emerge from the data that is relevant and meaningful in explaining the phenomenon under study (Blaikie, 2007). Additionally, unlike other qualitative approaches, GT is not linear but concurrent with data collection, analysis, theoretical sampling and conceptual theorising, which all occur simultaneously in a process of constant comparative analysis (Glaser & Strauss, 1967) until a theory is generated (McGhee, Marland & Atkinson, 2007). This flexibility allows ideas to be followed up as they are happening (Charmaz, 2014).

The founders of GT (Glaser and Strauss, 1967), however, have taken the methodology in different directions, which has caused much debate (Parahoo, 2014; Bruscalioni, 2016). The debate arose between the founders after Strauss collaborated with Corbin and published the '*Basics of Qualitative Research: Grounded theory Procedures and Techniques*' (Parahoo, 2009). Glaser suggests that Strauss and Corbin's technique, which is rooted in pragmatism and influenced by the Chicago school (Corbin & Strauss, 2008), ignores emergence. However, the technique, which Glaser names 'full conceptual description', forces data and analysis into preconceived categories, therefore resulting in the theory being forced rather than allowing it to emerge (Charmaz, 2014; Parahoo, 2014).

Glaser's approach is referred to as classical grounded theory, whereas Strauss and Corbin's principle is referred to as the Straussian grounded theory approach (Evans, 2013). Morse *et al.* (2009) stated that this debate between the Classical and Straussian versions of grounded theory led to the second generation of grounded theorists. Several variants of grounded theory now exist (Charmaz & Bryant, 2011; Bruscalioni, 2016; Timonen, Foley &

Conlon, 2018) with Clarke's (2005) situational analysis and Charmaz's (2006) constructivist grounded theory methods being two popular variations that have been developed.

Mills, Bonner and Francis (2006) suggest that it is the ontological and epistemological position that directs the researcher's decision as to which variation of grounded theory to undertake. Therefore, whilst considering the research question, aim, the conceptual and theoretical frameworks and the current absence of theory explaining the meanings of interprofessional relationships in stroke care, the decision to adopt the constructivist version of the grounded theory methodology was taken.

### **3.7.2 Constructivist grounded theory**

The constructivist variation of grounded theory is seen as contemporary (Charmaz & Bryant, 2011), with the approach situating itself between positivism and postmodernism (Hallberg, 2009). While the constructivist strand of grounded theory adopts the inductive, comparative, emergent and open-ended approach to Glaser and Strauss's (1967) original work, it rejects the notion of the researcher being an objective observer. Instead interpreting their role as a co-constructor of meaning (Charmaz, 2014). Additionally, in contrast to the classical grounded theory approach, constructivists, in research, attempt to learn how conditions within the social context influence the social world that is specifically under inquiry (Charmaz & Bryant, 2011). Constructivist grounded theorists view reality and knowledge as being constructed rather than discovered, as suggested by Glaser (Evans, 2013). The constructivist methodology acknowledges that the knowledge and reality of individuals under study are not fixed, but are multiple, occurring in their specific social

contexts and conditions, which may not be of their choosing (Charmaz, 2014). This view is in keeping with the ontological, epistemological and philosophical stance taken in this study. The constructivist approach to the methodology additionally emphasises reflexivity (Silverman, 2017), and takes into account, and accepts, that the researcher's position and perspectives are an essential part of the study's reality (Charmaz, 2014; Timonen, Foley & Conlon, 2018).

Traditionally, grounded theorists have paid little attention to their relationships with participants (Mills, Bonner & Francis, 2006; Charmaz, 2014). However, a change in thinking has emerged, with the ongoing interactions and the relationship between the researcher and participant being significant to deconstructing data and constructing a shared reality (Hallberg, 2009). This co-constructive interactive relationship between the researcher and participant has become a central principle in the constructivist approach and has resulted in some critical attention relating to researcher bias (Breckenridge *et al.*, 2012). Charmaz's (2008) response to criticisms was that although the classical approach aims to be objective, neither does it ignore the researcher's perspectives. The researcher's involvement is also compatible with the theoretical SI perspective, with the researcher and the participants under study being interactively linked in a mutual relationship in order to investigate their behaviour (Aldiabat & Navenec, 2011).

The decision, therefore, to adopt the constructivist approach rather than the classical or more traditional approaches deciphered first by Glaser and Strauss (1967) and later by Strauss and Corbin (1990), was based on the fact that the approach discovers social meaning through investigating social human behaviour. There is also an acknowledgement

that prior knowledge and experiences of being part of an acute MDT team was present. The notion of being free from knowledge and claims found within related literature was therefore not feasible. The theoretical and philosophical approaches, stances and perceptions identified previously in this chapter are also all embraced by the constructivist approach. Finally, the constructivist approach identifies the researcher as having an active role in the interpretation of meaning, which is in keeping with the study's question for understanding the working relationships of stroke care MDT professionals.

The phenomenological approach (exploring lived experiences) (Patton, 2015), the mixed method approach (the combinations of qualitative and quantitative data) (Parahoo, 2014) and the ethnographic approach (gaining understanding of the culture of a particular group) (Moule, Aveyard and Goodman, 2017) were also considered as potential qualitative methodologies. All have some merits in different ways to explore the perspectives and experiences of participants. However, as discussed, constructivist grounded theory methodology was considered the best approach to address the specific research question of this study (Moule, Aveyard & Goodman, 2017).

### ***3.8 Core characteristics of grounded theory***

Due to the variations of the GT methodology (Appendix 1), a common re-occurring criticism is the lack of clarity and evidence surrounding which GT components have been implemented (Parahoo, 2009). Whilst the methods of GT remain the same, the ways in which such methods are used, are shaped by the methodological position taken (Birks & Mills, 2015). Mruck and Mey (2007) note that creating restrictive rules or a standardised consensus for the execution of GT is optimistic, as the heterogeneity of the researchers

involved makes full consensus difficult to achieve. Both Glaser and Strauss talk about guidelines rather than about fixed rules for carrying out qualitative research, indicating that guidelines can be used in flexible and creative ways. However, since the '*Discovery of Grounded Theory*' some, guidelines, although noted as flexible, advocate the implementation of core components for the execution of GT research (Hallberg, 2009).

This chapter will now make explicit as to which GT core components were implemented within the research project on which this thesis is based.

### **3.8.1 Approaches to reviewing the pre-existing literature**

As previously identified in the literature review chapter, the process for reviewing the existing literature within the GT methodology is a continuous contentious issue for debate (Flick, 2018). Glaser and Strauss's (1967) original stance was to review the literature only after the data collection and analysis had been conducted. However, engaging in the literature is now considered a strategy which can stimulate theoretical sensitivity (Strauss & Corbin, 1990; Birks & Mills, 2015).

There is now a growing consensus that early engagement of the literature (particularly for PhD students) enables the identification of research gaps, provides topic justification, ensures originality, aids construction of the conceptual framework and confirms if the proposed research will contribute to the corpus of existing scholarly work (Dunne, 2011; Hussein *et al.*, 2014). Flick (2018) makes further comments in relation to the fact that not only has the field for under-researched topics decreased, but a copious amount of literature

exploring the execution of the methodological approach is available and can be considered as invaluable to researchers who, unlike Glaser and Strauss, are novices.

Thornberg (2012), who advocates an early review of the literature, concludes that in the field, researchers are able to distinguish between the literature's preconceived ideas and their own findings. In addition, Charmaz (2006) does acknowledge the variation in the times when the literature should be reviewed with the GT methodology. She advocates the importance of flexibility and appears to leave the timeline of when to review up to the researcher (Alemu *et al.*, 2015). As such, introduction to literature prior to commencing a study is not problematic.

### **3.8.2 Theoretical sensitivity**

GT is an area of much contention, due to different approaches taking different stances on addressing emergence, theoretical sensitivity and the concept of researcher objectivity (Glaser, 1978; Corbin & Strauss, 2008; Charmaz, 2014). Theoretical sensitivity is a GT component present throughout every stage of the research project and is a process promoted by Glaser (1978). Birks and Mills (2015) define the process of theoretical sensitivity as the ability to recognise and see data in new ways, so that relevant data extracts can be identified to aid emerging theory. Corbin and Strauss (2008) identify the need for GT theorists to be aware and examine their personal and professional assumptions continuously throughout the research process, in order to develop theoretical sensitivity to the data. This is due to the researcher not being neutral in their interpretations, as a result of the concept of meaning deriving through disciplinary emphases and perspectives.

Theoretically sensitising concepts can explicate how meaning is constructed as the starting

point for interpretation and analysis (Birks & Mills, 2015). Strategies to instil theoretical sensitivity have therefore been taken on the basis of this thesis, with reflexivity and memo writing being discussed at a later stage within this and subsequent chapters.

### **3.8.3 Theoretical sampling**

Theoretical sampling is a core GT component (Flick, 2018). The process of theoretical sampling is used as a strategy to guide the direction of data collection by identifying gaps, recognising areas of development and identifying situations in which individuals, who have the knowledge and experience, can be located (Charmaz, 2014). This process to guide the direction of data collection is acknowledged to be an influencing factor in reaching theoretical saturation, as it enables data to be specifically collected that enriches and saturates categories (Bowen, 2008; Aldiabat & Navenec, 2018; Flick, 2018).

For Corbin and Strauss (2015), theoretical sampling allows for data to be explored from different perspectives that are especially important when researching new and undeveloped areas. Among the GT scholars there are differing opinions on when theoretical sampling should begin. For Strauss and Corbin, theoretical sampling begins after the first set of data is analysed and continues throughout the research process (Corbin & Strauss, 2015).

Charmaz (2014), however, proposes that theoretical sampling should only begin when preliminary categories have started to be developed, thus reiterating the notion that theoretical sampling does not occur on the way to the data, but instead, in the way from the data to the theory (Flick, 2018). A full exploration of the theoretical sampling process can be found within the next chapter.

### 3.8.4 Constant comparative analysis

Grounded theorists engage in theoretical sampling, data collection and analysis simultaneously in an interactive process that uses comparative methods linearly or circularly (Kools *et al.*, 1996). The constant comparative analysis method within grounded theory is a central feature (Glaser & Strauss, 1967), with its systematic approach to analysis. The unique constant comparative process is a notable advantage of the methodology (Hussein *et al.*, 2014). In that the approach allows the researcher not just to explain how a participant creates the meaning of their reality, but enables an interpretive understanding (Hallberg, 2009). This interpretive approach to analysing data is, according to Flick (2018), the anchoring point in GT, where the decisions about data collection direction are made. The interpretative stance additionally embraces the symbolic interactionism and the social constructivist stance that views social life as processual with multiple realities (Charmaz, 2006).

Whilst all grounded theory approaches use constant comparison at each level of analytic work, it is the way in which data is coded that varies (Charmaz, 2016). It is in coding where Glaser, Strauss and Corbin, and Charmaz hold different views of how the analysis should be carried out. Glaser, when describing analysis, stays true to the original concepts within classical GT and identifies two types of coding: substantive and theoretical. Other scholars, however, refer to substantive coding as having sub categories of open and selective coding (Evans, 2013). Strauss and Corbin's approach added to the coding process by identifying three stages of coding: open, axial and selective coding (Cooney, 2010; Evans, 2013).

Opinions towards the Straussian process of coding vary, with some suggesting it offers a useful structure for novice researchers (Coonery, 2010). Others, however, have concluded that the approach to coding is too difficult or rigid (Evans, 2013). Additionally, like Strauss and Corbin, Charmaz identifies three stages of analysis: initial coding, focussed coding and theoretical coding (Birks & Mills, 2015). Corbin and Strauss (2008) state that analytical procedures should not be fixated on, and as an alternative, researchers should stay within the general guidelines of analysis, be flexible with the techniques and trust their instincts. Charmaz (2008) praises the lack of rigid rules within the constant comparative analysis process, which enable themes and concepts to emerge naturally, without preconceptions. Although flexibility is a celebrated process, Charmaz (2006) still acknowledges that, although analysis is not rigid, having systematic guidelines for GT analysis and key principles to follow enables novice researchers to get started, stay immersed and ultimately finish the project.

Even though the different versions of GT take different constant comparative approaches to analysis, what remains the same is the continuous and simultaneous interplay between collecting and analysing data (Glaser & Strauss, 1967; Corbin & Strauss, 2008; Charmaz, 2016). It is this simultaneous process of data collection along with the streamlined logic of the constant comparative approach that enables theory to emerge, providing a rigour (Charmaz, 2006).

A full account of the analysis process, including how data was coded, is discussed and made transparent within the next chapter.

### 3.8.5 Reflexivity

The term reflexivity, at its most basic, relates to the researcher having a conscious awareness of their individual influence on the process and outcome of their study (Robson, 2002; King, Horrocks & Brooks, 2019), thus heightening theoretical sensitivity.

Reflexivity involves turning the analytic lens towards the researcher, not only acknowledging but appraising how previous work and experiences (this can also include previous reading) can affect data collection and analysis (McGhee, Marland & Atkinson, 2007). Finlay (2002) notes that reflexivity as a tool offers the ability to be explicit and open about subjective and intersubjective influences, thus increasing the integrity of the study. Reflexivity within the paradigm of social constructivism is employed to explain, understand and gain meaning of the social world under study (Finlay, 2002), as well as seeking to deal with potential biases from the researcher (Bryant, 2003). This stance also fits with other grounded theorists who claim that to achieve an understanding of an individual's social world, questions need to be directed towards the often unassuming interactions, and interpretation, of not only the individual but also of the researcher (Dey, 2004).

Reflexivity has been criticised as a process that risks the researcher concentrating too much on their own experiences, which can result in participant voices or opinions not being heard or credited (Finlay, 2002). Additionally, categories and core categories within GT are to be inductively derived and not forced from preconceived ideas. This concept of forcing data instead of allowing it to emerge has raised questions concerning the need for reflexivity (McGhee, Marland & Atkinson, 2007). Evans (2013), however, notes that having knowledge of and professional experience in the research topic does not necessarily lead to ideas being preconceived or forced. It is important to acknowledge the position and

relationships adopted by the researcher in their research. Whilst Strauss and Corbin advocate that a research journal should be kept, Glaser views reflexivity as unnecessary and warns of reflexivity paralysis (Neill, 2006; Birks & Mills, 2015).

As previously discussed, within constructivist grounded theory the researcher plays a dynamic role in co-creating the theory of the social phenomenon under study. Therefore, a balance of self-awareness and distance is required (Charmaz, 2014). As a symbolic interactionist, Strauss (1987) states that the biographies of researchers influence grounded theory methods and for this reason there is a need to keep an account of them throughout the research journey. Memo writing within the methodology is a means by which awareness of one's own initial reactions, potential notions and preconceived ideas, which can all influence data, can be identified and kept track of (McGhee, Marland & Atkinson, 2007). Birks and Mills (2015) additionally note that, during analysis, taking a reflective approach is beneficial as it can help avoid subconsciously applying theoretical codes. Reflexivity within this study was used throughout the research process to acknowledge starting points, to keep a record of the journey of ideas and to form concepts. It was also used as a method to keep an open mind. Examples of reflective accounts are presented in Chapter Four of the thesis. The chapter also makes the researcher's role explicit due to the prior knowledge and experience of working in a stroke care MDT setting.

### ***3.9 Chapter conclusion***

This chapter first outlined the research question and aim. This was followed by an exploration into the theoretical and conceptual frameworks which underpinned the understanding of the research and provided justification and direction into the research

design. The chapter then provided insight into the grounded theory methodology, with a strong argument being presented as to why the constructivist variant was adopted. Finally, the chapter ended with a breakdown of the core methodological characteristics. The next chapter will explore and discuss the research process undertaken.

## **Chapter 4: The research process**



#### ***4.1 Introduction***

The previous chapter outlined the philosophical stance and rationale for the use of the constructivist grounded theory as the methodological approach for interprofessional relationship enquiry. This chapter explains the research process undertaken. It includes a full exploration of the data collection and methods of analysis used, which provides transparency in the form of an audit trail, enhancing trustworthiness of the study. In addition, the considerations taken into account when designing the study will be discussed, with particular attention paid to the process involved in deciding on the field location and sample population. Finally, this chapter will disclose the ethical considerations, as well as how reflexivity was undertaken. Extracts from the research journal will be included in the chapter to demonstrate reflexivity and to illustrate some of the reflective issues and the actions taken.

Figure 3 provides an overview of the research process that this thesis is based on. It is this research process that the chapter will discuss.

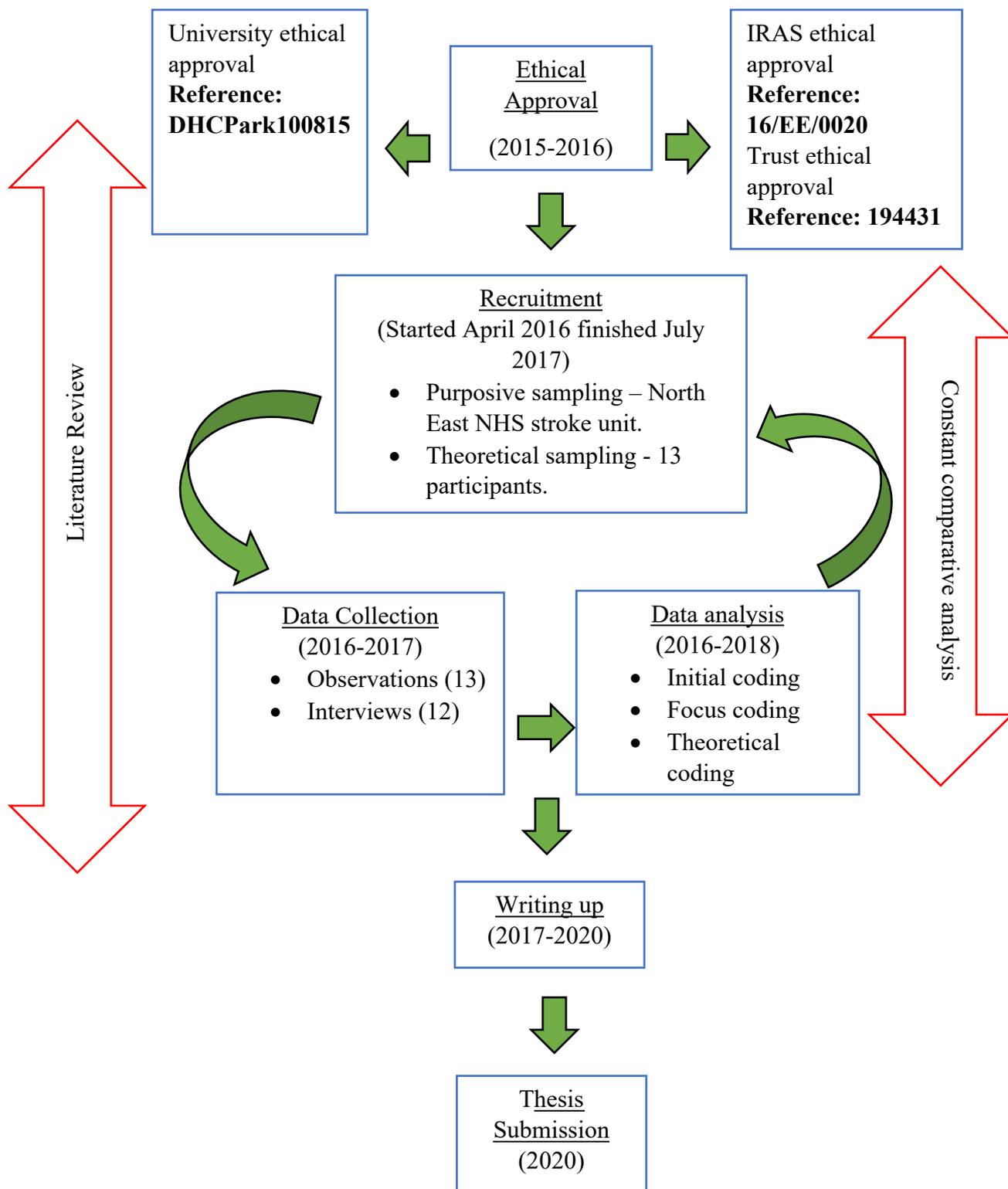


Figure 3: The research process

## ***4.2 Recruitment and theoretical sampling***

### **4.2.1 Defining the sample population**

In the initial stages of theoretical sampling, a purposive approach (Charmaz, 2014) was adopted to identify an appropriate hospital to approach for recruitment. The purposive strategy by design deliberately sets out to select individuals, groups or settings, that have a rich understanding, experience and knowledge base of the phenomenon under investigation (Bloomberg & Volpe, 2012). However, when using the strategy, there is a risk of the sample being chosen out of convenience so, therefore, reflecting back to the research question is key, as this provides guidance in sample choice (Parahoo, 2014). In order to address the study's research question, the stroke team purposively selected needed to be interprofessional. An acute stroke unit located in the north east of England was selected through purposive sampling as its large team comprised a range of core and peripheral team members from a range of professional groups.

As outlined in the introductory and literature review chapters, interprofessional working (IPW) in healthcare is defined as an interactive process, where two or more healthcare professionals from different disciplines interact together to complete work tasks and to achieve shared goals (WHO, 2010; Keeping, 2014; Morgan, Pullon, & McKinlay, 2015). Although the interprofessional team recruited for this PhD study was a stroke care MDT, interprofessional working was confirmed to occur in the purposively selected stroke care MDT. This was achieved through discussions with the gatekeeper and through the orientation phase of recruitment (Figure 4).

The sample population potentially included over 100 professionals who worked within the acute stroke unit and contributed directly or indirectly to the team, and in delivering patient care. Wood and Kerr (2011) state that the total population is ‘anyone in the world’ or ‘anyone belonging to the chosen research setting’, matching the initial criteria for the phenomenon under study. Reflecting on the study’s purpose resulted in inclusion and exclusion criteria being formulated to delineate the population and identify the target population (Wood & Kerr, 2011). The inclusion criteria stipulated that participants must be employees of the NHS, work within the stroke unit and/or work as part of the trust’s stroke team. Exclusion criteria excluded patients, families and professionals or staff members who were not employed by the NHS and who were not members of the stroke team.

#### **4.2.2 Recruitment process**

Ethical approval was granted by Northumbria University’s Ethics Committee Board (Appendix 2), IRAS (Appendix 3) and then finally by the research and development department at the selected North East Trust (Appendix 4). The stroke research nurse who acted as a gatekeeper was then approached. Identifying gatekeepers to facilitate accessing participants for recruitment is critical, as recruiting enough participants to gather sufficient data to answer the proposed research question is vital (Glasper & Rees, 2017). A recruitment strategy was then formulated to assist with recruiting participants from the stroke unit. Figure 4 provides an overview of the study’s recruitment strategy and sample process.

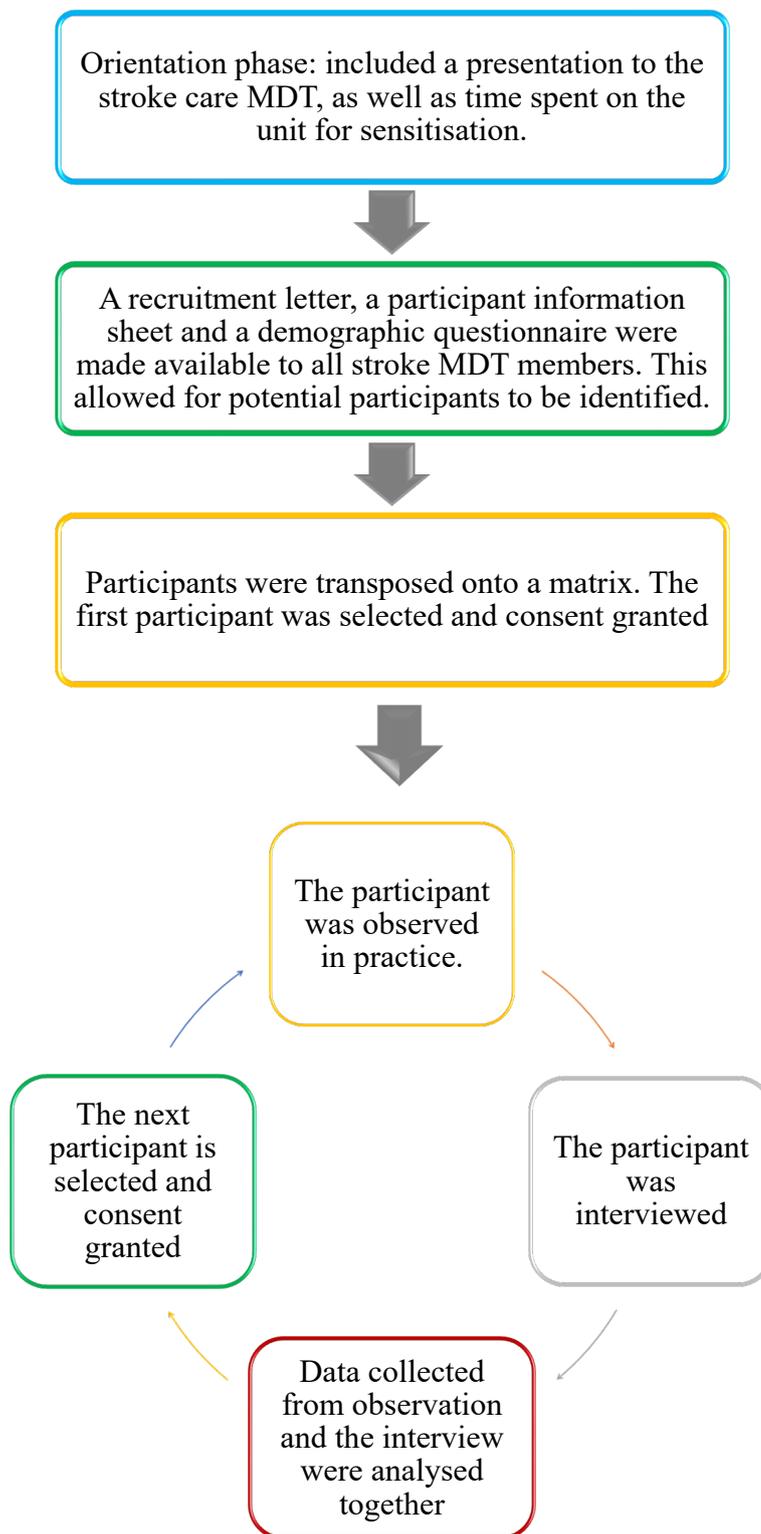


Figure 4: Recruitment strategy and sample process

The recruitment presentation and information packs allowed the research information to be presented in both a written and verbal context. Due to confidentiality constraints, email addresses of the MDT team were not directly accessible. For staff who met the inclusion criteria, an email was forwarded by the gatekeeper, which introduced the research project and invited potential participants to the recruitment presentation (Appendix 5). The recruitment presentation was delivered at the weekly MDT meeting. This allowed for a maximum amount of potential participants to be present, so that they could meet the researcher and hear first hand about the project. In total, 25 interprofessional stroke team members attended the recruitment presentation. The recruitment presentation provided attendees with a general overview of the research project with particular emphasis being placed on explaining their role if they were to participate. The research outcome of generating new knowledge in the field of interprofessional stroke care practice was additionally made explicit. Further details of the project were made available to potential participants via the research packs. The research packs contained an invite letter (Appendix 6), a participant information sheet (Appendix 7) and a demographic questionnaire (Appendix 8), all of which were disseminated at the end of the presentation.

For potential participants who could not attend the presentation, spare research packs were left with the gatekeeper, and an email was sent, informing all MDT staff where the research information could be located. To establish the characteristics of the potential sampling population and to enable theoretical sampling (Strauss & Corbin, 2008), all potential participants were asked to complete a demographic questionnaire (Appendix 8). The demographic questionnaire additionally provided participants with a way of indicating their willingness to participate. Concerns surrounding the intentions of a research project and towards confidentiality are common among participants (Silverman, 2017). It was

therefore decided that the contact details of the research team would appear on all participant documentation, allowing participants to contact the research team directly. After one week, demographic questionnaires were collected and any questions were answered. Information collected from the demographic questionnaire was populated into a sampling reference matrix (Figure 5) and utilised to assist with theoretical sampling. In order to maintain confidentiality of the research participants only an extract of the participant matrix is provided. Examples of how the demographic questionnaire assisted theoretical sampling is provided later on in this chapter.

Participant	Gender	Profession	Highest academic qualification	Number of years in the department	Attends meetings i.e. handovers, ward rounds, joint assessments	Band
P121	F	SALT	BSc Hons	1 year	Yes – joint assessments	5
P122	M	Consultant	MRCP	6 years	Yes – ward meetings	n/a
P129	F	Doctor	MBBS	9 months	Yes – meetings and handovers	F1
P123	F	OT	BSc Hons	2 years	Yes – joint assessments and ward meetings	5
P134	Female	Nurse	BSc Hons	5 years	Yes	5

Figure 5: Participant matrix extract

### 4.2.3 Choosing the first participant

**25<sup>th</sup> April 2016: Excerpt from research journal/memo jotter.**

*The joy of having consented participants quickly diminished when I realised I had no idea who I should select first.*

The problem with deciding on which participant to select first, was resolved by returning to the literature. According to Charmaz (2014), initial sampling within the grounded theory methodology assists with getting started, with theoretical sampling later providing guidance on who to select next for participation. Additionally, initial sampling allows the data collection process to start with a conscious selection of a participant who can readily articulate, in detail, their lived experiences of the topic under investigation (Burns & Grove, 2001). Cutcliffe (2000) describes the first participant from whom data is collected as a 'gatekeeper', who can provide insight and direction into who to select next. The first participant was selected because they were the first to engage with dates to be observed, and showed a keen interest in taking part in the research study. This level of engagement was an indication that they would potentially be able to talk at length about their work and their interactions with other professionals. An important starting point in terms of gathering some initial data to code.

### 4.2.4 Theoretical sampling direction

As discussed, theoretical sampling provides direction for elaboration and consolidation of the developing theory (Flick, 2014, 2018). The focus is not on the individuals per se, but their potential relevance to emerging categories or developing theories (Flick, 2014, 2018).

Thus, participants were selected on the basis of their potential contribution to the emerging theory, as data collection progressed and recurring codes and concepts started to emerge.

Providing the rationale for choice of participants and sequence of their recruitment adds rigour to a study's report (Chiovitti & Piran, 2003; Currie, 2009) (Appendix 9). However it is often neglected in published GT studies (Parahoo, 2009). Table 2 gives an overview of when and why participants were selected as concepts started to emerge from the data.

Tables 2 continues onto page 140.

Table 2: Theoretical sampling rationale

<u>Participant ID</u>	<u>Characteristics</u>	<u>Interview</u>	<u>Observations</u>
P121 (initial sampling)	Therapist (SALT) – peripheral member, one year experience working on the unit, works in other departments/wards.	✓	✓
P122 (initial sampling)	Consultant, six years' experience in the unit, sixteen years' experience in total, core team member, office located off the ward, attends all board rounds.	✓	✓
P130	Doctor (F1) temporary core team member, rotates for training, four months' experience on the unit, attends all board rounds.	✓	✓
P124	Nurse, core team member, three years' experience on the unit. Had transitioned from a student to qualified nurse	✓	✓
P129	Doctor (F1) temporary core team member who rotates for training. One month's experience in the unit, attends all board rounds.	✓	✓
P127	HCA, core team member, five years' experience working on the unit. Does not attend case conferences.	✓	✓
P132	Domestic, peripheral team member.		✓

<b>(Part withdrew)</b>			
P123	Therapist (OT) – core team member, two years’ experience on the unit, did work in other departments if required. Office located off the ward. Rotated to attend board rounds/meetings.	✓	✓
P125	Therapist (Physio), core team member Rotated, three months’ experience on the unit, four years’ experience in total.	✓	✓
P131	HCA, core team member, less than a year’s experience on the unit, Does not attend case conferences.	✓	✓
P126	Nurse, core team member, four + years’ experience on the unit, had previous experience working on other wards.	✓	✓
P133	Nurse (Research), five years’ experience on the ward. Progressed through posts while working on the unit, attends all case conference meetings.	✓	✓
P134	Nurse core team member, had transitioned from a student to qualified nurse, and had previously experienced an opportunity to progress.	✓	✓
P135 <b>(Withdrew)</b>			

Belonging, feeling part of the team and time spent on the unit are examples of recurrent codes that emerged early on from data collection. An example of how these influenced theoretical sampling was the decision to select participant P129, who’s professional role meant that they frequently rotated between hospital departments, resulting in their time within the MDT being restricted. In addition information from the demographic questionnaire provided information that P129 had only spent a number of months working on the unit. Their experiences of belonging and time on the ward could then be compared

to the experiences of other participants who consistently work on the ward and who have been part of the MDT for a longer period of time.

#### **4.2.5 Sample size**

Determining an ideal sample size within qualitative research is challenging. Patton (2015) suggests that there are no rules for sample size in qualitative research. However, there are approximations, varying between six and fifty participants, depending on methodology choice (Sandelowski, 1995). Guest, Bunce and Johnson (2006) indicated in their research that saturation can be reached in 12 interviews. Other authors within grounded theory suggest 20-30 participants to be the ideal sample size in order to develop a well-saturated theory (Sandelowski, 1995; Creswell, 2013). Currie (2009), however, states that sample size and nature when using theoretical sampling within the grounded theory methodology can only be determined retrospectively. As sampling and data collection continues until theoretical saturation is reached (no new data emerges from ongoing data analysis), sample size cannot be defined in advance (Glaser & Strauss 1967; Flick, 2007, 2018). Currie (2009) and O'Leary (2014) additionally agree that the sample size within theoretical sampling is dependent on the data, the goals of analysis and theoretical completeness. Having this flexibility within the sample size allowed for the sample of participants to be based on emerging concepts in need of further enquiry (Corbin & Strauss, 2015). It is suggested that the point at which one knows when enough data has been collected from a sufficient sample population, is when the major data categories show a depth of understanding about the phenomenon in question (Corbin & Strauss, 2008). Determining saturation within this thesis is discussed later in this chapter.

It was anticipated that in order to obtain an in-depth understanding of the meanings of interprofessional relationships within a stroke care setting, a desired target sample size would be up to 20 participants, with representation from the multiple professional groups. However, due to the methodology of grounded theory, the final size and composition of the sample for this study was ultimately reliant on when saturation was achieved (Patton, 2015). In total, 14 stroke care professionals were recruited. Thirteen of these participants were observed in practice, and out of the 13, 12 were individually interviewed, resulting in 25 data collection episodes. One participant withdrew from the study before participating in data collection.

#### ***4.3 Data collection methods***

To explore the different perspectives of work relationships and to extract knowledge to aid understanding of the human social process involved in interprofessional relationship understanding, two data collection methods were used: individual interviews and observations. Glaser (1992) and Benoliel (1996) both advocate using more than one method for data collection, as failure to do so, they suggest, runs the risk that focus will be on lived experiences and not the social processes. The use of multiple methods or combining methods for data collection is known as method triangulation and is a way to promote quality and enhance quality within qualitative research (Flick, 2007; King, Horrocks & Brooks, 2019). Fielding and Fielding (1986) note that when selecting methods for data collection, they should start from different perspectives, with one taking the stance to explore the potential structural aspects of the phenomenon under study (for this study the method of observations was utilised), while the other attempts to capture the elements of meaning (for this study interviews were implemented).

This approach to collecting data via observations and then interviews is in keeping with the shared symbolic interactionism and grounded theory assumptions, in that meanings of reality can only be defined and captured through the interactions between the participants (observations) and between the participants and the researcher (interviews) in the context of which the phenomenon exists (Aldiabat & Navenec, 2011).

#### **4.3.1 Non-participant observations**

The method of non-participant observations was utilised as the initial approach to collecting data on IPW relationships within the stroke care MDT. Observations, or ‘fieldwork’ as it is referred to by Bechhofer and Paterson (2000), is a useful design tool when investigating social worlds of practice-based professions (Parahoo, 2015). Morgan, Pullon and Mckinlay’s (2015) interprofessional research provides further support for the data collection method, with the notion that observing everyday collaborative practice leads to the discovery of IPW factors that are not initially obvious to individuals upon self-reporting. Non-participant observations as a data collection method, therefore, offers a lens to better understand and articulate the complex phenomena of interprofessional stroke care relationships, as it examines what participants do and then compares it to what participants say, or think they do.

Non-participant observations allow data to be collected on interactions or behaviours that go unnoticed (Laitinen, Kaunonen & Åstedt-Kurki, 2014). The observation of body gestures is an example of the behaviours that can go unnoticed but are considered to be integral to understanding and interpreting human relationships, since our bodies, when interacting, display signals and symbols, which help make sense of social relationships

(Heaphy, 2007). Observing stroke care professionals in practice provided the opportunity to enter the symbolic world of participants, where data is gathered on behaviours of who interacts with whom, when, how and how often. Meanings were derived from observations and formulated by watching, listening, interpreting and asking the occasional question (Bechhofer & Paterson, 2000; Timonen, Foley & Conlon, 2018).

Initial observations within this study adopted Angrosion and dePerez's (2000) descriptive observational process. This is when everything and anything is observed and documented with the assumption that nothing about the social world under study is yet known.

Although this led to a significant amount of data being collected, nothing was eliminated or regarded as irrelevant. This process heightened my theoretical sensitivity as it helped to reduce any preconceived ideas, I may have had (Birks & Mills, 2015). All verbal and non-verbal behaviours observed were documented to help this process.

As data collection progressed, more focused observations, were undertaken. This is when data from interviews guide the decisions taken about what to observe next (Angrosion & dePerez, 2000). An example of how interviews guided decisions on what to observe included observing the weekly MDT meeting after it was referenced multiple times in interviews, as a dominant occasion for core and peripheral stroke professionals to come together and interact. For this study, focused observations assisted with identifying other specific activities to observe, as well as with theoretical sampling. For example from observing the weekly MDT, the absence of stroke care professionals who were regarded as valuable core members was noted. This lead theoretical sampling to select a participant who did not attend or did not regularly attend MDT meetings.

Figure 6 illustrates examples of the activities that participants were observed doing during data collection. The activities in figure 6 were initially selected through personal knowledge gained from past experiences working on a stroke MDT unit, as well as from knowledge gained through the gatekeeper on the ward routine and the daily activities where interprofessional collaboration was high. Observations, lasting between one and four hours, were carried out at various times throughout the working day. Observations were useful in that the professionals working on the stroke unit had the opportunity to get to know the researcher and, in some cases, helped with recruitment, as staff members were able to observe and see first-hand what would be involved if they decided to participate. All data was documented in the style of anonymised fieldnotes and then transcribed at the earliest opportunity (Spradley, 1980). Structured and unstructured fieldnotes were initially taken. However, after the first two participants, the amount and pace of data being collected made collecting data through a structured fieldnote approach impractical (Appendix 10).

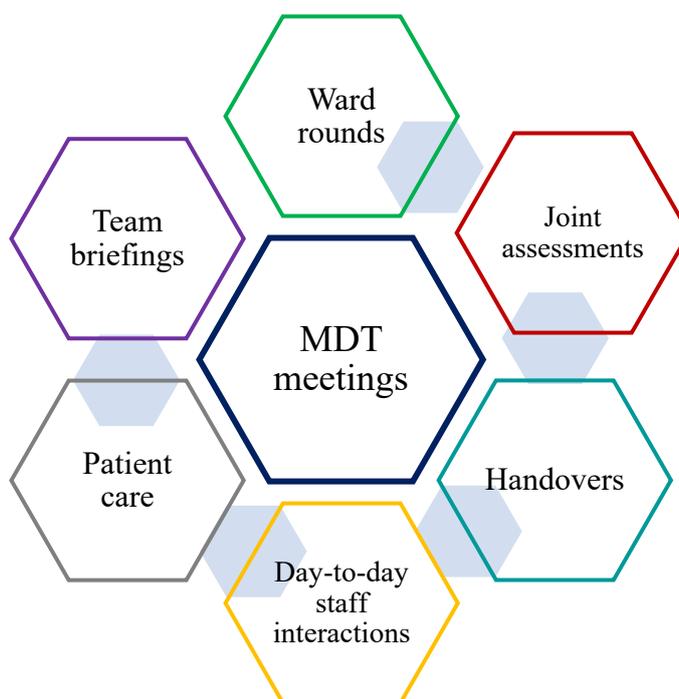


Figure 6: Examples of IPW activities observed during data collection.

Discovering who interacts with whom is important; however, to achieve the study's aim fully, how interprofessional relationships are perceived from day-to-day collaborative interactions needed to be discovered. Therefore, to clarify and complement the observational data, interviews were utilised as another method to collect data.

#### **4.3.2 Interviews**

Interviews are one of the most useful methods of data collection within qualitative research as they play an important role where a research question aims to further understand or gain meaning of participant experiences, thoughts, insights and actions (Parahoo, 2014). Thus they are the most commonly used data collection method in the GT methodology (Timonen, Foley & Conlon, 2018). According to Patton (2015) interviews are key to understanding the lives people live from their perspective. For this study, individual semi-structured interviews (Parahoo, 2014), were used to identify participants' perceptions, as well as to clarify observational data. In this study an example of how interviews were used to clarify observational data was from observing the exchanges of chocolate. These interactions were observed to be carried out in a way that they intended to go unnoticed, with participants slipping chocolates and sweets into the pockets of others or observed being handed the chocolates without any response being given back in return. The interviews were therefore used to probe the meaning of what had been observed. Creswell (2013) suggests that meanings are typically forged in discussions with other people; in this case the interviews.

There are a number of interview formats, each of which are suited to different research situations (Punch, 2014). Generally, however, interviews follow a structured, unstructured

or semi-structured format (Speziale & Carpenter, 2007). The style of interview undertaken within a study is determined by the degree of structure adopted or required. The more structure an interview has, the more control the researcher has over the content and the responses (Parahoo, 2014). Unstructured interviews allow participants to talk freely about a topic, as no questions are pre-planned (Gray, 2018). Although this approach allows for a greater breadth of data (Fontana & Fray, 2000), it is time-consuming and the interviewing technique requires the researcher to be highly skilled, as they are required to remain focused at all times, as the respondents lead the interviews (Polit, Beck & Hungler, 2001; Corbin & Strauss, 2008). Due to the busy nature of the stroke environment, professionals were restricted in terms of time and therefore, interviews generally could not last longer than the time stated in the recruitment documentation (Appendix 7). In contrast to the unstructured approach, the structured interview approach asks all participants the same fixed predetermined questions, putting limitations on responses (Fontana & Fray, 2000; Speziale & Carpenter, 2007). As this study's philosophical stance lies within social constructivism, using fixed, predetermined questions would not capture data needed to address and answer the research question. It was these criticisms, along with the flexibility in the structure of how and when questions are asked in an interview, which resulted in the semi-structured format being selected.

To assist with the semi-structured interviews, an interview guide was created (Appendix 11) to maintain focus on matters relevant to the research question (Parahoo, 2014). The flexibility of the semi-structured approach allows the guide to be sufficiently broad, thereby enabling participants to raise their own issues that may or may not have been anticipated (Creswell, 2013; Patton, 2015). Scott (2011) states that Glaser's guidance on asking broad questions at the start of the interviews can assist in creating an environment

where participants feel comfortable to talk freely about their experiences. Aiding participants to be open and honest about their experiences is a key component to successful interviewing, which can additionally be gained through building a trusting rapport (King, Horrocks & Brooks, 2019).

Strauss and Corbin (2015) however, argue that the semi-structured format can make it more difficult to be certain that specific issues relevant to the participants are covered by the questions. To try to overcome this limitation, the questions within the original interview guide were developed from information gained from the literature surrounding work relationships in a general and in an interprofessional context. The original interview guide consisted of eight flexible, open-ended questions (Appendix 11) that would initiate discussion and the emergence of rich data surrounding interprofessional relationships within a stroke care MDT. In line with constant comparative analysis, the interview guide was continually revised, based on information gained from the observations as well as the themes generated during previous interviews. An example of this was through the re-occurring code of conflict. Although no episodes of conflict were observed during data collection. During interviews conflict between professionals was discussed by participants, as a result the interview questions were reviewed to include questions surrounding conflict.

To reduce participant apprehension of the interview, the first question posed to every participant was a request to explain what it is like to work on the stroke ward. At the end of every interview, all participants were asked if they would like to discuss or add anything else. According to Kvale (2007), good questions in qualitative interviews should be open-ended, neutral, sensitive and clear to the interviewee so that a natural data-rich

conversation can be achieved. Interviews lasted between 20 and 45 minutes, which was predominantly dependent on the time constraints of the participant being interviewed. Distractions did occur during the interviews. On a number of occasions, the digital recorder was paused due to phone calls, staff interruptions, bleeps and alarms going off. The extract below from the reflective journal provides insight into an interruption that occurred during the 5th interview.

**June 2016: Extract from research journal/memo jotter. Feelings and thoughts from first interview.**

*The emergency buzzer has gone off and my participant went running out the room. They had been gone 10 minutes and by that time I had forgotten what we were talking about.*

*Before they came back I rewound and listened to the last minute of the recording.*

*This has made me think of other potential distractions that may occur and affect the interview. Thus, I need to consider and be prepared for:*

- *Phones*
- *Alarms*
- *Bleeps*
- *Other people*

Although the sound of the emergency alarm is not uncommon in a stroke care MDT environment, during the interview it was unexpected and something I had not thought of or prepared for. This experience made me think about other potential interruptions that might occur, when planning interviews in the stroke clinical setting.

At the start of each interview, participants were reminded that they could decline to answer any of the questions. After each interview, a verbal debrief was given, which covered the purpose of the research and how participants can access the research findings once published. Ensuring an adequate debrief process was necessary for this study, as questions

regarding work relationships may have evoked difficult feelings. Engaging in research interviews or questionnaires can lead to after effects, therefore, leaving time for an adequate debrief is required (Danchev & Ross, 2014). Additionally, Farrimond (2013) states that the debrief process allows participants to have closure, as it enables them to leave the research process fully informed.

All interviews were conducted on the hospital grounds, in a range of locations that were private, quiet and convenient for participants. A digital recorder was used to audio record all interviews. Although Glaser argued that taking notes alone during interviews allows grounded theorists to record essential data without getting overwhelmed in the detail, other researchers have found this to be untrue, with details including tone, tempo, interview flow and silences often being missed (Charmaz, 2014). This study used a digital recorder to record the interviews alongside the use of memos to record any additional data. All recordings were transferred to a password-protected university computer and then transcribed, verbatim, shortly thereafter. An extract of an interview transcript can be found in the appendices (appendix 12). By doing the observations first, a rapport with participants was initiated, enabling them to open up and divulge experiences in the interviews. At times participants divulged insightful data once the digital recorder was turned off (see extract from research journal).

**December 2016: Extract from research journal/memo jotter. Feelings and thoughts after an interview**

*After turning off the digital recorder, the participant opened up and mentioned that there had been conflict within the team and that from what they experienced was within their own professional group. Little annoyed I do not have it on tape.*

'Off the record' according to King, Horrocks & Brooks (2019) is the process in which participants' provide crucial information that has direct relevance to the research topic under study, once data collection has ended i.e. after the digital recorder is turned off. Whilst collecting off the record data is common there is debate as to whether the data can be used, with the information being argued to be of personal disclosure (King, Horrocks & Brooks, 2019). King, Horrocks & Brooks, (2019) suggest that the use of off the record data should be a process that is guided by the participant. Whilst I did not turn the digital recorder back on, the participant was asked if I could make written notes on what had been said. This enabled the data to be captured and used within the findings. Gray (2018), however, states that if conversations are going to be recorded from recall, then it is important to distinguish between these recalled conversations and the quotations that are from the verbatim transcripts. All quotes found in the findings chapter will be identifiable, with 'int' indicating interview quotes and 'obs' indicating observational quotes.

#### ***4.4 Memo writing and the research journal***

As previously discussed memo writing plays an integral role in encouraging coding, initiating data analysis and aiding theoretical construction (Birks & Mills, 2015; Flick, 2014; Charmaz, 2014; Timonen, Foley & Conlon, 2018). From the start of the study until its completion, memo writing and the research journal coincided with one another. This meant all thoughts, ideas, feelings, reflections and dilemmas were summarised and documented in one place. This resulted in data recorded in memos and in the journal to prompt each other by identifying research gaps, explicating data content and by directing the data collection and analysis process (Silverman, 2017). Figure 7 gives an example of a

memo that summarised initial thoughts surrounding the interprofessional interactions and their connection to IPW relationship perception.

**July 2016:**

Stroke team members teaching each other new skills or passing on new knowledge is a regular interaction that occurs amongst all team members throughout the entirety of the working day. Professionals at times go out of their way to teach each other new things. Further exploration is required.

My initial impression is that these interactions are more than just a process of social exchange or episodes of IPE/IPL or carried out only to improve patient safety. Developing a greater understanding for why these interactions occur and what motivates the professionals towards these interactions may give a further analytical understanding that relates to their relationships meanings.

Two participants have already mentioned the large number of MDT staff leaving the team to go on to promotion or areas seen as a step up from the unit – is this linked? – are relationships based on gaining new knowledge and therefore seen as a way to move forward?

Things to consider

- Do these interactions of learning from one another frame expectations of the relationships?
- Is it an automatic thing??
- Look into IPE/IPL literature
- Is this exclusive to interactions of learning/knowledge?
- Theoretical sampling (who is next?)

Figure 7: Example of a memo

Other benefits of memo writing and the research journal for this study included the elaboration on existing categories, the examination of insufficient code and the avoidance of preconceived ideas and researcher bias (Charmaz, 2014). My professional experiences working in a stroke MDT as a registered nurse increased the risk of bias. However, as discussed in the previous chapters, researcher experiences and assumptions are expected to occur within GT, with the methodology recognising that the researcher is not neutral (Birks

& Mills, 2015). In addition, the methodology literature advocates that GT theorists need to have a constant awareness of their personal and professional experiences (Birks & Mills, 2015; Flick, 2018). The GT methodological tools (i.e. memo, journal writing and reflectivity) adopted while undertaking the study helped manage the risks of researcher bias as it enabled theoretical sensitivity to develop.

#### ***4.5 Constant comparative analysis***

As discussed in Chapter Three, the constant comparative analysis method was utilised to collect and analyse all the data. The constant comparison method started as soon as data collection began and only finished after no new data emerged, when categories became saturated and when a theory was formulated (Strauss & Corbin, 2015). Figure 8 illustrates the grounded theory analysis process for this study.

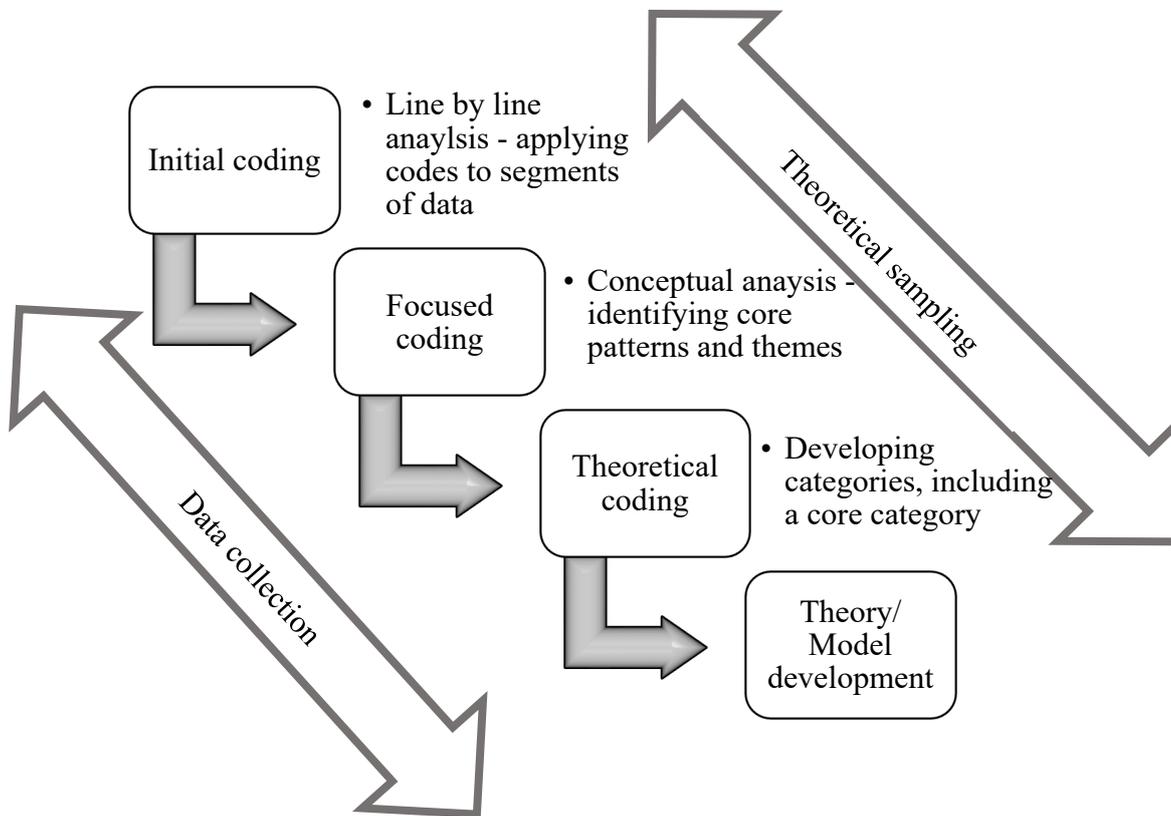


Figure 8: The grounded theory analysis process adopted for this study.

#### 4.5.1 Initial coding

The first stage of the coding process was line-by-line manual coding. Transcripts were annotated with each line or segment of data being read and then re-read before being given an appropriate code. Initial coding in the first instance was used to break up participant narratives, with the aim of identifying underlining meaning. It facilitated a deeper reading of how interactions unfolded between the participants in the study (Birks & Mills, 2015). Initial codes were predominately of a descriptive nature, so that a participant's actions could be captured in concise terms. Incidents of codes were then compared, with patterns and trends beginning to emerge, leading to the development of conceptual ideas (Flick, 2018). An example of a code given to an extract of data in this study would be episodes of interaction where professionals helped each other to complete tasks. This action was given

the code ‘supporting others with work tasks’. Figure 9 shows an example of an interview transcript with initial line-by-line coding. A table was constructed to aid organisation due to the large amount of data sets (Figure 9). Observational fieldnotes were also coded line-by-line using colours. A mind-map computer software package was then used to visually layout the code ideas and to identify which codes linked together. An extract from the mind-map can be found in the appendices (Appendix 13).

<u>Initial codes</u>	<u>P122 interview</u>
<p>Length of time and feelings towards the unit            Discussing personal lives            Personal communications</p>	<p>Yes, definitely the more time I spend with people the more comfortable I become around them. So now, I feel I could have more of a friendly chat about our lives when walking up the corridor or at the nurse’s station.</p>
<p>Negative experiences on other wards            Feelings of belonging            Personal communication</p>	<p>Where on the other wards I wouldn’t talk to staff about that on other wards you stand at the side in silence and document on other wards I feel like an outsider, where here you can chat and see how each other are.</p>
<p>Interacting outside of the work environment            Positive atmosphere</p>	<p>With the other speech therapists, they are all very friendly we do things and see each other outside of work we go out and meet up.</p>
<p>Meeting up on a personal level            Professional socialisation</p>	<p>Yes...but it tends to just be the speech therapists we meet up quite regularly, which is nice. I don’t know why it’s not like I go up my way not to meet other stroke staff. I guess it is just easier, we do the same job we just already have that shared interest we are similar.</p>
<p>Knowing staff            Being part of the team            Team Consistency</p>	<p>No the staff on the ward are generally the same everyday even though OT and physio rotate I still feel like I know them and even though there are four physios’ and a number of different nurses I still feel like I know everyone.</p>

Belonging Time interacting Knowing staff	But when I go on other wards I feel like I don't have that same relationship because I don't know anybody because I only go once a month. So I think seeing the same people every day does make a difference.
Role specification Respect trust	You know even if you're not chatting to them you're still seeing them... you are aware of each other you can see what they are doing what they are up to.

Figure 9: Example of initial coding

Some of the data, which included both new data and data that had already been hand-coded, was put through the computer software analysis program, named 'Nvivo'. The software programme assisted with the organisation of data and helped with the coding process. This is a widely accepted tool for analysis among grounded theorists (Birks & Mills, 2015). The main benefit that arose for this study, by coding some pieces of data twice, once manually and then through 'Nvivo', was that it allowed for the transcripts to be checked, in that they were looked over multiple times from a fresh perspective. This fresh perspective allowed for a second layer of analysis, allowing transcripts to be revisited to ensure analysis was indicative of the data. Member checking i.e. the method of returning interviews and observational data to a participant (Birt *et al.*, 2016), did not occur as part of the analysis/ data collection process. Participants were informed that they could read their interview and/or observational transcript upon request. Member checking as a qualitative research tool has been reported to increase credibility and trustworthiness (Birst *et al.*, 2016), however there is conflict in the literature on its usefulness for validating all qualitative research data (Thomas, 2017). According to Thomas (2017), if the aim of a project is theory development i.e. in grounded theory, then the validity of the theory developed is not dependant on the accuracy of the portrayal of individual participants' perspectives. Instead, the theory developed is expected to portray the social processes

common to multiple participants and not necessarily to represent the experiences of specific individuals in a sample. This therefore negated the need for member checking within this constructive grounded theory study.

Strauss and Corbin (1990) note that revisiting original transcripts and their initial assumptions is useful in the coding process, with the process allowing for the larger sets of codes from the findings to be condensed. Some codes meant the same thing and some segments of data had several codes attached to them. An example of this is where several segments of data had the codes 'belonging', 'being part of the team', 'purpose' or 'role' attached to them. Upon reflecting and re-examining the data, it was decided that the code '*belonging*' would be used, as the term concisely encompassed all the other assigned codes. This initial process of the constant comparison therefore facilitated early category formation, as it identified specific codes relating to the study's aim within the interview and observational data sets.

Finally, the deep immersion in the data that came from initial coding fostered sensitivity towards the participants' interactions and their interprofessional relationship perceptions, enabling a full picture to develop, of their perceptions of how such relationships impacted on their daily interactions. Once initial coding was complete, analysis progressed into focused coding, which is also known as selective coding.

#### **4.5.2 Focused coding**

As analysis continued, so did the natural progression from initial coding to focused coding. According to Charmaz (2014), focused coding involves looking at the existing initial codes

and deciding which are significant, thus identifying the theoretical direction of the study. In qualitative research, a decision on which codes are significant is made by assessing what is important and meaningful in what is, ultimately, trying to be understood (Bloomberg & Volpe, 2012). During the focus coding phase, codes were grouped together as conceptual patterns emerged, resulting in the formation of categories which began the process of the explanatory understanding of the phenomenon in question (Birks & Mills, 2015). An example was the frequently recurring code of 'support', which was named as an initial/provisional category, with its sub-categories being identified as 'personal support' and 'professional support'. However, as analysis progressed and new incidents of data were compared with old data and as other categories emerged, the category of support was no longer appropriate. The category of support as it stood was too broad, as it encompassed a number of interactions and behaviours that eventually emerged from the data. This did little to aid understanding of the IPW relationships within a stroke care MDT. It was clear from initial coding that support was a significant concept. Going back over the codes and returning to the pre-existing literature helped draw focus to the specific patterns of interactions and behaviours that had been given the code of support. These were then reassigned to other relevant codes.

As focused coding progressed, the research questions and aim were kept in mind. This helped when returning to data sets, as it aided understanding of the participants' interactions and perceptions. An example is the code of 'dealing with conflict, where its re-examination led to an unanticipated line of enquiry, of professionals caring and looking after one another despite belonging to different professional groups. Through theoretical sampling, this new line of enquiry was explored further, aiding the development of tentative categories.

### **4.5.3 Theoretical coding**

Theoretical coding progressed quite quickly after focused coding. As discussed in Chapter Three, Glaser (1978) introduced theoretical coding as a way to conceptualise codes, which were identified through the analysis process. Charmaz (2014) adds that the process of theoretical coding provides insight into the relationship between concepts and therefore theorises the focused codes. Theoretical coding, in its simplest form, detects the relationships between two or more categories (Hernandez, 2009). Charmaz (2014) notes that, through theoretical coding a theoretical interpretation or explanation can be determined: a process which allows an identification of how codes and categories relate. Having this explanatory power through theoretical coding allowed for greater scope and completeness, as the process of theoretical coding enabled data analysis to take the leap from simply describing the data to explaining it (Glaser, 2005). This made this stage in the coding process not only important, but also challenging, as it moved the research towards new understandings and findings that went beyond the specifics of the data (Hernandez, 2009).

At this stage of the analysis process, a core category or a central concept should be determined (Corbin & Straus, 2015). Within GT, identifying a core category is a central analytical process, as it acknowledges the category that encapsulates all other categories, sub-categories and codes (Birks & Mills, 2015). However, the analytical process of identifying a core category only appears to be in early seminal texts, as later work completed by Strauss and Corbin (1990) and Charmaz (2014) places less emphasis on identifying a core category, and more on looking at the broader approach in describing how categories and their sub categories actually integrate and relate to each other. Furthermore, according to Hernandez (2009), theoretical codes overlap considerably and

should remain flexible, not mutually exclusive in respect of certain categories. This makes the identification of a core category difficult. Taking these views into consideration, along with the key rule in GT of not forcing data, which includes preconceiving theoretical codes (Glaser, 1998). The focus of this study was on strengthening the discussion into how the data categories empirically related.

This stage in the coding process additionally helped with the refinement and reduction of category numbers, as well as fine-tuning the allocated terms for each category according to which best represented them (Clarke, 2007). A full explanation of the categories, sub categories and their corresponding properties is presented within the findings chapter.

Figure 10 shows an example of the coding process.

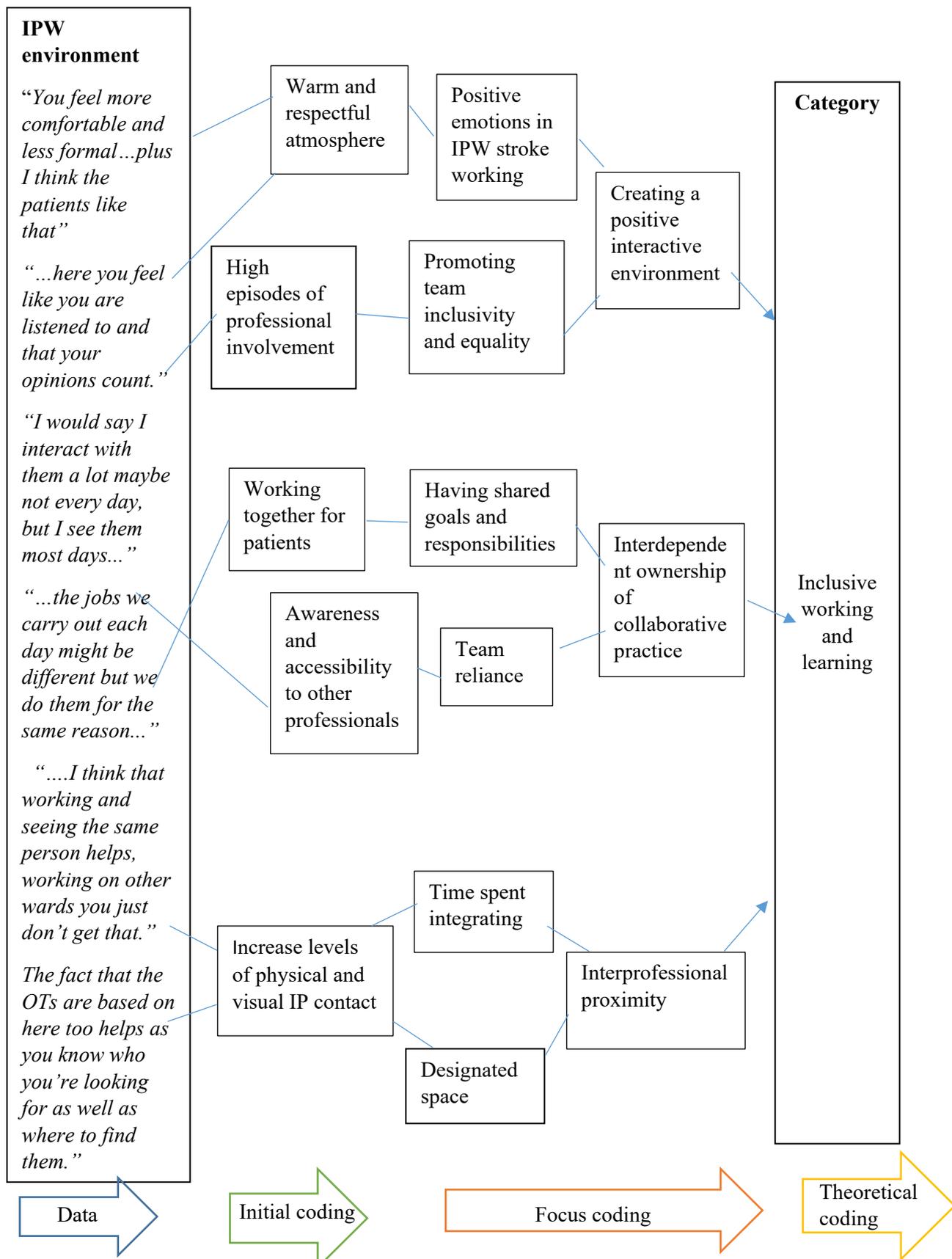


Figure 10: Example to represent the coding process

#### **4.5.5 Determining saturation**

Theoretical saturation is traditionally understood as a fundamental feature of grounded theory that signals study completion. In essence, it is the judgement of when there is no further value in continuing coding or the integration of new data (Straus & Corbin, 1990; Flick, 2018). Theoretical saturation in GT has been challenged as to whether it can ever be fully achieved. Others argue, despite its difficulties, saturation is necessary for the integration of a theory (Birks & Mills, 2015; Brusaglioni, 2016), at least at the propositional stage. Within the interpretive paradigm, when the development of meaning is found over time, it is difficult to claim to know everything there is to know about a phenomenon. However, I was confident that the key data categories of relevance had been identified.

#### ***4.6 Using the literature for analysis***

As formerly discussed, returning to the literature throughout data analysis aided theory development. In this grounded theory study, returning to the existing literature allowed for explanations to emerge from the data, as it enabled the findings to be compared with existing theories and models. It prompted regular questioning on how the data and emerging findings related to or differed from other findings, models and theories. This, in turn, aided theoretical sampling, as exploring theories that emerged from the literature as a result of the emerging data led to specific lines of enquiry.

Making connections with the pre-existing literature during the analysis process helps capture and support interpretations made about the emerging data (Green & Thorogood, 2018). Making connections with other research findings enabled illustrations of similarities

and differences with current knowledge, deepening interpretation thus moving the analytic process to a higher level (Bloomberg & Volpe, 2012). These connections acted as a way to support and explain the unique contribution that this study brings to understanding the IPW relationships of a stroke care MDT (Bloomberg & Volpe, 2012).

#### **4.7 Reflexivity**

As discussed previously in Chapter three, reflexivity is an awareness of how the researcher influences and is influenced by the research process. The reflexive journal extract below highlights one of my reflexivity considerations taken into account before entering the research field.

**April 2016: Extract from research journal/memo jotter. Feelings and thoughts after recruitment presentation.**

*The team were very interested as to who I actually was. It felt like they asked more questions about me than about what would be involved if they were to take part. I was open and honest about my professional background and that I was a novice researcher. At first, I felt that revealing I was a novice researcher may have reduced my credibility and impact on their willingness to participate. However, I felt that once I shared that I was a nurse who had experience working in a stroke unit influenced their opinion on if I was trustworthy and what my intentions actually were.*

According to Blaikie (2007), deciding on which reflective stance to adopt, as well as the involvement the researcher has with participants, is an important consideration as it can affect the generation of knowledge. Historically, grounded theorists have paid very little attention to the relationships they have or intend to form with participants (Birks & Mills, 2015). However, this stance has since changed with acknowledgement of the benefit of gaining trust from participants, as this can result in participants opening up, being honest

and providing information that is not expected (Polit & Beck, 2012; Chamaz, 2014; King, Horrocks & Brooks, 2019). The constructivist grounded theory methodology also describes creating meaning as a shared journey, in that participants do not simply recall past experiences but, co-create knowledge as a result of the interaction that takes place with the researcher (Kvale, 2007; Charmaz, 2014; Birks & Mills, 2015). Hammersley and Atkinson (1983) also proposed that participants are actually more anxious about the researcher and who they are, rather than the research itself. By going into the field of study prepared, with an explanation of who I was, and why I was there, helped reduce role conflict and made the participants feel more comfortable (Polit & Beck, 2012).

Reflexivity also assisted with standardising my behaviour within observations and during interviews which is illustrated in the following journal extracts.

**May 2016: Extract from research journal/memo jotter. Differences in my behaviour.**

*I feel like from my first observation session I was a lot closer in proximity and keen for the session to carry on, not sure, if I took a step back because the professional was a consultant.*

**July 2016: Extract from research journal/memo jotter. Differences in my behaviour.**

*During my second interview, I felt I was a lot more reserved with probing questions as well as I felt like I rushed the interview more than I did then when I interviewed the speech and language therapist.*

The interviewer effect is noted by Gray (2014) as a bias that can subtly find its way into interview situations. Gray (2014) gives examples such as consciously or unconsciously giving more time to participants who may be perceived to be of a higher ranking. As a nurse, I became aware of potential interprofessional dynamics.

Reflexivity was also used to counteract the potential negative impact of early engagement with the literature through memo writing. Memo writing, as highlighted above, was central to my GT study and was employed to explain my internal thoughts concerning the data at a specific point in time (Dunne, 2011) (Figure 7). This kind of reflective thinking has been described as being:

*“...continuously aware of the possibility that you are being influenced by pre-existing conceptualisations in your research area.”* (Suddaby, 2006, p. 635)

## **4.8 Ethical considerations**

### **4.8.1 Ethical approval**

The research study was first approved without amendments by Northumbria University’s Ethics Committee (Reference: DHCPark100815) (Appendix 2). The Proportionate Review Sub-Committee of the East of England – Cambridge South Research committee reviewed the IRAS application on 11/01/2016. In early February 2016, IRAS approval was granted (Reference: 16/EE/0020) (Appendix 3). Ethical approval was then sought from the recruited North East Trust’s research and development department. Ethical approval from the trust was granted in March 2016 (Reference: 194431) (Appendix 4).

### **4.8.2 Ethical issues**

#### Gaining informal consent

Although the research posed no direct risk of harm to any of the participants, it was acknowledged that observations could be intrusive and interviews had the potential for sensitive information to be recorded, with answers being derived from participants’

interactions and perceptions of their work relationships. No participants refused to answer any of the interview questions or were unwilling to divulge their work relationship experiences, a problem often experienced during interviews (Nunkoosing, 2005).

Participants from the start of the recruitment process to the end of data collection were regularly informed that they could decline to answer any of the interview questions, as well as of their right to withdraw from the study or any aspect of the data collection process. In the event of a participant withdrawing from the study, they were given the option to either have data relating to them destroyed or kept and used towards the findings anonymously. One participant withdrew from the study before data collection and another participant withdrew from the interview aspect. The participant who withdrew from the interview did consent to their data remaining within the study and to being used towards the findings.

Consent is central to any project's ethical process (Alldred & Gillies, 2012; King, Horrocks & Brooks, 2019). Individual written consent was obtained from all participants. It was made transparent for participants and the gatekeeper during the recruitment presentation and within the participant information sheets, that even though the trust had agreed that the research could take place, the professionals working on the unit were under no obligation to participate. Participants were asked to sign two consent forms, one for observations (Appendix 14) and the other for interviews (Appendix 15).

### Insider Researcher

Ethical dilemmas for practitioners are, according to Bell and Nutt (2012), to be expected. At the time when the research was undertaken, I was not employed at the NHS trust site under study, which provided a degree of distance (Bell & Nutt, 2012). However, as an

NMC registrant, it was important that I was sensitive towards patients, fellow staff members and the host organisation.

Although no data was collected from patients or visitors, they would be present during certain practice staff interactions. An example of this was during joint assessments and ward rounds. This needed to be managed to ensure patients were protected. A research poster (Appendix 65) was created and displayed throughout the stroke unit, informing patients and visitors of the research activity and the contact details of the research team, in case further information was needed. The participant information sheet (Appendix 7) that was provided to all potential participants and the consent form for observations (Appendix 14) stated that if the participants felt that the presence of a patient was inappropriate, they must voice this immediately and the observation would stop. This was also reiterated at recruitment and stated within the presentation (Appendix 5). During observations, when patients and/or relatives were present, it was explained to them who the researcher was and reiterated that no data was being collected from them. No situations occurred where a participant asked for observations to stop. However, on one occasion, I stopped the observational session out of respect for the privacy and dignity of a patient and their family:

**October 2016: Extract from research journal/memo jotter.**

*The participant informed me that a patient had deteriorated dramatically. The door to the patient's side room was open as I approached with the participant. In the room I could see a number of doctors and another nurse. The patient's relatives were stood in the door way and were physically upset and were shouting out. The participant approached the relatives and invited them into the room. Here, I felt that another person in the room at this sensitive time was inappropriate. I therefore did not enter the room and remained outside.*

Farrimond (2013) suggests a number of ways to handle distressed participants, one being to pause or terminate the research activity. Although patients and relatives were not the focus of this study and no data was ever collected from them, the situation outlined in the above extract was of a sensitive nature. Farrimond (2013) advises that in situations of distress, you should do what feels right and natural. For Bell and Nutt (2012), ethical dilemmas like the one highlighted above can be overcome by a form of reflective practice, which they call self-regulation. Self-regulation is where professional and research judgements are made about specific events occurring out in the research field (Bell & Nutt, 2012). As the above experience occurred well into the data collection process, the professional and research judgement was made to briefly pause the observational session, as the outcome of the overall findings would not be affected, as other occasions of observing interactions between different professions had been captured through other participants.

#### **4.8.3 Confidentiality and information governance**

Every effort was made to ensure confidentiality and to keep the details of the participants anonymous. Throughout data collection and data analysis, the decision was made to provide all participants with a unique code as an identifier. Participants were informed via the participant information sheet, as well as reminded verbally, that no personal details would be printed on interview transcripts, reports or any other research documents. Only the unique identifier code would be published, allowing anonymity to be maintained. While using an identifier and/or pseudonym is widely recommended within research literature, during interviews the identity of participants can be distinguished in other ways (King, Horrocks & Brooks, 2019). As this thesis aims to understand interprofessional

relationships, data was elicited through narrative and descriptions of experiences, which can lead to the identity of participants becoming transparent. Therefore, names, alongside certain terminology (regional dialect) were removed from the transcripts.

The list of unique identifier, together with fieldnotes, memos and other documents relating to the research study, were stored in a secure location on the university premises until the research was completed. Any data imputed into a computer was stored on the university secure “U” drive, which is password protected. Only the principal researcher had access to the data, with the supervision team seeing the data upon request. Participants’ were informed that once fieldnotes and interviews were transcribed, they could request to read them. No participants asked to read their transcribed fieldnotes or interview transcript.

#### ***4.9 Chapter conclusion***

In summary, this chapter has outlined the research journey, in terms of justifying how the constructivist grounded theory methodology and its methods of data collection and analysis were employed to operationalise the study. Insight was specifically provided on the recruitment and sampling process, as well as the methods of coding, with examples being given to demonstrate the analysis process. Finally, the process of ethical approval and the subsequent ethical issues and considerations were discussed. The next chapter will detail the findings attained from the data collection methods.



## **Chapter 5: The findings: The emerging concepts**



## 5.1 Introduction

This chapter presents the research findings that emerged from the constant comparative analysis process of the data gathered from the semi-structured interviews and non-participant observations - a process described in Chapter Four. From the data, it was clear that IPW relationships in a stroke care MDT context are complex with multiple factors contributing to how participants perceive their working relationships from collaborative stroke care practice. Four data categories emerged from the data analysis process (Figure 11), each having sub-categories and several properties that were interrelated.

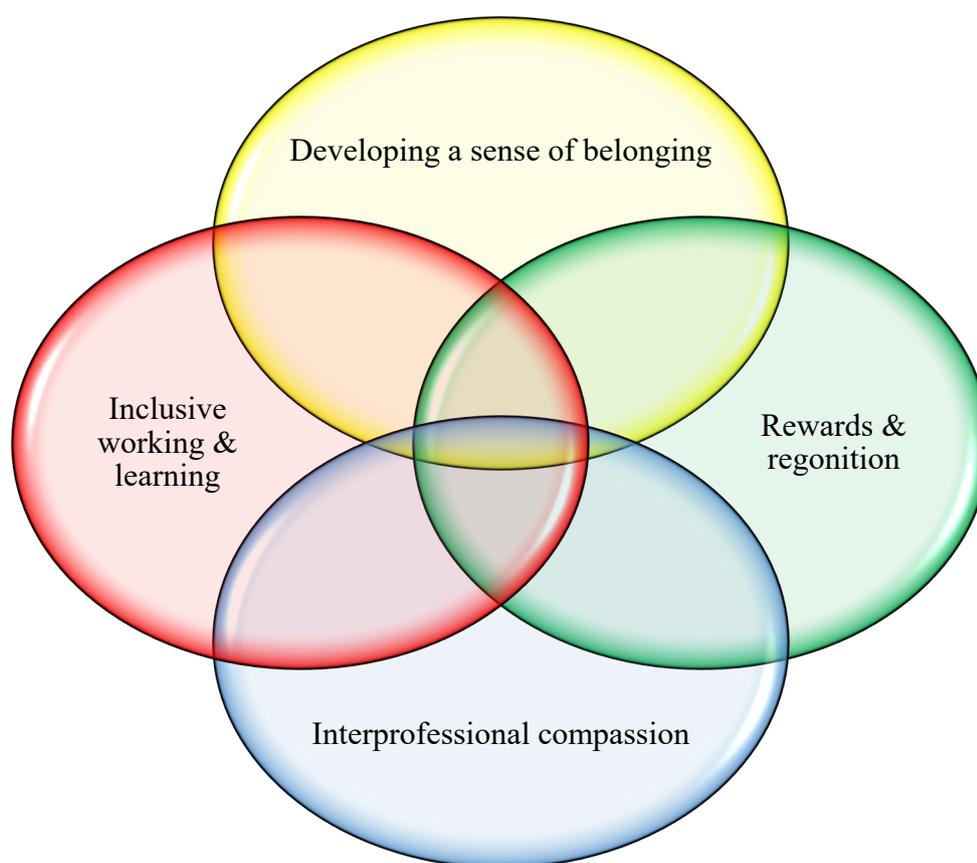


Figure 11: The four key categories

Quotations used in this chapter are identifiable via the participant unique identifier and data collection method code (int used to indicate interviews and ob to indicate observational data), presented after each data extract. Steps for maintaining participant

anonymity were taken when presenting the findings. Any first names or locations spoken by the participants have been replaced with “[NAME]” and “[PLACE]”. In addition the use of “...” has been utilised to identify pauses in speech to aid flow and meaning.

Like other qualitative studies, a large quantity of data was gathered and analysed from the data collection methods. Only a sample of illustrative data was selected and presented within this findings chapter. Considerations were made in selecting the data quotes and included the volume of quotes for each subsequent category, as they needed to illustrate category completeness. To ensure the participants’ voices are heard within the findings presented no existing literature will be drawn upon, instead the formative discussion is supported by participant quotations. This is an approved grounded theory (GT) format that values the participants’ narratives and supports the credibility of the research (Charmaz, 2014). My interpretation will be included, to begin the process of explaining how participants perceive their day-to-day IPW relationships. Finally, the chapter concludes with a discussion of the core social process that governs the IPW relationships within the stroke care MDT under study.

## 5.2 Category one: *Developing a sense of belonging*

This section presents the first category and sub-categories that emerged from the data (Figure 12).

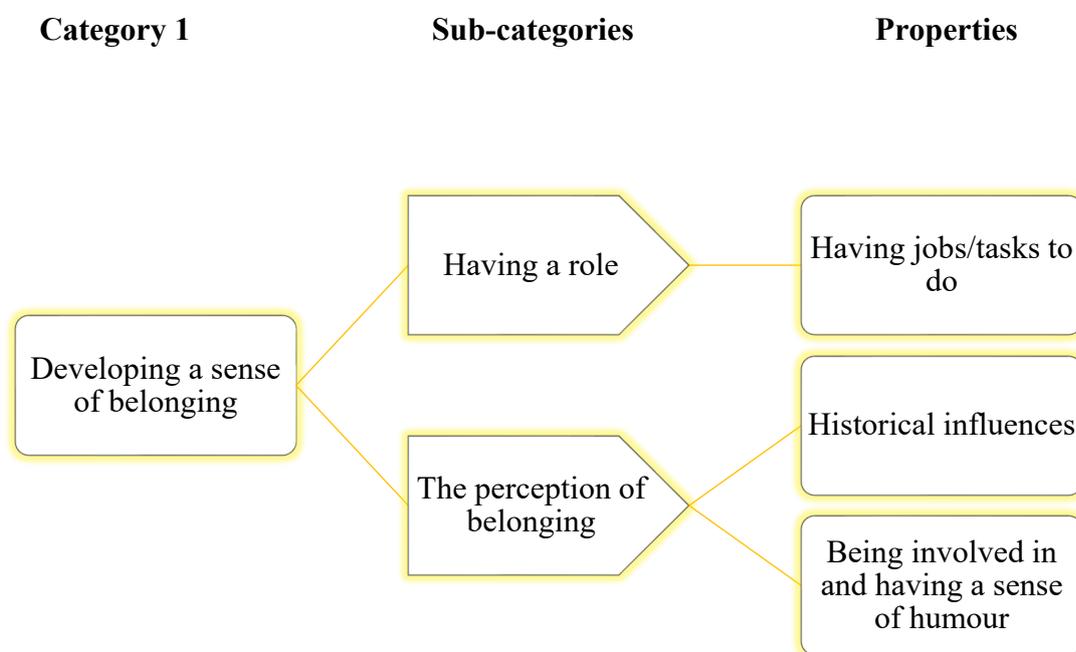


Figure 12: Category one: Developing a sense of belonging

*Developing a sense of belonging* refers to the social actions that gave professionals the connective feelings that they are not just part of the interprofessional stroke care MDT but are valued individuals.

### 5.2.1 Sub-category one: **Having a role**

Having a role within the stroke MDT provided an explanatory insight into how participants, during episodes of collaborative practice, developed a sense of belonging that

contributed to understanding their stroke care IPW relationships. The language used by participants to express having a role varied, with having a purpose and having jobs to do being popular phrases to express their perception of having a role within the team. However, having jobs/tasks that contributed to the collaborative team influenced this sense of belonging and, in turn, influenced how they perceived their working relationships.

#### **5.2.1.1 Property one: Having jobs/tasks to do**

During observations, all participants were observed working collaboratively within the stroke care MDT. However, work duties varied depending on the discipline, with some tasks being completed independently and others collaboratively:

*“...you do your jobs like washing, feeding, obs, getting patients ready and sorted for the day.”*

(P127, HCA/int)

*“...no day is the same so I could be doing lots of joint assessments with a physio.”*

(P123, OT/int)

Having jobs to do were important indicators of being part of the stroke care MDT:

*“I was a student here so from that experience I already felt confident on what my role was and was going to be. But for others it’s about telling them and showing them.”*

(P123, OT/int)

*“...we are all here to do a job and therefore have a role to play.”*

(P124, nurse/int)

In the interviews, participants reported that having a role significantly influenced their perception of belonging, with one participant describing their role as part of a system:

*“...here like we are part of a system, everyone has a place a role, everyone knows what they are doing. You don’t feel like your chasing anyone because regardless of if you have or haven’t seen them that day, they will be doing their job.”*

(P124, nurse/int)

The above quote provides evidence that professionals have an awareness of one another and their level of competence and collaborative role in contributing to work-related tasks, even when it was not visually witnessed.

Having a role contributed to experiences of feeling valued, being needed, and contributing to the achievement of patient care goals and the goals of the interprofessional team:

*“We all have a role to play and no matter what role that is or what you do on the ward it’s important, as it helps with caring for the patients.”*

(P126, nurse/int)

*“...everyone is important and plays an important role in treating patients.”*

(P122, consultant/int)

Having a role was found to influence the working relationships of the MDT. Participants described how having a role and having an awareness of the role of others enabled them to become closer to other professionals within the stroke MDT. Comments made included acknowledging role similarities and how their roles complemented each other:

*“I think that’s important in stroke to let the other professionals get on with their job and sometimes take a back seat. Getting to know how people work has allowed me to get to know them.”*

(P129, doctor/int)

*“We are doing the same jobs we already have that shared interest we are similar.....since working with them and seeing what they do there is quite a lot of overlap in what we both do.”*

(P121, SALT/int)

*“I guess I liaise with the nursing staff the most because we generally do the ward round together, our roles complement each other.... we need all these specialists who form the stroke MDT to get involved and help care for patients. So, relationships are important.”*

(P122, consultant/int)

Participants suggested that greater understanding of role led to a shared recognition of the stroke care pressures that they all faced. This brought professionals closer together by increasing their perceived levels of support, empathy and value of each other's professional role:

*“.....we have the exact same pressures at work, so I think automatically that mutual understanding makes you closer.”*

(P125, physio/int)

*“Like with the physios my relationships I would say are different, just because we have similar jobs, that at times cross over which isn't a bad thing as you become close and help each other out.”*

(P123, OT/int)

Not all participants felt that they had a valuable role within the stroke care MDT:

*“There is often not a great deal of things to do medically with patients so often I do feel like I am babysitting patients...”*

(P129, doctor/int)

Despite this view, this participant was seen carrying out clinical tasks specific to their discipline on several occasions:

*“P129 carrying out a ward round with a consultant and a nurse.”*

*“P129 reviews a patient after been asked to by a nurse.”*

(P129, doctor/ob)

Despite suggesting they did not have much active involvement, the participant did describe specific input:

*“It’s a lot of the nurses asking me for fluids....then ward round is mostly the consultant and me.....We talk through every patient that I have seen like what I have done, what I want from then, what the plan is....”*

(P129, doctor/int)

However, while P129 did not feel that they contributed significantly to the team, they did describe a sense of belonging, through feelings of being accepted by other MDT members:

*“....so, after a month I felt I was accepted.....”*

(P129, doctor/int)

This reflects the idea that while having tasks to do is important for perceptions of having a role and relationship connections, developing a sense of belonging may emerge from the professionals’ perception of belonging to the MDT.

## **5.2.2 Sub-category two: The perception of belonging**

The perception of belonging refers to the interactions that led participants to interpret their own sense of belonging, as well as the belonging of others. Perceptions of belonging emerged from the data through historical influences and being involved in and having a sense of humour.

### **5.2.2.1 Property one: Historical influences**

Historical influences refer to how participants’ experiences, opinions, and attitudes gained from working in other healthcare contexts influenced their perceptions of belonging. They

compared these experiences, attitudes, and opinions to the largely enhanced feeling of belonging they had in the stroke MDT and their perceived level of closeness to other interprofessional team members.

The participant in the below quote describes the difference in their perceived levels of closeness experienced from working on the stroke MDT compared to an experience from another clinical area. The participant described feeling like an outsider, unlike in the stroke care MDT where they felt safe and comfortable to enter into collaborative interactions where questions can be asked:

*“...every now and again we do get referrals for other wards but it’s not that often...but I do find when I go there it’s a bit more intimidating...on the other wards I wouldn’t talk to staff about that on other wards you stand at the side in silence and document on other wards I feel like an outsider, where here you can chat and see how each other are.”*

(P121, SALT/int)

Alongside personal experiences, the idea of possessing certain positive attributes was found to be an indicator that influenced participants’ perceptions of belonging to the stroke care MDT. These attributes included being a ‘hard worker’, ‘being motivated and engaged’, ‘being competent’, ‘offering support and help’ and ‘making an effort with one another’. This view was shared by professionals from different groups:

*“When you take the time get to know someone and I don’t mean like in great depth but little things like their home life or where they are going on holiday makes working together easier.”*

(P133, research nurse/int)

*“...coming across as not only competent but good at my job is important. I think that’s a big reason for why people like to work with you because you pull your weight and do your job well...”*

(P125, physio/int)

*“You can't be work shy here, you just won't fit in.”*

(P127, HCA/int)

P133 and P125's quotes suggest that having these attributes or associating someone with them, led to increased levels of job satisfaction, self-esteem and popularity. One participant reported how opinions of others, such as being a hard worker and helping others out, resulted in them feeling closer to team members:

*“Around here with the staff that have been around a while we all get stuck in and help each other out, coming together in difficult situations you become close”*

(P126, nurse/int)

Feeling close to other stroke care professionals through team opinions and attributes was further reinforced by one participant who reported that they struggle to work alongside new team members who do not possess the positive attributes described. This affected their work relationships with the new team members and significantly reduced their perceived levels of job satisfaction, resulting in a strong desire to leave the MDT. Interestingly, they refer to the new members of staff as 'people' and not by their name or by their professional group, suggesting that they did not have a relationship or were yet to be perceived as stroke care MDT members:

*“I don't mean to sound like I am moaning or having a dig but they just need to sort out the new workers. Like we have tried as a team, there has been words to try and encourage and motivate them...like the new people it feels like you are constantly carrying them...it's a reason that I am looking for another job.”*

(127, HCA/int)

Those within the interprofessional team were found to be on first name terms, which was found to enhance their feeling of belonging. While having new 'people' at times was found to disrupt the sense of 'team', efforts were made to learn new members' names:

*“While observing P121 a NAME approaches says hello and introduces them self as a new member of the team. They then asked P121 their role and name.”*

(P121, SALT/ob)

Remembering names may be regarded as a simple social fact to learn, however, in a big team where professionals work different shift patterns and rotate it can be challenging.

Despite this, knowledge of names was interpreted as a symbol of belonging, with it providing participants with symbolic recognition of their place in the team and their value to the successful working of the MDT:

*“...remembering first name (laughs) which is hard when it is such a big team and staff rotate frequently....However, that shows you value them being here.”*

(P122, consultant/int)

*“It also nice when staff come up and know your name or I know their name it makes me feel more valued I feel like I belong a bit more. I feel like I play a helpful part; I have a piece of the jigsaw that ultimately helps everything come together for the patient.”*

(P121, SALT/int)

Knowing names was also found to be an indication of relationship status:

*“...like I call all the consultants doctor surname em but all the nurse I try and address them all by their first name I feel like that is a decent measure of where like (pause) where your relationship is.”*

(P129, doctor/int)

The perception of belonging influencing perceived levels closeness and value was also described by one participant’s experience of a member of staff going out of their way to keep them as part of the MDT, after they voiced their desire to leave:

*“...I was looking for another nursing post, where I could reduce my hours and not work shifts because of my kids. NAME came to me one day and said that she didn’t want me to go, she was like if I can sort out your shifts and hours would you consider staying. I don’t know many places that would do that, like she went out of*

*her way to do that for me, so that I would stay. It made me realise how much I'm thought of and how much I do enjoy working here."*

(P134, nurse/obs)

#### **5.2.2.2 Property two: Being involved in and having a sense of humour**

Being involved in and having a sense of humour was linked to participants' perceptions of belonging, as it gave them feelings of being involved and accepted.

One participant who was in a transient role in the stroke unit described how they felt liked and accepted by the MDT team because they made fun of their accent. Humour at work, in this case, gave them an increased feeling of self-worth through feelings of being accepted:

*"One of the nurses has a running joke with me that I am very jolly holly stick so I put on an even posher accent, to (pause) I don't know reinforce that I am not posh (laughs)...its nice, I feel that they like me."*

(P129, doctor/int)

A number of participants from other disciplines also identified that having a good sense of humour is key to fitting in:

*"I think generally here as long as you're a hard worker and have a good sense of humour you will fit right in."*

(P124, nurse/int)

Others described a sense of belonging by being involved in 'in jokes'. This was perceived to be a way of being included and for sustaining interprofessional relationships:

*"You feel like when then nurses or OT's are talking about something or having a joke about something that you can join in."*

(P125, physio/int)

*"I am very comfortable about having a joke with the consultants and with the nurses."*

(P129, doctor/int)

Both quotes are IPW examples that indicate that humour is a vehicle for building relationships across professional groups. Humour was also linked by participants to job satisfaction:

*“We can all take part in a joke at work, I guess it helps makes certain aspects more enjoyable.”*

(P122, consultant/int)

*“We look after some really acutely ill patients...sometimes having a joke and a giggle gets you through the day.”*

(P133, research nurse/int)

This again indicates a shared perspective from participants from different professional groups.

### **5.2.3 Category summary**

The findings so far suggest that interprofessional relationships in a stroke care MDT context are partly constructed through the professionals’ sense of their own belonging, and that of others. Having a role, possessing attributes deemed desirable, and being involved in ward humour were all collaborative interactions that occurred between the different professionals which enhanced this sense of belonging.

The category provides insight into how to create a sense of belonging in interprofessional teams, i.e. via ensuring professionals have jobs and tasks to do. The data from this category also indicated that interactions of *developing a sense of belonging* provided participants with positive experiences to grow, in both a personal and professional capacity. While experiences of growth, i.e. increased levels of self-esteem, confidence and job satisfaction varied between the different professionals, growth was evident from the interprofessional

collaborative interactions found within the category and its corresponding sub categories. In addition, in this category, where participants did not feel they belonged or felt like others did not belong, their sense of growth was diminished.

### 5.3 Category two: Rewards and recognition

The second category is *rewards and recognition*. This category refers to the personal and professional gains that professionals received from their daily collaborative social interactions. The category, its corresponding subcategories and their subsequent properties are illustrated in Figure 13.

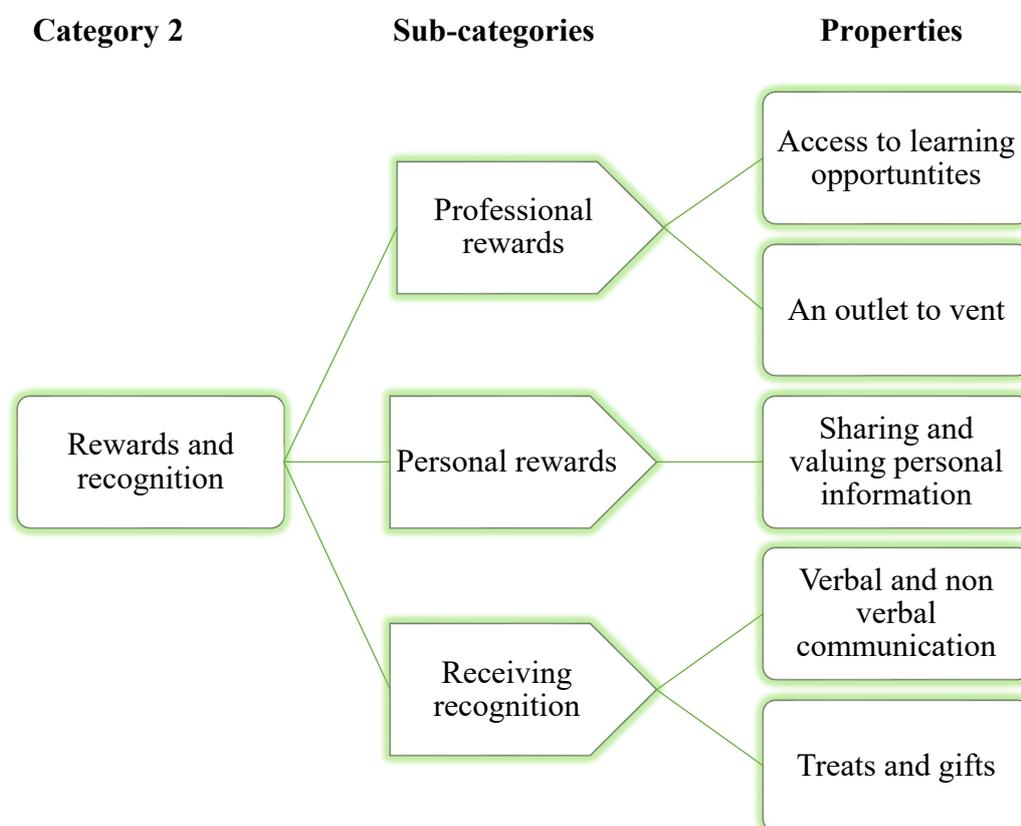


Figure 13: Category two: Rewards and recognition

### 5.3.1 Sub category one: Professional rewards

#### 5.3.1.1 Property one: Access to learning opportunities

Having access to learning opportunities was perceived as a professional reward. It provided insight into how episodes of collaborative practice between professionals led to opportunities for professional development, all of which contributed to how they perceived their interprofessional working relationships. Several participants cited learning opportunities as a positive benefit to working as part of the stroke MDT, with one participant physically confirming they had received learning opportunities:

*“There is so much scope here for progression, like I have just started my mentorship...”*

(P134, nurse/int)

Other participants commented on the positive effects of learning opportunities in the stroke MDT by commenting on the professional development of others:

*“We have had a lot of girls progress in their careers....maybe not progressed in stroke but they have gone on to progress in other areas and everyone is supportive of it, that’s what I like.....they want to get the best out of you.”*

(P124, nurse/int)

*“I see the other girls doing the same job as me and from watching them and listening to them they seem to know loads about stroke and are able to do loads of things. It makes working here exciting, as I want to be where they are at.”*

(P131, HCA/int)

Other participants described interprofessional opportunities beyond their own profession:

*“...you get to work with physios and OTs, you get to see what they do and, they can show you stuff, like on other wards you wouldn’t necessarily get that.”*

(P127, HCA/int)

*“With the joint sessions...I get to develop my own skills by learning some of the OT’s skills.”*

(P121, SALT/int)

*“I have learnt loads from the nurses....”*

(P129, doctor/int)

Developing clinical knowledge and practical skill ability was not the only learning opportunity that participants experienced. Data indicated other areas of self-development, such as increased levels of confidence and ability to execute important non-technical skills, which they perceived contributed to their ability to work successfully within the stroke MDT:

*“Joining a big team that is known for being busy was daunting...I have loved my time here and feel it has helped me grow in confidence...it has given me the opportunity to refine those team player skills...”*

(P130, doctor/int)

Interestingly, although learning opportunities existed within the stroke care MDT context, only one participant had progressed within their career on the ward going from a band 5 to a band 6. A further three participants, however, had progressed in the sense of transitioning from being students to fully qualified MDT members through ‘in-role development’. In addition, the stroke unit had recently seen up to 15 MDT stroke professional leave the team as a result of their development. Learning opportunities were seen as prime resources enabling professionals to experience self-development and growth. This was also seen for those not yet registered to a professional body:

*“I’m looking into becoming an HCA but, I don’t want to be on any other ward, the staff here are great I see what they do day-to-day and how they help each other.”*

(P132, domestic/ob)

*“I have learnt so much like skill wise here that a lot of other HCA’s on other wards wouldn’t know, so for me it is exciting as I would like to progress to become a nurse.”*

(P127, HCA/int)

In the latter quote, the learning opportunities were highly valued by the HCA participant, who perceived the opportunity to learn on the stroke unit to be different from other places.

Learning opportunities as a professional reward, however, were not always explicit, with the opportunities only being understood later during actions of reflection:

*“Looking back, I can see there was many times when the consultants were testing me or explaining something and I have kind of let it wash over me, but actually I have taken it in and learnt quite a lot, looking back.”*

(P129, doctor/int)

The above quote from P129 reflects that the opportunities to learn and develop as a professional are not always consciously done, entered into, given out of choice, or through reciprocal exchange or negotiations.

Experiencing professional growth and development from the learning opportunities were often described to occur from a sense of duty, rather than being explicitly sought.

*“...new staff are quiet to start with but once we show support and encouragement they do start to speak up and engage more.”*

(P122, consultant/int)

This support was also found to come from the wider team regardless of profession:

*“I feel that everyone is supportive and helpful when it comes to learning new things... I feel that I can come on here and even though I won’t be as confident on the dysphagia side of things because I will be learning. I know that I will be more relaxed when I start doing the dysphagia stuff, as I can chat to the staff about it and they know it’s new to me and that I am still learning. That support helps a lot.”*

(P121, SALT/int)

*“...they want to get the best out of you.”*

(P124, nurse/int)

These positive descriptions of team members wanting each other to succeed, learn, develop, and grow were not only discipline-specific but often also interprofessional. It suggests professionals from different disciplines were united due to a sense of responsibility and willingness for team shared learning.

Providing other professionals with opportunities for growth and development via this sense of responsibility was found in several other data quotes:

*“...it’s important that staff ask [not just doctors] questions, learn and questions things, part of my role is to help that...”*

(P122, consultant/int)

*“...well, the physios first initially approached me to ask about how to use the board...Then the next week I went up to the OT’s and the nurses and was like...come with me I want to show you something.”*

(P121, SALT/int)

*“The team themselves [all disciplines] they are kind of...are aware that I won’t know a great deal, but they are keen for me to experience things on my own.”*

(P129, doctor/int)

Although the ward was recognised as an active environment that provided professionals with opportunities to grow and develop, some restrictions to these learning opportunities were acknowledged. Participants described that while there were multiple opportunities to advance skills and knowledge, there was limited career progression within the stroke care MDT. This had resulted in several professionals leaving the team to fulfil career goals.

Despite this, some participants wanted to stay in the team:

*“I think that’s why people have started to leave, to progress further. Like...I wouldn’t just leave here just for the sake of leaving. I want to progress too. I wouldn’t just go to another ward; I would rather stay here.”*

(P127, HCA/int)

*“...people are supportive in you wanting to learn and develop your skills as an OT, however, there isn’t that much opportunity as an OT to progress, it’s about waiting for someone to leave.”*

(P123, OT/int)

This led to questions surrounding why professionals continue to want to learn and develop or continue to work in the MDT if it may mean they do not progress up the career ladder. Perhaps professional progression in this context is more of an intrinsic reward. This raises the question of where else their motivation to stay lies. The quotes below illustrate two participants’ motivation to join and remain in the team, with the learning opportunities and experiences gained extending beyond the capacity of stroke care and viewed as being an exclusive stroke MDT reward:

*“...there are lots of girls in the office downstairs who are interested and are asking or looking out for jobs coming up...just because the skills are so varied...You practice those skills everyday so you’re getting that experience and confidence not all other wards offer that.”*

(P123, OT/int)

*“It very acute and fast paced here, you get to experience the acute side, the rehab side, the admissions, discharge ad the palliative side the care side of things...If I’m being honest, I don’t think I will progress on here just because of the type of people who get into them types of jobs...I don’t see myself in a managerial role. I do however see myself progressing into a palliative role, so I do want to stem into that scope of nursing, but we have a lot of patients on here that are stroke patients but are on palliative pathways. It sounds wrong but here I get the best of both worlds.”*

(P134, Nurse/int)

Interestingly, P134 describes how they had witnessed others progress into different roles and areas associated with stroke, due to the scope of learning and experiences that the stroke MDT offered to all its professional group members:

*“You see the physios come through you know, you see them start off as a band 5 and then you see them work up to team leaders and then to the managerial roles, so there is loads of scope. Whether you stay here, or you go into the rehabilitation side, so there is the community stroke teams or there is ward NAME... There are loads of different avenues to go down once you start working here.”*

(P134, Nurse/int)

Role rotations and interests in pursuing a career outside of stroke did not stop participants from experiencing opportunities to learn. Two participants from different disciplines describe two similar experiences where they made no secret of their desires to work elsewhere, yet still experienced opportunities to advance their skill abilities from the wider team:

*“I have actually looked at research jobs... They have been supportive. I am open about wanting to progress further. The team are good like that.”*

(P124, nurse/int)

*“I just find stroke so mind numbingly boring...I want to do surgery em so one of the consultants is always saying, oh you know you need to practice your PR's and things like that then.”*

(P129, doctor/int)

The above quotes show that the stroke care MDT context recognises its professionals as individuals who have different interests and self-development needs. This suggests that professionals have taken the time to get to know each other; actions which are known to provide a common basis for relationship formation.

Several examples in the data show participants demonstrating interactions for building a common basis for a relationship by getting to know one another personally and professionally via learning interactions:

*“...with the other F1s because we have teaching together, and we are all in the same boat...it makes things easier like to get to know each other or makes things easier like to get on with one another and work together.”*

(P129, doctor/int)

*“We also do other training sessions with other staff which is great. You find out who does what and who knows what, so if you need to know anything you know who to approach.”*

(P121, SALT/int)

*“You know one minute you’re showing a nurse how to use a piece of equipment and before long you are chatting about life...”*

(P125, physio/int)

One participant described a situation in which a team member specifically sought them out in order to learn because they had prior knowledge of their interest and knowledge of surgery, which might assist them in resolving their work-related problem:

*“...one of the F2 has once and the other F1’s sometimes ask me about like surgical stuff not as a kind of be all and end all opinion but they are like oh I have to talk to a vascular surgeon like what should ask what do you say what words do you use that kind a thing minor stuff. It’s nice because it helps me keep on top of my surgical knowledge.”*

(P129, doctor/int)

This quote highlights that the type of development experienced from the MDT’s learning opportunities can be experienced differently. The professional seeking advice developed their knowledge base for dealing with a certain clinical situation, while the other experienced positive emotions in relating to their expertise being acknowledged. This suggests that from the learning opportunities, professionals can develop physically in intellectual gains and emotionally.

Professionals seeking other professionals to develop and learn was also found to occur interprofessionally:

*“...well the physio’s first initially approached me to ask about how to use the eboard with that patient and it was me that then approached them to see if they still wanted to be shown. The other week I went up to the OT’s and the nurses and was like come with me, I want to show you something and they just came along. It’s the same when they want to show me something...”*

(P122, SALT/int)

This sense of being rewarded by enabling others to professionally develop via the learning opportunities was felt by other participants, with a senior member of the team describing a similar experience:

*“This is a learning environment. It’s satisfying when you see doctors and nurses progress.”*

(P122, consultant/int)

These findings indicate that the learning opportunities occur and affect professionals in multiple ways, with all stroke care MDT professionals experiencing them regardless of discipline and status within the hierarchy structure. Fulfilment of seeing others in the interprofessional team achieve was motivation with learning perceived as a reward.

### **5.3.1.2 Property two: An outlet to vent**

To ‘vent’ in this context means being able to verbally release work-related stress and frustrations to other professionals within the stroke MDT. This ability to vent was seen during observations as a way of building interprofessional relationships:

*“P130 and another doctor are stood at the side of the corridor after the morning ward round. The doctor appears to be venting about the consultant on the other ward round. They are animated with their hand gestures and are talking in hushed*

*tones. P130 stands and listens throughout, providing reassurance through nodding.”*

(P130, doctor/ob)

*“P124 approaches another nurse at the nurses’ station. P124 raises their hands and discusses how [NAME] is being difficult before picking up the phone. While on the phone, the nurse at the nurse station places a hand on P124’s shoulder as they walk past, P124 smiles before speaking on the phone.”*

(P124, nurse/ob)

While venting may be viewed as a negative social interaction, it appears in this case to have a positive effect. Venting provided participants with a coping strategy, which they said supported them to manage the pressures and emotions of day-to-day working life:

*“...I think it’s a healthy way especially in this environment you need to let off steam.”*

(P133, research nurse/int)

*“..at the end of the day while we look like we are just moaning about our day or even joking about stuff to me it [venting] is a support mechanism...Family and friends at home don’t necessarily know what it’s like to see someone die or to be told bad news.”*

(P124, nurse/int)

Participants chose certain professionals within the team to vent to; those who they believed they had stronger relationships with, which was found to not always be someone from the same professional group:

*“I’m always moaning to [Pharmacist], I feel like I can say anything to her...”*

(P130, doctor/int)

This suggests that relationship strength is not determined by professional group. One participant described how the social process of being able to vent allowed them to feel

reassurance, which, in turn, gave them confidence, enabling them to complete tasks successfully, for example:

*“I find as well when you’re doing things like that, venting about like I have to make this phone call, someone else will say something like just say this this and this and it will be fine, that is massively reassuring if you know someone else has been put in a position similar and then there saying look this is what I did and it went well.”*

(P129, doctor/int)

This provides insight into the consequences of acts of venting. For participant 129, the process of venting led them to experience enhanced feelings of support as the other professional to whom they were venting, acted supportively in response to their needs.

Other participants reflected on venting as a way to evaluate the strength of their relationships with the interprofessional team:

*“The fact that working here you feel like you can go and vent or moan to someone shows the strong connections and bonds we have with one another...”*

(P133, research nurse/int)

*“I think it’s kind of a comradery isn’t it you feel like that you’re not the only one that feels under this pressure...if you felt that you were on your own and you were the only one that felt that pressure or that stress or frustrated or whatever, that would make working here ten times harder. I don’t know why but it’s the feeling of all being in it together.”*

(P124, nurse/int)

These actions were perceived as enhancing the informal social relationships between individuals, with venting being an interprofessional symbol that signifies the close bonds and connections professionals in the stroke MDT have with one another. This indicates that acts of venting are rewarding interprofessional interactions.

### 5.3.2 Sub-category two: Personal rewards

Data showed that professional rewards were not the only rewards influencing how participants perceived their stroke care MDT relationships. Personal rewards emerged from the data in the form of sharing and valuing personal information.

#### 5.3.2.1 Property one: Sharing and valuing personal information

Sharing and valuing personal information was viewed as a privilege, not a work requirement. On several occasions, conversations between professionals were observed as being clinical or patient driven at first, before evolving into those of a personal nature. Personal conversations included enquiring how each other was, sharing and discussing weekend plans, and divulging details about their families and the ups and downs of their private home lives:

*“P123, while documenting in patient’s notes, chats to an OT assistant about their mother who has recently been ill.”*

(P123, OT/ob)

*“...we will chat about stuff and like she has a bad back at the minute, so we have been talking a lot about that and her daughter is going to prom tomorrow and we don’t actually end up talking about patients.”*

(P129, doctor/int)

Being privy to intimate information about one another enabled deeper connections to be made, which led to increased levels of job satisfaction being experienced from forming MDT connections and friendships:

*“Like when I was talking to [NAME] about her parents I already knew from other chats we have had and it just makes the time at work that more enjoyable than just sitting in silence...Spending that much time with someone you do get to know them on a personal level and then you become friends.”*

(P123, OT/int)

Along with friendships, one participant described how they had developed a relationship with an older team member that was likely to be long-term, regardless of their work positions:

*“[NAME] has always been a bit of like a maternal figure for me since I started working here...I would like to think that if I didn’t come onto the ward again, we would still stay in contact.”*

(P133, research nurse/int)

The quote below outlines how working in the team rewarded the professionals with strong connections that were personal and professional:

*“...there are four of us that are really good friends and we are always doing stuff outside of work like nights out and that, regardless if we all leave, we will still see each other...”*

(P127, HCA/int)

The same participant further described the value of these personal connections, suggesting they led to a growth in confidence and increased levels of job satisfaction:

*“Because you become close with some of the staff you feel comfortable to voice your opinions and share things about your personal life...Like having friends at work just makes work better. It makes the time that you have to spend at work that much more enjoyable.”*

(P127, HCA/int)

One participant described how team members would regularly swap shifts to cater to the known personal needs of others, which suggests empathy and value in the relationships. A further three occasions were observed in which professionals looked in the ‘off duty’ to see if they could help someone by swapping shifts:

*“...will swap shifts with you to help accommodate other personal stuff you have going on”*

(P124, nurse/int)

From observations, team members were also seen negotiating breaks and work tasks, with personal preferences and circumstances being valued and considered when deciding who was going to be doing what:

*“Ah yes we were deciding on breaks. [NAME] likes to go first when she is only working a short day.”*

(P126, nurse/obs)

*“We have a good understanding on how each other works...like who works better at doing certain things and who works better on certain teams. So, when the day starts, we do think about who is going to be put where.”*

(P134, nurse/int)

Knowing personal information about each other and showing interest in the personal lives of others was interpreted as a personal reward. Participants described the interactions as giving them a sense of personal value and an increased sense of perceived closeness to others:

*“It’s nice because you are called by your first name most days and not just nurse. It makes you feel valued just that little bit more...I don’t feel like I am just seen as a nurse within the team.”*

(P126, nurse/int)

*“Some of the consultants do talk to you, like we have fab ones who see you more than just someone who passes information’s onto the nurse, em they actually ask you how you are and how your kids are.”*

(P127, HCA/int)

The above quotes highlight that rewards of a personal nature gave participants an enhanced sense of self-worth, as they were seen as an individual. It again highlights that when

working interprofessionally, stroke professionals made efforts to get to know personal information beyond a team member's professional identity.

### **5.3.3 Sub-category three: Receiving recognition**

Feelings and acts of recognition were found to bring professionals from different disciplines together and enabled professions to experience increased levels of value, self-worth, and job satisfaction.

#### **5.3.3.1 Property one: Verbal and non-verbal communication**

Non-verbal communication as social interactions of recognition occurred between all professional disciplines and was displayed via positive gestures of appreciation or gratitude. Symbols for appreciation and gratitude included handshakes, hugs, smiles, thumbs up, a pat on the back, and winks:

*“A hug was given to P126 after they were able to swap a shift”*

(P126, nurse/ob)

*“A thumbs up was given across the corridor from P125 when asking a doctor if they had seen a patient.”*

(P125, physio/ob)

Symbols of verbal communication interpreted as gestures of praise included; *“thank you”*, *“well done”*, *“I owe you one”*, *“you are a lifesaver”*:

*“P123 thanked another OT for covering for them in handover as they were running late.”*

(P123, OT/ob)

These verbal and nonverbal gestures of appreciation were found to have positive effects on relationships, as they brought professionals together, made them feel valued and, arguably, boosted their self-esteem:

*“...with it being such a big team, saying please and thank you goes a long way. It shows you value them.”*

(P122, consultant/int)

*“I think it is important to show how much you appreciate and care for one another. I couldn't do my job without the HCA's and other members of the team. Some days you are on auto pilot and forget how much of a hard job this is and how much goes into caring for patients. I know for me it makes coming to work the next day that much easier.”*

(P126, nurse/int)

### **5.3.3.2 Property two: Giving and receiving treats and gifts**

The giving and receiving of treats and gifts was viewed as another symbolic way in which team members recognised each other's contribution. In particular, team members were frequently observed making each other cups of tea or giving each other food:

*“One doctor before they left made cakes for everyone to say thanks.”*

(P127, HCA/int)

*“P131 brought a handful of chocolates into a patient's bay and shared them with two other nurses and an HCA.”*

(P131, HCA/obs)

When probed why this was done, P131 responded with:

*“It has been a long shift; chocolate always helps especially when you start to flag at the end of the day.”*

(P131, HCA/obs)

Receiving gifts and treats as symbols of recognition resulted in an emotional response, with participants experiencing increased levels of job satisfaction from receiving them:

*“...someone giving you chocolate or making you a drink, it’s nice to know they are thinking of you it makes a difference to your day.”*

(P124, nurse/int)

These positive emotions that emerged from recognising the contribution of others were interpreted as a way that brought stroke care MDT professionals together. This was seen when observing P134:

*“P134 is called over to the nurse’s station along with all other multi professional team members that were on shift. There are a number of cards, gifts and cakes present at the nurses’ station and in the manager’s office. It appears to be a leaving party. The team member leaving is a pharmacist and gives a short speech to thank the team and express her sadness on leaving. P134 stands alongside other members of the team and listens and then claps once the pharmacist has finished.”*

(P134, nurse/obs)

After the encounter, P134 was probed further to uncover further details:

*“[NAME] is retiring, she has worked here for years... We had a collection, so they were giving her the gift we got her... I don’t actually know her that well and I have very little to do with her... We always come together and do collections like this when people leave. I guess it’s a way to show that we care and appreciate all their hard work. I hope people do the same for me when I retire (laughs).”*

(P134, nurse/ob)

The process of receiving gifts and cards as a symbol of recognition, as identified above, increased levels of value and self-worth for the recipient. However, what was interesting is P134’s desire for future recognition with their comment:

*“I hope people do the same for me when I retire.”*

(P134, nurse/ob)

This suggests that the motivation behind interactions of recognition in interprofessional settings is self-growth, which indicates a consensus in the interprofessional working relationships that exist in the team:

*“We had one consultant and he was leaving so we did a collection and I put in and signed the card. Me and some of the other girls were laughing and I was like he won't know who has signed the card...I wouldn't generally sign a card of give a thank you gift to someone I hardly know, but it's a nice thing to do.”*

(P127, HCA/int)

Despite the interactions occurring to initially benefit someone else, it led to increased levels of self-esteem for this participant from actions of doing a nice thing and being considerate to others.

#### **5.3.4 Category summary**

In summary, the category of *rewards and recognition* shaped participants' perceptions of their working relationships via the professional and personal rewards and the verbal and non-verbal recognition that they encountered from their collaborative practice. The data highlighted that interactions of rewards and recognition were both received and given (i.e. through access to learning opportunities), and were found to shape IPW relationships, as perceived closeness was interpreted via the occurrence of the interactions (i.e. the actions found in sharing and valuing personal information) and/or from carrying out the interactions with others (i.e. interactions in an outlet to vent).

Similar to category one data from this category indicated that interactions of rewards and recognition provided participants with positive opportunities to develop and grow, in both a personal and professional capacity. Again, like in category one, while experiences of growth, i.e. increased levels of clinical knowledge, self-esteem, safety and job satisfaction varied between the professionals, it was clear from the findings that all professionals, regardless of discipline or hierarchical status, experienced growth from the interprofessional interactions of rewards and recognition.

Furthermore, even when these interactions were not desired, asked for, or acknowledged, they still occurred and were instead interpreted to be motivated out of a sense of professional duty or responsibility and not reciprocal gains. Finally, the category findings provided insight into a potential reason professionals left or remained working collaboratively within the stroke care MDT. Even when knowledge was gained and there were minimal opportunities for career progression, relationships provided emotional growth, with job satisfaction and value being perceived as important, alongside actual opportunities for professional development.

#### ***5.4 Category three: Inclusive working and learning***

Inclusive working and learning refers to the social behaviours that promoted the inclusion of team members (peripheral and core) to take part in daily MDT activities. These interactions explained how professionals within the stroke care MDT perceived their working relationships, as they were found to bring participants closer together as the process enabled professional to get to know one another.

From the data, an environment that inhibits and promotes individual and professional inclusivity was significant in influencing IPW relationships. *Inclusive working and learning* was explained in the data via the sub-categories of interprofessional proximity, by creating a positive environment, and through interdependent ownership of collaborative practice. Figure 14 illustrates category three.

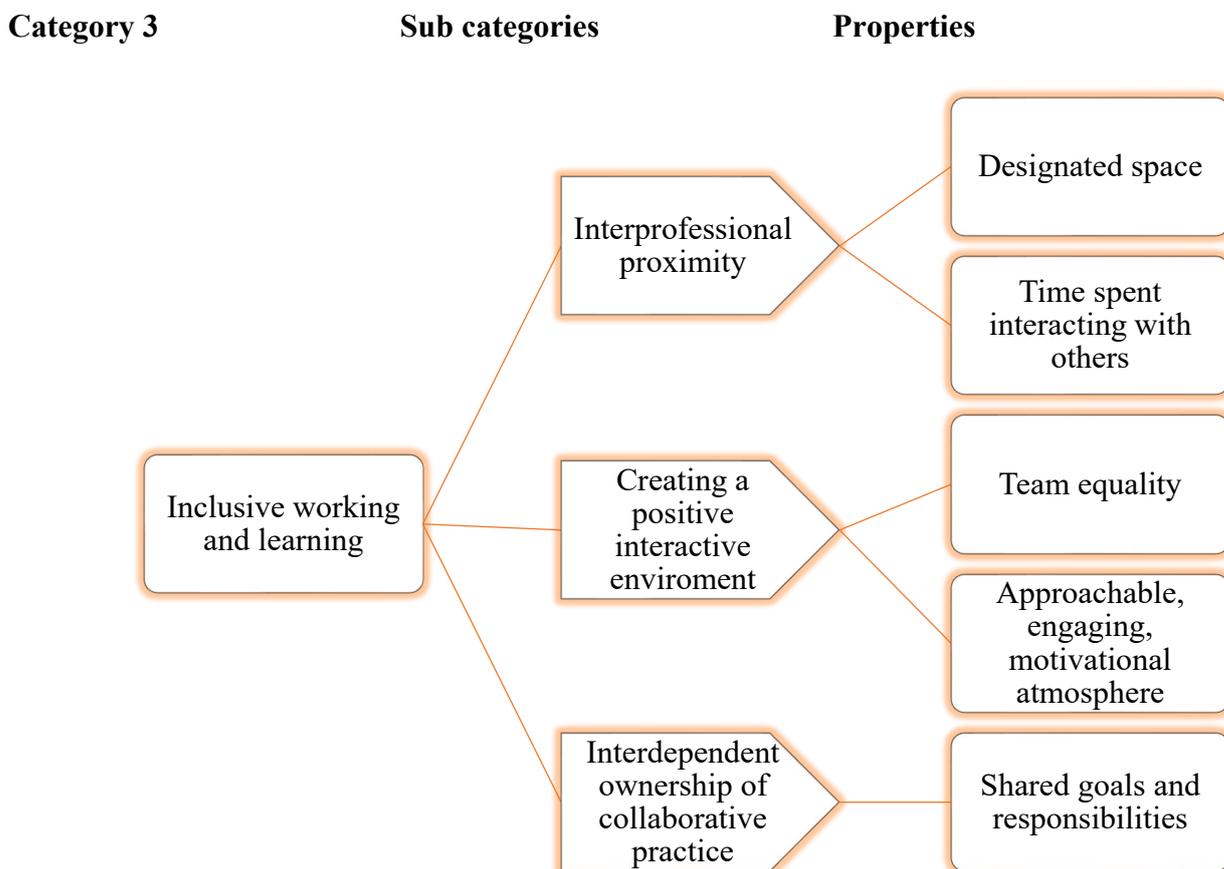


Figure 14: Category three: Inclusive working and learning category

#### 5.4.1 Sub-category one: Interprofessional proximity

Close interprofessional proximity at work was found to promote inclusive behaviours and interactions, enhancing feelings of closeness to others in a relationship. The category properties include having designated space and time spent interacting with others.

#### 5.4.1.1 Property one: Designated space

From the data analysis, interprofessional proximity was perceived by participants to be created through designated workspaces. Several of the disciplines (i.e. OTs) had offices located in other areas of the hospital. However, all professionals were brought together on the ward via designated space to complete their work tasks. This resulted in all stroke professionals having a strong stable presence within the team. This led to increased opportunities for professionals from different disciplines to regularly interact (the basis for relationship formation) in both a professional and personal capacity.

One participant described how having dedicated space in the ward gave them increased feelings of being valued. Allocating space, additionally, made accessing other team members easier as participants knew where to find each other:

*“...we keep all our paperwork and therapy bits in that top bay. It is known as the like the OT area on where we congregate to handover or update one another as well as document. It makes it easier for people to find us...if they are looking for us they will go there first to find us... it is nice to have your own space and to be thought of as needing a space.”*

(P123, OT/int)

Being able to access other professionals, from different disciplines was also found to help others to achieve MDT work tasks, improve job satisfaction and aid the development of relationships:

*“The fact that nearly everyone is based on the ward helps, it saves you a lot of stress and energy especially when patients are poorly, or you need an answer quick.”*

(P133, research nurse/int)

*“The fact that the OT’s are based on here helps as you know the person who you’re looking for as well as where to find them.”*

(P125, physio/int)

Working in close proximity from designated work areas enabled professionals to get to know one another personally and professionally. One participant described how working closely together gave them the means of figuring each other out. In particular, to discover who they ‘gel with’ and with whom they can ‘have a laugh’. This links with category one, with humour being an indicator of relationship status:

*“Working so closely together gives you the opportunity to find out who you gel with better... I guess it’s like figuring out who you can have a laugh with and who you can’t. Some people here are very professional and like to get the work done. While with others you can say something maybe that isn’t professional and they get it or you can be like silly together (laughs).”*

(P124, nurse/int)

Another participant described how close working proximity helped them to improve their own performance and that of others:

*“...they [the MDT] know me and are aware of how I work, they will be like ok this is all normal and I know this won’t interest you, but this is why I am worried. So, it’s not just about getting the best out of them it’s also about them getting the best out of me as well.”*

(P129, doctor/int)

#### **5.4.1.2 Property two: Time spent interacting with others**

Interprofessional proximity via a designated space gave professionals from different disciplines the opportunity to engage and interact with others regularly. Time spent interacting was also found to be important, as it brought professionals from different disciplines closer together and fostered IPW relationships.

The amount of time spent on the stroke unit varied across professional discipline groups, which was a result of the varying working hours, shift patterns, rotational working system,

and the fact that some professionals had the responsibility to work across multiple departments. The difference in working patterns meant that interactions between the different disciplines were at times irregular and restricted. However, despite these restrictions, it was found that it was not the amount of time spent in each other's company, but the time spent interacting while in the company of others that created an interprofessional closeness within the team:

*“Sometimes you don't see each other that much. So, when you do see one another and have time it's about making the effort to see how each other is and how they are getting on.”*

(P123, OT/int)

*“...me and [NAME] have no relationship, one time I saw her outside of work I smiled, and she just ignored me (laughs). Like I know things are different outside of work but even at work we don't really have anything to do with one another even though I see her most days when I'm at work.”*

(P127, HCA/int)

*“I think your confidence grows with the opportunities that you have to work and interact with other professionals. You know getting to know people from working together you, get to know people names and you feel confident in asking questions and approaching them.”*

(P124, nurse/int)

The significance of time spent interacting was also articulated interprofessionally with participants from different disciplines describing how time spent interacting did not need to be physical. They described how they regularly interacted with others via different methods (i.e. over the phone). This indicates team closeness, with professionals acknowledging and respecting the contributions of others and including them, even when they were physically unavailable:

*“...even though I won't see a colleague I will interact over the phone numerous times a day.”*

(P122, consultant/int)

*“I will start off in the SALT office doing all the referrals but that’s mainly just inpatients, but often the ward will be ringing up saying can you come and see this patient or what’s happening with this one? So, you are still getting those phone calls...”*

(P121, SALT/int)

Time spent integrating during work tasks was found to include actions of both a personal and professional nature and occurred throughout the working day. The below quotes provide evidence of personal and professional interactions that occurred between the different professionals within the team:

*“P130 while stood at the nurses station documenting asks a nurse sat at the nurse’s station if the weekend was ok on the ward. P130 and the nurse engage in a conversation about what happened on the weekend shift before making a joke in which they both laugh.”*

(P130, doctor/ob)

*“I like going to the MDT because it’s not always focused on work like often in-between patients we chat and ask how each other is.”*

(P123, OT/int)

*“Like the domestic [NAME] we don’t discuss anything physio wise, but I love to chat to her while I’m at the computer or while she is cleaning the bay.”*

(P125, physio/int)

Time spent integrating was found to be an impetus for professionals to get to know one another. Time spent together on collaborative tasks led to personal communication. These interactions of personal communication enabled professionals to get to know one another as individuals. It links with the previous category, where sharing and valuing personal information were identified as important:

*“Sometimes as well you end up having conversations with like me and the pharmacist or me with the nurses having conversations about diseases. Em your kind of go off on one a little bit, kind of like oh my auntie had that but when she had it, it was like this and so on. So, you get to find out stuff about each other about taking about clinical stuff as that’s common ground.”*

(P129, doctor/int)

*“...when you spend a great deal of time with them you can lean the nonverbal signs of stress or you learn what makes them stressed or how they deal with it as you get to know each other’s personality.”*

(P124, nurse/int)

One participant clearly articulated how time spent interacting with others from the team enabled deep connections, which they described to be like family, suggesting trust and growth in the participant’s social circles:

*“Here you have to work as a team and from that you have time to get to know people on both a personal and professional level and become part of the stroke family.”*

(P133, research nurse/int)

Other participants, while not explicitly describing relationships as ‘family’, made comments that suggested strong relationships. Participants described how the stroke care MDT was ‘like no other’, with the stroke care MDT invoking feelings of inclusivity and closeness:

*“...when I go on other wards, I feel like I don’t have that same relationship because I don’t know anybody because I only go once a month. So, I think seeing and spending time with the same people every day does make a difference.”*

(P121, SALT/int)

*“..it is better than other wards we work more clearly as a team here I feel more involved with the physio’s and OT’s in other areas I felt like I didn’t have much to do with them or have much interaction with them. Here it feels there is more of a push or effort made to interact with one another.”*

(P124, nurse/int)

One participant described feelings of sadness because a professional from a different discipline leaving because their role meant they rotated between departments. This again

indicates the close connections that develop between the interprofessional MDT stroke members, with time spent integrating and getting to know each other being key:

*“It is disappointing we have a doctor who has been here since January and the continuity is fab, she knows us and has taken the time to know how the ward works and we have gotten to know her. To think that she is going at the end of the month it is a horrible feeling really. When new doctors start it can be really frustrating. They have to take the time to get to know how we work and how to care for stroke patients.”*

(P134, nurse/int)

Other participants also suggested that they grew in terms of confidence and felt more comfortable after spending time interacting with other professionals. This time spent interacting provided insightful knowledge of how and when to approach certain team members, which enhanced feelings of comfort and confidence when collaborating:

*“...the more time I spend with people the more comfortable I become around them. So now I feel I could have more of a friendly chat about our lives when walking up the corridor or at the nurse’s station.”*

(P121, SALT/int)

*“Depending on what they’re doing I would happily interrupt them to ask a question or for an update...I guess over time I have learnt how and when to approach certain members of the team”*

(P134, nurse/int)

#### **5.4.2 Sub category two: Creating a positive interactive environment**

From the data, an environment that inhibits and promotes a positive interactive environment was important for creating inclusive behaviours, which contributed to the understanding of stroke care IPW relationships. Creating a positive environment was advocated by both senior and junior members of the team and emerged from the data via the interactions that promoted team equality and created an approachable, engaging and motivating atmosphere.

#### 5.4.2.1 Property one: Team equality

Although participants indicated that they perceived the ward to be one that promoted a non-traditional hierarchical approach to working, this was not always seen during observations. Interactions observed instead were interpreted to be more in line with the expected traditional structure of professional hierarchy. In this study, the medical side of the team (consultants and doctors) were observed to have adopted the ‘*in-charge*’ approach. For example, during meetings, consultants spoke first when discussing patient care, followed by the more junior doctors and then the nursing or therapy staff:

*“During the ward weekly MDT P133 remained quiet until it was their turn to contribute. P133 contributed to the discussion after a consultant a doctor and a nurse.”*

(P133, research nurse/obs)

There was clearly an implicit ‘*running order*’ for professionals contributing to the team meeting. Despite this, equality and inclusivity of the views of other professional disciplines were seen. During these meetings, all team members were given the opportunity and time to contribute to the discussions, negotiations and decision-making surrounding patient care:

*“After P133 had finished their contribution they returned to being quiet and listened to the next professional to give their contribution. P133 remained silent until the last professional contributed to the discussion.”*

(P133, research nurse/ob)

The quotes below demonstrate that although the traditional hierarchy structure was present in the stroke care MDT, additional steps were taken to promote a positive atmosphere which endorses equality. This was seen through actions of doctors not being given preference on patient case notes. Patient files were instead picked at random:

*“P122 in MDT round picks up patient files from the trolley and distributes to the medical team who are either already seated or as they walk through the door.”*  
(P122, consultant/ob)

*“...here we try and not have anyone in charge we are free to talk. We take out notes randomly to look at and discuss. We ask nursing staff to openly talk about patients as well as the other professionals to see from their perspective what is going on and how to move forward.”*  
(P122, consultant/int)

Professional equality within the stroke care MDT was acknowledged and promoted verbally during interviews, as well as physically through the observational data. One participant described how they felt listened to when a senior member of the team, who was from a different discipline, took the time to listen to their clinical opinions:

*“...here you feel like you are listened to and that your opinions count. Consultants will often ask you in front of the doctors what you think, that doesn't always happen on other wards.”*  
(P126, nurse/int)

Another participant made comments on the fairness of the senior staff who were in charge:

*“I find that the senior nursing team are fair when it comes to allocating ward teams especially with who works well together and if you have three long days in a row.”*  
(P134, nurse/int)

Implicit in the comments so far presented is the acknowledgement that professionals felt that they have an equal opportunity to express their opinions and contribute to patient care. The weekly MDT meeting was a focal point in the team's week, and apart from the daily ward rounds, no other meeting brought a large group of professionals together to discuss and negotiate patient care. However, outside of a meeting context, participants also felt equally valued for their contribution, with professionals seeking the opinions of other disciplinary team members on many occasions:

*“P122 asks an HCA how a patient is doing and what their last observations were.”*  
(P122, consultant/ob)

*“P134 shouts after a physio as they walk down the corridor and asks if they have assessed the new patient’s mobility.”*  
(P134, nurse/ob)

*“P123 approaches a nurse to ask if it is appropriate to assess a certain patient who was poorly the previous day.”*  
(P123, OT/ob)

Professionals approaching other professionals from different disciplines to discuss patient care was observed on many occasions. Team members equally valued, trusted, and acknowledged each other’s professional opinion. It also showed that they felt comfortable in their relationship, with them. One participant who had experience from another department reflected that this was not the same elsewhere:

*“Some of the nurses know about stroke more than I do so I can ask for advice off them as well. Because I am a NAME, I don’t feel like there is a barrier between what my role is meant to be and what their role is meant to be. I find some of my friends who are NAME can fall into the trap of I am a NAME you are a nurse I will tell you what to do.”*  
(P129, doctor/int)

Another participant noted the importance of creating a safe environment, where professionals feel equal, so that opinions on patient care are expressed freely. This suggests that the IPW relationship in stroke MDT working is fostered on the feelings of value, safety, and comfort created from a sense of equality:

*“We encourage each other to participate and speak out, that might be right that might be wrong, but we don’t criticise each other... You know there is a hierarchy within the team...it’s giving people the equal opportunity to talk... sometimes people become reluctant to be involved and voice their opinions. Here everyone is on the same level you have an equal say.”*  
(P122, consultant/int)

#### 5.4.2.2 Property two: An approachable, engaging, motivating atmosphere

During data collection, the atmosphere of the stroke care MDT was found to be of significance to relationship development. It was specifically the approachable, engaging, and motivational nature of the MDT that led participants to feel confident, safe, and included.

One participant described how the approachable atmosphere made them feel confident enough to have a relationship where they could joke with senior members of the team:

*“...I think on this ward especially it is very easy to speak to the consultant not as my peers because that’s clearly not the case. I am very comfortable about having a joke with the consultants and with the nurses.”*

(P129, doctor/int)

This is another reference to humour in the interprofessional stroke care setting.

Another participant reiterated the approachable atmosphere finding, with their description of a senior member of the team encompassing positive attitudes of being open and accessible. This led to the participant to specifically seek them out in times of need:

*“Even though she is the manager I feel she makes herself approachable which I like...she has an open attitude I feel like I can go to her for support.”*

(P133, research nurse/int)

Perceiving the team as approachable and motivating was raised as important by a number of other participants from different disciplines:

*“...sometimes people become reluctant to be involved and voice their opinions...If people are happy, they are enthusiastic...they are going to be more motivated to work and work at the best of their ability, without fear worries or being under pressure.”*

(P122, consultant/int)

*“I would say I feel comfortable going up to a mental health consultant or a physio for advice or help and I hope that they would feel the same coming to me.”*  
(P124, nurse/int)

*“I feel I can ask them for advice or that no matter how stupid the question is I feel like I can ask them it and they will help me...I also want the nurses to find me approachable I want to know that they feel like they are talking to someone worth talking to.”*  
(P129, doctor/int)

*“...we have to be honest and say these things but within the MDT’s it has the atmosphere of that it’s ok to, we need to be professional for the patients and say what going on, but you feel ok and safe doing so.”*  
(P123, OT/int)

*“I haven’t been here that long ... the hostess they are really friendly and have helped me out with thickening drinks and where to find things.”*  
(P131, HCA/int)

*“Like if someone doesn’t get a slide sheet or does something that isn’t right, because we have good working relationships, we are not afraid to say, {NAME} you need to get a slide sheet.”*  
(P134, nurse/int)

There is a perception that the stroke care MDT environment is interprofessionally positive and supportive, fostering growth and relationship building.

One senior member of the team described how being supportive and encouraging others brought new team members out of their shell and motivated them to be involved. This has links to category one, with interactions related to relationship perceptions having links to self-development and growth. This team member attempted to get the best out of others by being approachable and motivating:

*“Sometimes new staff are quiet to start with but once we show support and encouragement, they do start to speak up more.”*  
(P122, consultant/int)

Participants were observed to go to great lengths to ensure a positive atmosphere was maintained. There were, however, some examples of deliberate strategies to avoid interacting with others:

*“I feel that if you know the names of people whatever you want it’s a bit more palatable to ask if you have got a name and you can say oh I’m really sorry NAME or whoever but can I have...like there is one nurse who’s I am not entirely certain how to pronounce her name and I just avoid it at all cost and try not to talk to her which is a bit mean, but if I can I will ask and talk to someone else.”*

(P129, doctor/int)

This contradicts the notion of interprofessional equality. Interestingly, it was less about not wanting to engage with the particular nurse, but instead a situation in which the participant might feel awkward by incorrectly pronouncing someone’s name. Behaviours to avoid tense and awkward encounters were also found in another participant’s response who described how they did not want to re-ask someone’s name because they perceived the acceptable period to ask them again has passed:

*“...personally I find it difficult to remember people’s names, I recognise their faces and I know who they are, but I have left it too long to ask for their name again....”*

(P130, doctor/int)

By minimising the risk of awkwardness for both professionals, positivity in the atmosphere is maintained.

Talking, offering reassurance, and interacting frequently were also described as being important for creating a positive environment and for relationship building:

*“It makes the atmosphere nice knowing that you are not going to be working in silence...Like if you not getting on with someone or you not talking that’s when things get missed so here having some form of relationship whether it is being best friends or just a working relationship It is important to have.”*

(P127, HCA/int)

*“People have this perception that it is really heavy ward. Talking to one another and making sure everyone is alright is really important. It’s a huge place it can be scary and daunting so I think by offering reassurance, security and understanding makes a difference. I think we are approachable, and a lot of people do want to come back because of it.”*

(P134, nurse/int)

While the stroke care MDT was perceived as friendly and approachable, this was not replicated elsewhere. This indicates that, alone, creating opportunities for professionals to interact is not enough to construct interprofessional relationships:

*“On other wards you don’t know the staff and they don’t know you, so they’re less likely to spend that time with you...I feel like an external person who has just come in to see the odd patient...on the other wards I wouldn’t talk to the staff...you stand at the side in silence and document.”*

(P121, SALT/int)

#### **5.4.3 Sub-category three: Interdependent ownership of collaborative practice**

Interdependent ownership of collaborative practice refers to the social interactions and behaviours that gave participants a shared understanding of the reliance on each to complete MDT tasks. This acceptance of the needs of others was significant in creating an inclusive working and learning environment and for understanding the IPW relationships of the MDT. Interdependent ownership of collaborative practice emerged in the data in the shared, goals and responsibilities that the MDT encompassed.

### 5.4.3.1 Property one: Shared goals and responsibilities

Having shared goals and responsibilities was linked to inclusive working and relationship perceptions via the interdependent ownership professionals had for collaborative practice, which emerged in the ‘in it together’ attitude:

*“...the jobs we carry out each day might be different, but we do them for the same reason and that is to care and look after our patients.”*

(P126, nurse/int)

*“There is a strong awareness here of what the wards goals are in relation to patient care that way everyone know what they are doing and where they stand.”*

(P125, physio/int)

*“The aim at the end is the same but we all contribute differently...So I guess your sharing the same responsibility...you can help each other out...It doesn't mean your better than any other profession or you should let pride get in your way when you need help, it's just the way it is.”*

(P122, consultant/int)

*“The good thing about working here is we all sing from the same hymn sheet.”*

(P134, nurse/stroke)

This ‘in it together’ attitude from having shared goals and responsibilities was found to influence relationships through increased feeling of perceived closeness:

*“Here we share the responsibilities that in itself makes you closer to people as you have this immediate understanding of what's involved when working here...”*

(P130, doctor/int)

*“There are people here that I don't like but I have a very good working relationship because you work together for the patient and that's what you focus on when working with them.”*

(P129, doctor/int)

*“I think if you felt that you were on your own and you were the only one that felt that pressure or that stress or frustrated or whatever, that would make working here ten times harder. I don't know why but it's the feeling of all being in it together, I think again it all goes back to support and being there for one another.”*

(P126, nurse/int)

Appreciation and respect for the role of others within the stroke MDT was expressed, with participants accepting reliance on each other to complete MDT tasks:

*“We communicate well together; we need to here....there are several times throughout the day when we get together to discuss patients. You know this area is so fast we need the team, we need the physios, the OT’s. They have all the information from the initial assessment that they feedback to the nurses, so without them we wouldn’t get very far.”*

(P134, nurse/int)

*“If something has changed with the patient someone will inform me and I might have to think right I need to do something else in my sessions.”*

(P121, SALT/int)

Both participants had an interdependent view of their collaborative practice, with shared goals acknowledged as important. Acknowledging the need of others to complete MDT tasks was also found to influence feelings of animosity towards other disciplines:

*“Patients can need a lot of input from a range of staff and because everyone is aware of that you don’t feel so frustrated when you go to a patient and an OT or the nurse is with them because next time they might come along and you’re there.”*

(P125, physio/int)

*“They have been so supportive this last couple of months we have been really short staffed and the doctors and actually, the OT and physios too have done things that are maybe not in their role. Like the doctors have referred patients themselves or sorted out meds themselves, where often they would delegate to the nursing staff. The Physios have walked patients up and down the ward to help calm them down... I feel like they really understood the pressures the nursing staff are under.”*

(P124, nurse/int)

Shared goals and responsibilities also emerged from the data in the form of the shared expectations professionals had for one another. Participants described the importance of team members pulling their weight due to the complex needs of the patients. One

participant described how they felt they had been carrying new members of the team, which negatively influence their ability to carry out their own MDT tasks:

*“It’s hard enough working on here when you have your own jobs to do it’s even harder when you are doing your job and then carrying others.”*

(P127, HCA/int)

Although the above quote is negative, it does support the category findings, with ‘carrying others’ reflecting the importance of shared expectations and a co-ownership attitude for collaboration within stroke care MDT working. This also has links to category one, in relation to a sense of belonging being influenced by ‘carrying others’.

The following quote presents a participant’s reaction to being updated about a patient’s discharge status during an MDT meeting. The participant notes that from this meeting, their response was to make that patient a priority, indicating that they had a sense of having shared responsibilities, shared goals, and an interdependent ownership of their collaborative stroke care practice:

*“Like in the meeting the doctors, nurses and OT’s might say someone is for discharge, but they need to have a stair assessment beforehand, so I would make that a priority patient.”*

(P125, physio/int)

The decision to prioritise that patient was influenced by the needs of the patients and of the other professionals within the team.

The interdependent ownership of collaborative practice for creating an inclusive environment was also evident in the language that the participants were observed to use. Instead of “I” the words “we”, “us” or “the team” were used frequently to describe how clinical procedures are carried out as well as to how day-to-day activities occurred. The use of these pro nouns shows inclusivity and a sense of a team built on relationships.

#### **5.4.4 Category summary**

The category of *inclusive working and learning* is about interactions that promoted inclusivity, which brought the different professionals together in a united sense that they needed one another, regardless of discipline or hierarchical status. The category data found that perceived levels of closeness framed working relationships, with closeness being influenced by a positive interactive environment, interprofessional proximity, and an interdependent ownership for collaborative practice. Similar to category one and two, creating a positive interactive environment, interprofessional proximity, and having an interdependent ownership for collaborative practice increased participants’ social circles, as well as levels of self-esteem, safety, and job satisfaction. In addition, data in this category highlighted IPW relationship characteristics that were found within previous research, which was identified in within Chapter Two, i.e. respect and trust.

#### **5.5 Category four: *Interprofessional compassion***

Interprofessional compassion is the final category and refers to the social behaviours and interactions that demonstrated high levels of compassion that the stroke team members displayed for one another, regardless of which disciplinary group they belonged.

Actions and behaviours of compassion across professional disciplines were important in explaining the emotional ties within the MDT's working relationships. Interprofessional compassion was explained through properties of concern and conduct towards one another, protecting each other, and dealing with conflict (Figure 15).

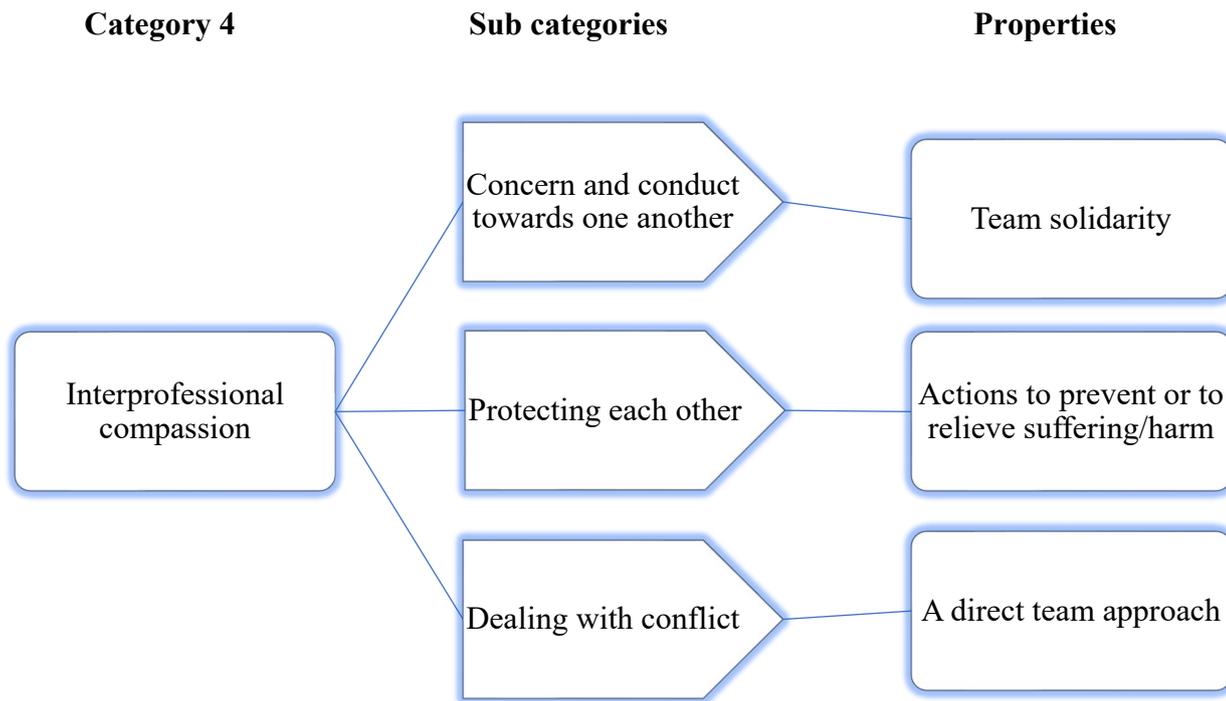


Figure 15: Category four: Interprofessional compassion category

### 5.5.1 Sub-category one: Concern and conduct towards one another

Concern and conduct towards one another refers to how interprofessional compassion was demonstrated through the treatment of each other and the feelings professionals had for one another. This was found to increase feelings of closeness between individuals of the different professional disciplines.

### 5.5.1.1 Property one: Team solidarity

Team solidarity refers to how team members, regardless of position or discipline, came together to look after one another to collaborate successfully. Professionals with a similar disciplinary background were found to have deep connections with one another:

*“With the other SALT they are all very friendly we do things and see each other outside of work, we go out and meet up...I guess it’s just easier, we do the same job we just already have that shared interest we are similar.”*

(P121, SALT/int)

*“So, I would so I am closest to the other OTs...Apart from them next I would say the physio’s and I would also say I am close to the speech and language therapist NAME.”*

(P123, OT/int)

However, compassion through team solidarity was found to occur across the stroke disciplines. It was reflected in the way professionals treated and cared for each other, and reacted during difficult situations:

*“It’s important that you give back.... we are all in it together.”*

(P122, consultant/int)

*“Even if I’m with somebody who I don’t really get on with or who I’m not that close to (pause) like we have a lot of different cultures on here and I’m from a little town. So, working here I have learnt to adapt and to get on their wavelength and ways of working”*

(P134, nurse/int)

*“We are a team and things happen, even if it’s not about a patient we pull together and step in for one another, it’s just a given.”*

(P123, OT/int)

*“...there have been incidents when a physio or OT have had issues with work or a specific patient and I have been like right how can I help you and they have done the same for me.”*

(P124, nurse/int)

The comment “*it’s just a given*” suggests there is a consensus of concern for the wellbeing of other professionals working in the stroke care MDT. Further evidence of care and compassion from an interprofessional perspective included:

*“The staff here help each other out a lot. Like in NAME if someone is having a stressful day or some assessments are taking longer than others we go and help, I see this especially within the nurses and physio team.”*

(P123, OT/int)

*“When I first started working here, I hated it... But a couple of health care’s come over and took me under their wing and then after that I started to enjoy working here and I felt comfortable and part of the team.”*

(P127, HCA/int)

This team solidarity was also noted in observations:

*“P125 while walking back to the NAME room stops and enters a patient’s bay to start helping an HCA put a patient back to bed.”*

(P125, physio/ob)

On probing, P125 comments that situational support would always be given to support team members to achieve MDT tasks during times of difficulty:

*“...if I saw someone truly struggling, I would step in and do whatever for them.”*

(P125, physio/int)

Concern for the wellbeing of others was found to occur even in their absence, with participants asking and thinking about others. This suggests that professionals had a level of personal knowledge about one another and a level of empathy and understanding for others:

*“Have you seen [NAME] lately? How are they getting on?”*

(P134, nurse/ob)

*“...there is a physio who is pregnant and there is also a nurse so as a physio working closely with them both I would think twice before asking them to do something.”*

(P125, physio/int)

P125’s quote additionally is another reference to receiving professional rewards in the interprofessional stroke care setting, with personal circumstances being valued and considered when deciding who is going to be doing what tasks.

Throughout all sets of observational data, the ward was observed to be continuously busy, which is a fact reiterated by participants in interviews. Data showed that interactions of team solidarity stemmed from professionals having empathy, with professionals helping each other out because they understood the daily demands and pressures that each other are under:

*“.....a nurse will come up to you and say so and so isn’t well so I wouldn’t see them today or this patient is washed and dressed and ready to go. Things like that save you time in the long run.”*

(P125, physio/int)

*“P124 at the end of their late shift approaches an F1 who has stayed late and is still sat working at the nurse’s station... “[NAME] why are you still here? Go home your back again in the morning...leave that, you have done enough, go home.”*

(P124, nurse/ob)

When probed as to why they encouraged the F1 to go home, P124 responded by identifying concern for their wellbeing, which indicates the emotional ties between professional members:

*“He often stays late, you can’t keep that pace up of staying late every night, the night team can pick up any jobs that need doing. I have seen so many people go off with stress or leave because of the pressures.”*

(P124, nurse/ob)

Along with professional support for completing MDT tasks, participants also experienced personal support from team members:

*“A nurse approaches P127 after the second time they left the ward to answer their phone. P127 on their return to the bay is asked by the nurse if they are ok and if everything is alright, in which they explain that they are buying a house and are still trying to negotiate the price.”*

(P127, HCA/ob)

*“...one of the girls was getting married and her partner just called off the wedding and I wouldn’t necessarily say we are close or anything, but we all stick together when something like that comes out of the blue. 100% if something happens, we look after each other.”*

(P127, HCA/int)

The above quotes show the positive responses of team members supporting others in times of need. It supports the previous discussions made within this findings chapter as a method for professionals to get to know one another. The comment that *“we stick together”* even when they perceive themselves not to be close, indicates a relationship culture of mutual support, trust, and compassion.

The quote below highlights the pressures stroke care MDT professionals are under, with actions of support for personal problems influencing job satisfaction and the ability to efficiently carry out MDT tasks:

*“Recently the girls have been amazing because I have recently had some bad news at home and I feel inside of work and outside of work they have been really understanding and have been there for me...Here you are not just working in an*

*office, you're dealing with life and death and you need that support to mentally function and to do your job, it makes coming to work that much easier."*

(P124, nurse/int)

The above quote provides further evidence of crossover, with support extending beyond professional boundaries. It again indicates the influence of compassion on job satisfaction and the perceived social circles of professionals.

### **5.5.2 Sub-category two: Protecting each other**

Protecting each other refers to how professionals reduce or shield other team members from difficult situations or from experiencing episodes of harm. This is an indication of established relationships.

#### **5.5.2.1 Property one: Actions to prevent or relieve suffering/harm**

It became clear, during initial data collection and analysis, that caring for stroke patients was not the sole role of the stroke care MDT, with acknowledgments being made to care being delivered beyond the scope of patients:

*"You know we don't just look after patients we look after each other."*

(P127, HCA/int)

*"It's good to have peoples backs, regardless of wherever you're a nurse a domestic or a pharmacist.....we need to look out for each other even if people are just feeling low it's good to have that person there to boost you."*

(P134, nurse/int)

Protective actions that emerged from the data included stepping in or intervening in certain situations to prevent MDT members from making mistakes, preventing others from getting

into trouble, and preventing uncomfortable encounters (i.e., with patients, relatives, and/or other healthcare professionals):

*“We do look out for each other like when you came and watched me [NAME] asked if he was being watched for an audit as last week there was a girl watching us doing the dinners and I was like no I would have given you the heads up.”*  
(P127, HCA/int)

*“They’re the person who updates or warns me about angry relatives (laughs).”*  
(P124, nurse/int)

*“I stepped in to stop [NAME] complaining about her supervisors audit report because it’s not good for the patients to hear and I don’t want them getting into trouble if what she said and how she is going on gets back to her supervisor.”*  
(P134, nurse/ob)

These actions of protecting one another were found to have positive impacts, with feelings of contentment being experienced from knowing that MDT members were looking out for them:

*“...all I am doing day to day is trying to get through the day without getting shouted out and its nice knowing other staff will help you accomplish this (laughs)...”*  
(P129, doctor/int)

One participant described how the protective stance adopted by the team led to increased feelings of safety, which encouraged others to engage in ward interactions, i.e. learning opportunities. The quote below links the increased feelings of safety to how relationships were perceived by participants, in that they hoped that others perceived their relationship with them as one that is safe. This again indicates a level of trust within the interprofessional relationships:

*“...no one is here to criticise you in front of others which is a good thing. It’s a friendly environment it’s important that staff ask questions and learn and questions*

*things and that they feel safe doing that...I perceive the relationships with staff as them feeling safe and comfortable enough to approach me.”*

(P122, consultant/int)

Apart from elevated levels of safety felt through these regular protective actions, an expansion in levels of confidence was also a consequence of interprofessional compassion. P129 outlines how they felt more confident working as part of the MDT because the wider team were protecting them from complaints, by approaching them when they had done something wrong:

*“As an FI I don’t want to build up a list of complaints and I feel that there are people who will come up to me and say did you mean to do that because it’s wrong and I think that’s essential for working in this profession and building on your confidence.”*

(P129, doctor/int)

The above quote also illustrates the MDT’s ‘in it together’ attitude, with actions of protection leading to the participant’s ability to work effectively and efficiently.

The language used by participants within the stroke care MDT again suggests close ties and gave insight into the motivations behind why they protect one another, with professionals in the MDT identifying team members as extended family:

*“I mean you have your family and then you have your work family.”*

(P131, HCA/int)

*“[NAME] has always been a bit of like a maternal figure for me since I started working here.”*

(P133, research nurse/int)

*“We are one big family, we are one big team, we all need to look out for each other.”*

(P134, nurse/int)

### 5.5.3 Sub-category three: Dealing with conflict

While no instances of conflict were seen during observations, several participants discussed instances of conflict that had arisen between team members and how they were dealt with via a direct team approach.

#### 5.5.3.1 Property one: A direct team approach

Professionalism, regardless of discipline, status or position is an explicit fixture of every regulatory body's code of conduct. Dealing with conflict professionally is obligatory.

However, participants suggested that dealing with conflict went beyond professional duty:

*"I did clash with a junior doctor once...For me I have to sort the problem there and then...talk it through then move on."*

(P124, nurse/int)

*"I actually was accused of bullying someone... the sisters pulled us both and we got to the bottom of it...we got past it, I talked to some of the other nurses about it and the sister."*

(P127, HCA/int)

Having this open line of communication and being able to confide in others over difficult subject matter shows unity and a team desire to diffuse difficult situations by dealing with conflict immediately. One participant described the impact conflict had on the working atmosphere and their ability to work as part of the MDT, with it influencing job satisfaction by causing others to feel uncomfortable:

*"I couldn't have kept coming to work and worked in an atmosphere. It also makes other people uncomfortable if they are in the company of two people who are not talking. Like on your break you want to be able to go in and sit down and chat and not to feel awkward because two people have fallen out."*

(P127, HCA/int)

Conflict between professionals within the MDT was also found to extend beyond just those involved. P123, once the digital recorder was turned off, described how management had to 'step in' as conflict between two professionals had started to affect the actions and behaviours of the wider OT team:

*“There has been conflict within our team. I wasn't personally involved but everyone was aware that there were issues between these two people. In the end management had to step in as the tension was starting to affect the whole team. Some people were gossiping about it, it was uncomfortable at times during meetings and breaks, people didn't want to work with one another.”*

(P123, OT/ob)

An interprofessional approach to dealing with conflict was also seen in one participant's response, who, although had not experienced conflict themselves, had an awareness of conflict existing within the MDT:

*“I don't get involved in other people's dramas, however you can't help but notice the dramas...we were just saying this morning that we need more team meeting where everyone has the chance to come together and air out issues. It's not fair on other people, you put others in difficult and uncomfortable positions.”*

(P134, nurse/int)

Conflict was also found to impact on working relationships. Interestingly, the break down occurred after the participant took a direct approach to resolve it:

*“There are people that I would say I have had minor disagreements with...I have pulled someone up on their professionalism...I thought their behaviour was inappropriate, I felt like it was my duty to say something...we haven't really recovered from it if I'm being honest...I always try and make conversation though if I see them, even if it is awkward.”*

(P133, research nurse/int)

While there was a break down in their working relationship, P133 still made a conscious effort to interact and engage with the other professional, even if it caused them feelings of discomfort. This supports the previous comments made within the category of reducing or preventing harm for the sake of the team. The comment that P133 always tries to make an effort indicates growth through taking a professional approach, despite feeling uncomfortable.

Contradictory to P133's experience of conflict, P124 reflected on how their experience of dealing with conflict directly resulted in a closer relationship being formed with the other professional. Their experience of dealing with their conflict resulted in a deeper connection, in which compassion was felt from the support that they gained from the other professional:

*“He spoke to me quite rudely in front of a patient who was quite shocked and there was another time when he didn't discuss something with me regarding testing a patient with HIV...After I spoke to him about it we actually had a good working relationship...There was then an incident where a patient died suddenly and I was upset and I found it really hard to get over, this doctor came over and stood with me for ages and explained everything and was really understanding supportive.”*

(P124, nurse/int)

This quote highlights how dealing with conflict can influence job satisfaction.

#### **5.5.4 Category summary**

In summary, the findings from this category highlighted that stroke care interprofessional relationship ties were understood through a series of collaborative interactions that enabled and inhibited acts of *interprofessional compassion*. This category, like the other three, showed that interactions of compassion through the sub-categories of concern and conduct,

protecting each other, and dealing with conflict, led participants to experience personal and professional growth (i.e. job satisfaction and feelings of being safe). In addition, the findings within this category showed that, where experiences of interprofessional compassion were felt, participants were found to enter into other interactions, for example feeling supported and more confident and safe enough to access the learning opportunities and be involved in ward humour. This again shows clear links between the four categories discussed and within the previous research discussed in Chapter Two.

### ***5.6 Chapter summary and conclusion***

This chapter has discussed the thesis findings, which were presented in the form of four key categories. All four categories, along with their sub-categories, were discussed in turn, with each discussion illustrated with data quotes and a detailed interpretation. The insight gained from this research study has derived directly from the interprofessional stroke care MDT participants, and is grounded in the data that was collected and analysed. Through an in-depth constant comparative analysis process, the four emerging categories together were significant for interpreting how stroke care professionals through interactions of collaborative practice understood their IPW relationships. As discussed the process of interpretation is significant within the symbolic interactionism (SI) perspective, with social meanings being generated, understood and learnt through interpretations (Blumer, 1969).

It was evident from the findings that although stroke MDT relationships had similar characteristics to those found within the pre-existing literature, they were not simply perceived as ‘friendships’ or ones that were ‘trustworthy’. Perceptions instead emerged as multi-dimensional and both professional and personal. The interprofessional working

relationships observed and discussed were found to be embedded within the collaborative interactions occurring specifically in the four data categories discussed. It was evident from the analysis process that the collaborative interactions within the four categories, were underpinned via a core social process (Figure 16). The core social process of experiencing growth was found to be the social foundation for interpreting and conceptualising the interprofessional relationships of the stroke care MDT participants.

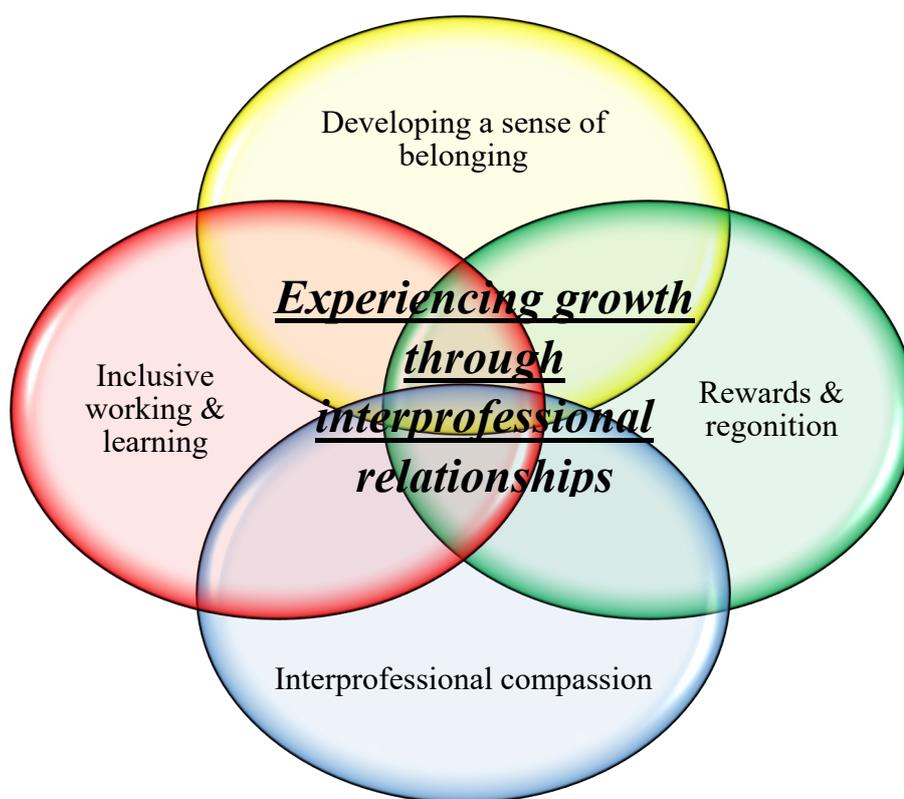


Figure 16: Experiencing growth through interprofessional relationships: the core social process for explaining IPW relationships in a stroke MDT.

Experiencing growth from interprofessional relationships was perceived as a positive outcome and occurred where interprofessional relationships were robust. As discussed, the

interprofessional relationship ties in stroke care emerged through the collaborative interactions found within the four data categories. Findings indicated that it was not the interactions per se that provided insight into the interprofessional relationship perceptions. Instead, perceptions derived from the personal and professional growth that occurred in a physical and emotional capacity, which participants experienced because of their interprofessional stroke care practice. Examples of growth from the four data categories include acquiring new knowledge, building confidence, job satisfaction, feelings of value, and expanding on social networks. Figure 17 provides illustrative examples of how the core social process of growth was found to be grounded within the collaborative interactions in each of the four data categories and their sub-categories.

As illustrated in Figure 16, all four data categories either alone or in conjunction with one another were found to facilitate participants to experience growth from their interprofessional relationships. Examples of growth from each of the four categories has been illustrated in Figure 17. The types of growth experienced through the collaborative interactions within the four categories were further interpreted to have physical, emotional, professional and personal dimensions. Figure 18 provides an overview of the types of growth that were experienced by participants from their interprofessional stroke MDT relationships.

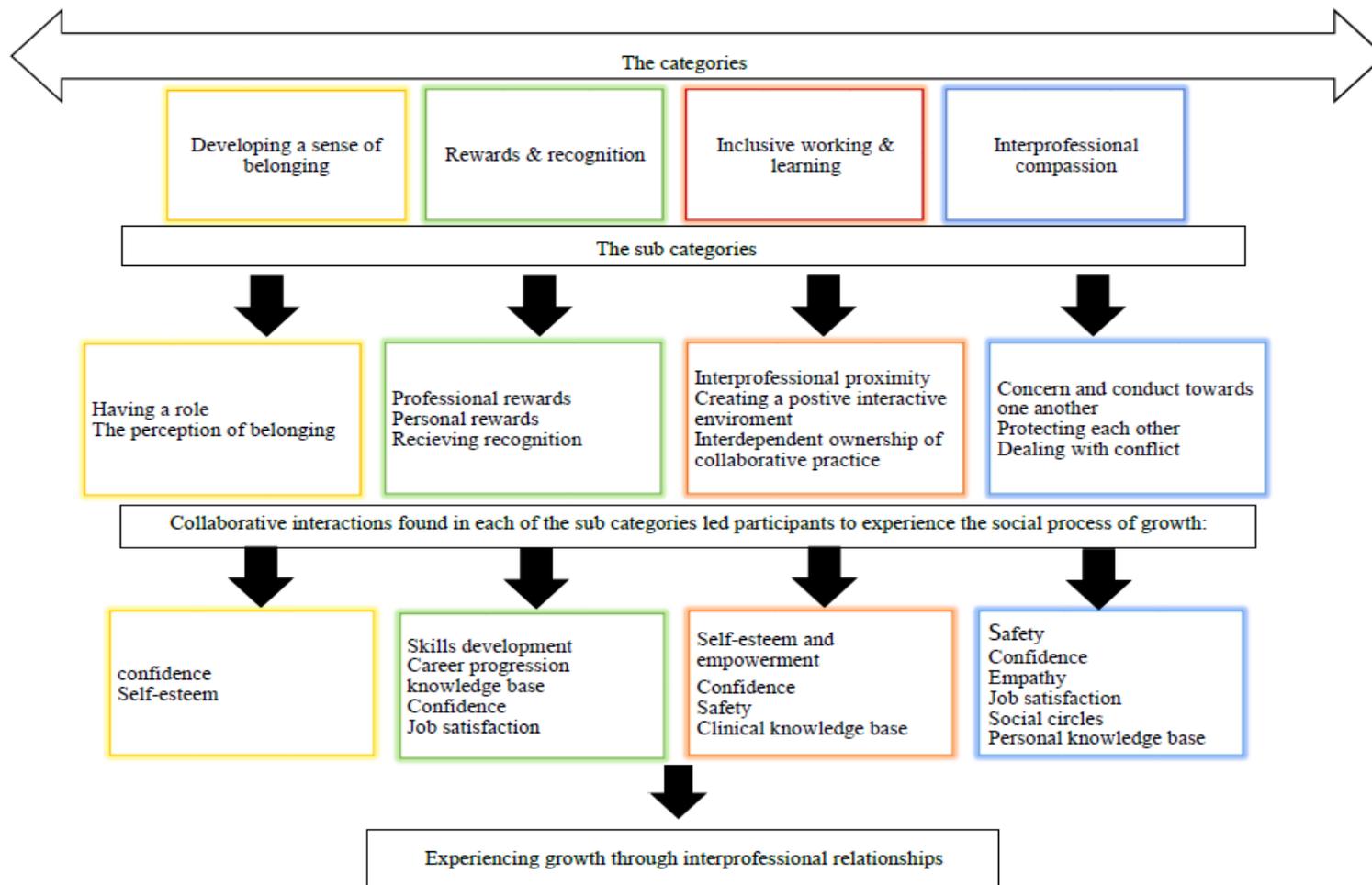


Figure 17: How the findings led to the relationship perception of experiencing growth through interprofessional relationships.

The growth experienced from interprofessional stroke MDT relationships

Physical growth

Emotional growth

- ❖ Skill acquisition abilities
- ❖ Expansion in clinical knowledge
- ❖ Expansion in personal knowledge
- ❖ Career progression
- ❖ Increased numbers in social circles

- ❖ Job satisfaction
- ❖ Confidence levels
- ❖ Self-esteem/empowerment
- ❖ Empathy
- ❖ Security/safety

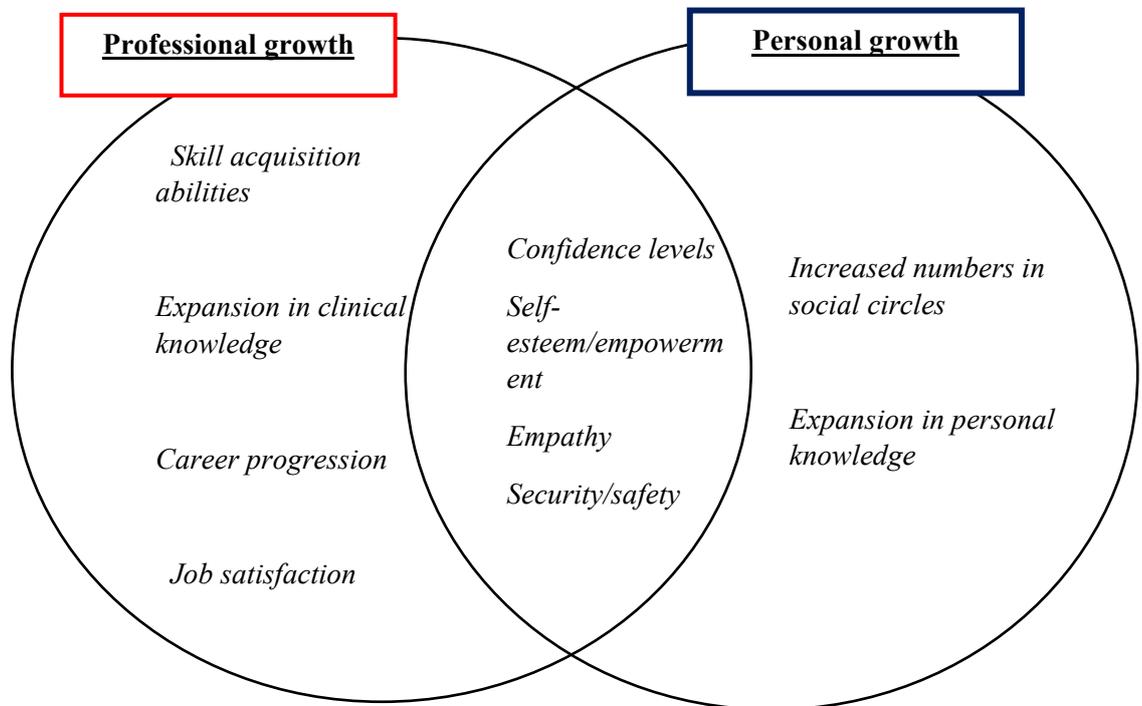


Figure 18: The types of growth experienced from interprofessional stroke care MDT relationships.

The discovery of growth as the core social concept for understanding interprofessional relationships led to the original relationship perception finding of ‘*experiencing growth through interprofessional relationships*’. This new finding offers an IPW relationships

perception that not only accounts for the complexities of IPW relationships, but offers a more clear and concise understanding of the collaborative social process that determines the interprofessional relationships of a stroke care MDT. This clearer and more concise perception comes from the findings social process approach, which provided a multi-dimensional explanation for understanding stroke care MDT relationships perspectives, which currently does not exist. The original interprofessional relationship perception achieves this as it acknowledges and accounts for the function, process, and motive for relationship development and maintenance, which included several of the characteristics and behaviours of the relationships, i.e. trust and respect, which have previously been found to be scattered within the pre-existing IPW relationship literature.

In the next chapter, the findings are critically discussed while revisiting the pre-existing theoretical literature. In addition, the significance of these research findings and their implications for IPW policy and practice will be considered in in the next two chapters.

## **Chapter 6: The discussion**



## ***Part 1: The emerging model***

### ***6.1 Introduction***

This chapter discusses the findings concerning the wider knowledge context and their contribution to advancing the theory. Part one begins by reiterating the research question to provide context for the discussion that follows. Key findings from the four categories presented in Chapter Five are revisited and reiterated. The discussion that follows provides a critical overview of the original propositioning model constructed from the findings, which provides a new frame of reference to permit the development of a better understanding of the interprofessional working (IPW) relationships of a stroke care MDT.

The discussions throughout the chapter are supported by evidence explored in the literature review. Further literary evidence is drawn upon to support the discussions, which is in keeping with the grounded theory (GT) methodological approach (Charmaz, 2014).

### ***6.2 A review of the thesis question and findings***

#### **6.2.1 The research question**

This thesis set out to address the following research question:

*“How do professionals working in a stroke care multidisciplinary environment perceive their collaborative interprofessional working relationships?”*

### 6.2.2 Findings summary

The supporting theoretical framework of symbolic interactionism and the methodology of constructivist GT were used to examine the social interactions and behaviours that exist between the interprofessional participants; uncovering the realities of the interprofessional working (IPW) relationships within the stroke care MDT under study.

The four data categories: *developing a sense of belonging, rewards and recognition, inclusive working and learning, and interprofessional compassion* provided a social process explanation of how participants perceive their IPW relationships within a stroke care MDT context. It was evident from the findings that the four categories were complex and interrelated, with each category being made up of a series of corresponding sub-categories and properties. In exploring this, an underlying social process was uncovered, which has informed the propositional GT developed in the model devised. This process of ‘experiencing growth’ in a personal, professional, emotional, and physical capacity was identified by participants as the central benefit of working interprofessionally in the stroke care MDT and provides the *Experiencing growth through interprofessional relationships model: a stroke care MDT setting* answer, for how professionals working in a stroke care MDT environment perceive their IPW relationships. This is in keeping with the theoretical literature of fulfilling needs and receiving benefits being the motivator for relationships and the IPW research, with D’Amour *et al.* (2005) analysis revealing that collaborative processes are developed with two purposes in mind; one to serve the patient’s needs and the other, to serve the needs of the professionals. This additionally fits with Hammick *et al.’s.* (2009) view on being interprofessional, which includes successful collaborative interactions to be ones that serve professionals, the team and patients.

These experiences of growth were found to explain the bonds, ties, and connections that occurred between the professionals within the stroke MDT. As previously discussed in Chapter Two when examining human relationships, researchers are challenged with not only explaining how human relationships come to develop, but how they ultimately break down and come to an end (Heaphy *et al.*, 2018). My original model explains both, with the data supporting the claims that IPW relationships perceptions are embedded in the social process of experiencing growth, with interprofessional relationships not forming or consequently ending when experiences of growth were or became absent. This indicates that the approach to researching relationships adopted by the thesis was robust, adding rigour to the original finding. As indicated in the literature review, other studies did not specifically identify when IPW relationships broke down. Finally, the relationships finding emerged from the sole constructivist grounded theory study that explores interprofessional stroke care relationships. Thus, it provides an innovative, comprehensive explanation of the process, function, and motivation of experiencing growth as the relationship understanding interprofessional stroke care professionals attached to their working relationships with others. This innovative IPW relationships explanation not only compliments the current literature for understanding IPW teams and work relationships (D'Amour *et al.*, 2009; Coissard *et al.*, 2017; King *et al.*, 2017; Persson *et al.*, 2018; Adamson *et al.* 2018), but it supports and contributes to the literature for what it means to be interprofessional (Hammick *et al.*, 2009).

Figure 19 is a pictorial representation of the proposed original model for how participants' perceptions of IPW relationships are embedded in experiences of growth.

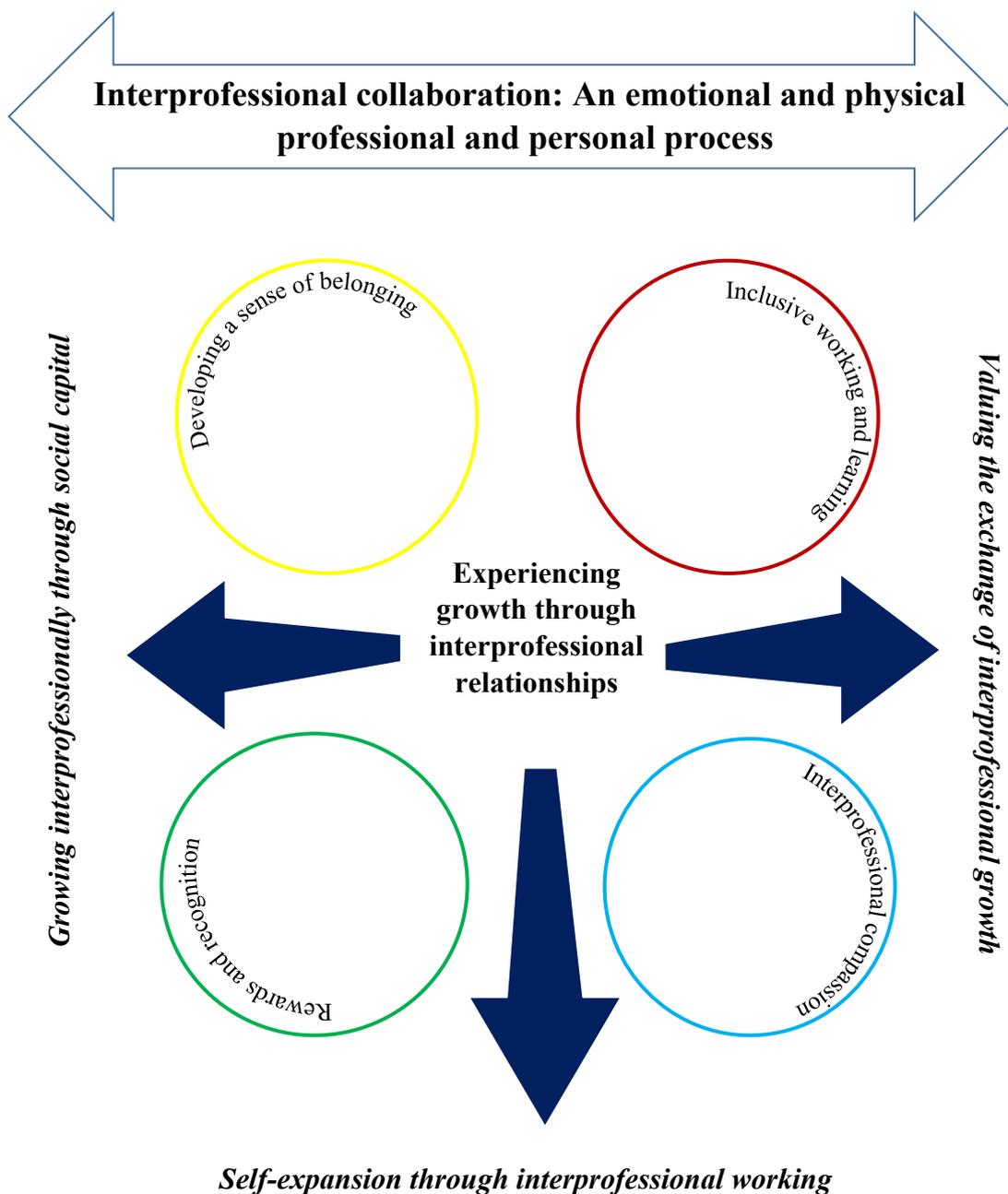


Figure 19: Experiencing growth through interprofessional relationships model: the stroke care MDT setting.

The elements of this proposed original model are discussed in the context of other pre-existing literature below.

### **6.3 An overview of experiencing growth through interprofessional relationships model: the stroke care MDT setting**

#### **6.3.1 The four categories**

As previously discussed, the findings identified four data categories: *developing a sense of belonging, rewards and recognition, inclusive working and learning, and interprofessional compassion*. These four categories are placed centrally within the model (Figure 19), as they give insight into the collaborative interactions and behaviours that brought the different professionals within the stroke MDT together. While elements of the four categories have been found in the pre-existing literature to explain IPW relationships, they are explored singularly, with the focus being on their importance in interprofessional relationships and not how they inform interprofessional relationship understanding (D'Amour *et al.*, 2009; Coissard *et al.*, 2017; King *et al.*, 2017; Persson *et al.*, 2018; Adamson *et al.* 2018). Together, the four categories are fundamental for explaining stroke care IPW relationships, as they provided understanding of the social process that IPW relationships are understood, through contributing new knowledge into the development and sustainability of interprofessional relationships in stroke care.

Category formation in explaining human phenomena specifically within the GT methodology is a process that enabled the study to initially provide insight into unspoken social processes, allowing understanding to be gauged at a higher abstract level (Straus & Corbin, 1990). However, through the theoretic rendering process within the constructivist GT approach, multiple voices, views, and visions of participants' lived experiences are captured, which enabled the study to gain understanding directly from those who live within the social context under study (Charmaz & Mitchell, 1996; Charmaz, 2006). Theoretical understanding from this constructivist GT study is supported by the data within

the four categories, which was gained directly from the realities of the participants. This supports their central position within the proposed model (Figure 19).

*Rewards and recognition* as a data category was initially identified as the core category, with it being perceived as having a greater influence for explaining how stroke care MDT professionals perceived their relationship through collaborative stroke care MDT practice. However, it was through the constant comparative analysis process that led to the discovery that neither one category had more power over the other. Instead, all four categories were interpreted to be equally important, with all four being interrelated by the social process of experiencing growth. Not having a category that takes precedence over all the others has been found in other research which has explored the topic of IPW. D'Amour *et al's.* (2008) typology study for understanding interprofessional collaboration identified four dimensions (two related to organisational structure and two related to professional relations) which, together, capture the processes inherent in collaboration. While their study does not explore IPW relationships, their results support the difficulties in identifying a single dimension to explain active, developing, and potential interprofessional collaborative practice. They describe the simultaneous importance of both the organisational and relational dimensions in their interprofessional collaborative model.

Before returning to the theoretical perspectives on which this thesis bases itself, it seemed appropriate to first make explicit the types of growth and how they were interpreted to be experienced from category data, because the pre-existing theories and models within the discussion that follows specifically address these aspects of growth.

While the process of how category data led to the discovered interprofessional relationship perception is illustrated in Figure 17 (page 240), and the types of growth are shown in Figure 18 (page 241). An explanation of this process of interpretation includes a growth in self-confidence from the category *developing a sense of belonging*. This growth in confidence was found to be gained from having a role that contributed to the interprofessional team and/or out of possessing the desired stroke care MDT attributes and qualities. The growth gained from this category was interprofessional, as developing a sense of belonging was experienced to be from the perspective of belonging to the interprofessional stroke care MDT and not just to the participants' own professional group.

From the category of *rewards and recognition*, an example of growth experienced between the different professional disciplines, was from the collaborative interactions that gave professionals opportunities to learn. These opportunities to learn led to experiences of growth as they allowed professionals to not only learn from each other, but provided them with experiences to learn and develop new professional skills that were perceived to be outside of their own professional remit.

In the category of *inclusive working and learning*, an example of growth came in the form of professionals experiencing growth in their social circles. Interprofessional proximity from the structure of the strokes MDT's collaborative practice enabled participants to have maximum exposure to episodes of interprofessional interactions, which were found to bring the different professionals within the team together, with it enabling them to get to know one another personally and professionally. Both of which have been identified in the literature as an important element for successful IPW and in relationship development (Blue & Fitzgerald, 2002; D'Amour *et al.*, 2005, 2008; Harrod *et al.*, 2016; King *et al.*, 2017; Persson *et al.*, 2018). These experiences of growth were interpreted as being

interprofessional, as new additions to a professional's social circles, were not limited to individuals who belonged to the same profession.

Finally, an example of how growth was experienced in the category of *interprofessional compassion* was via the increased feelings of safety gained from interactions of protecting one another. Feelings of safety were interpreted as episodes of experiencing interprofessional growth, as they were found to not be exclusive to only occurring between single professional groups, i.e. nurses protecting nurses, but instead occurred between different disciplinary members, i.e. nurses protecting doctors.

This thesis, therefore, claims that the concept of experiencing growth as a stroke care interprofessional relationship perception can occur if professionals are allowed to experience and engage in collaborative interactions and behaviours identified within any of the model's four categories. This suggests advances in the current knowledge in respect to developing and sustaining IPW relationships via the proposed model, providing knowledge of the interprofessional interactions and behaviours that influence the interprofessional relationships within stroke care.

### **6.3.2 Interprofessional collaboration: an emotional and physical, professional and personal process**

The four categories provide an explanation of the working relationship perceptions of stroke care MDT professionals via them being grounded in the social process of experiencing growth. The overarching context in which growth was found to exist in, created in, or perceived through was via the team's daily interprofessional collaborative interactions. These interactions, and therefore the growth experienced, were found to

extend beyond only occurring in a professional physical capacity, with them being found to include personal and emotional dimensions.

### **6.3.2.1 The personal and professional aspect of interprofessional collaboration**

Collaborative interactions deemed as ‘professional’ included interactions surrounding work tasks and work-related issues, i.e. joint assessments and ward rounds. Examples of ‘personal’ collaborative interactions included interactions that were not related to work tasks, such as sharing personal information and chatting about personal and home lives. Personal interactions and behaviour, however, were often found to occur from collaborative interactions that were initially of a professional capacity, with an example being personal communication stemming from actions of a professional nature, such as personal communication occurring before and/or after MDT meetings.

Interprofessional collaboration that involved actions of a professional nature is seen throughout the pre-existing IPW literature, where its importance is emphasised through social processes of communication and shared decision-making (Hewitt, Sims & Harris, 2015; Tang *et al.*, 2018; Hustoft *et al.*, 2018). In this study, both personal and professional collaborative interactions were found to be influential for understanding stroke care professionals’ experiences of their IPW relationships. Personal and professional collaborative interactions were, therefore, found to be the basis for creating interactions and behaviours that gave participants their interprofessional relationship perceptions. The importance of personal interactions and behaviours on a broader scale within the work domain has been documented with employees now blending their professional and personal lives in order to be successful at both (Schwabel, 2014; Heaphy *et al.*, 2018; Pillmer & Rothbard, 2018). Colbert, Bono and Purvanova (2016) refer to how work relationships have shifted from being places for providing only work-related support.

Instead, the valued resources to which individuals have access to while at work serve multiple functions that benefit individuals inside and outside of their professional domain (Colbert, Bono & Purvanova, 2016; Heaphy *et al.*, 2018). This compliments Burkitt (2008) who proposes that for individuals working in occupations that include activities of continuous learning (i.e. healthcare), both personal and professional benefits, such as growth may be experienced. In the context of interprofessional working, Weiss and Swede's (2016) work in encompassing the relationship-centred care (RCC) model into education discusses that for healthcare professionals to build and sustain relationships with each other, their personal and professional needs must be met within the context of their daily interactions. This is the case for this study.

While personal collaborative interactions and behaviours in IPW have been described and discussed within the IPW literature (Stephenson, 2015; Isaccs & Ellender, 2016; King *et al.*, 2017; Salas, Reyes & McDaniel, 2018), they have not been a prominent focus of interprofessional relationship research. D'Amour and Oandasan's (2005) work does, however, explore the concept of personal interactions within both interprofessional working and interprofessional education contexts, with their work complementing my research findings. They discuss how collaborative relationships are not possible if the basic actions of getting to know one another personally and professionally are not fulfilled, with the process allowing professionals to transcend their inclination from exclusive professional 'turfs' to sharing professional territories, enabling bonds to develop between team members and their willingness to work together. Although personal dimensions for collaborative practice are noted within D'Amour and Oandasan's (2005) interprofessional collaborative work, personal connections or personal actions were not elaborated on, for example, specific insight into the nature of the personal actions was not provided. Finally,

although acknowledged as an important element of IPW, personal dimensions were not included within D'Amour and Oandasan's final illustrative model.

Like D'Amour and Oandasan (2005), King *et al.*'s. (2017) work identified the importance of work interactions that occurred outside of the 'professional' day-to-day roles for relationship facilitation. Their research of personal relationships within collaborative working highlights the existence of personal relationships from interprofessional collaborative interactions. Although they are not specific in defining relationships beyond descriptions of trust, positive, and personal, their work supports my findings in that relationships in interprofessional settings are based on both personal and professional interactions. Blue and Fitzgerald's (2002) study, although from a dyadic interprofessional perspective (they researched interprofessional relationships between nurses and GPs), additionally noted a blurring of personal and professional boundaries, with relationships establishing from practitioners having a level of awareness and knowledge about the family and home lives of others. Their study also highlighted the need for incorporating a variety of personal and professional activities during collaborative practice, with patient care discussions and meetings being held over coffee or lunch. Blue and Fitzgerald's findings were further reiterated in Tang *et al.*'s (2018) study who, again, while only researching IPW relationships from a dyadic perspective, highlighted the need for interprofessional settings to increase the opportunities for personal engagement as a strategy for relationships building, for example, sharing personal information through less formal activities such as over lunch and coffee.

In addition to the presence of personal interactions, Bajnok *et al.*'s. (2012) mixed-method study, which included multiple professional disciplines, described experiences of personal growth (i.e. confidence and self-awareness) that were found to be experienced by

participants through interprofessional collaborative interactions that moved beyond interactions of a professional nature. This supports both the proposed model's claims for the equal significance and inclusion of personal interactions, and the concept of growth being a product of interprofessional collaborative interactions.

The GT developed model from my finding builds on D'Amour and Oandasan's (2005) work on the emerging concept of 'interprofessionality' in interprofessional practice and educational settings and supports and elaborates on the work of King *et al.* (2017), Tang *et al.* (2018) and Bajnok *et al.* (2012). It does this by first acknowledging and placing equal status on the significance of personal interactions within interprofessional collaborative practice for framing the interprofessional work relationship of experiencing interprofessional growth. While my model's findings compliments and therefore is supported by other researchers, unlike D'Amour and Oandasan (2005), it adds new knowledge via the identification of the four categories providing contextual insight into the personal and professional dimensions of collaborative practice that can create interprofessional relationships that result in experiences of growth. By doing this, the model extends previous knowledge by providing useful insight into how to create and sustain interprofessional relationships. Through this, the model extends previous knowledge by providing useful insight into how to create and sustain interprofessional relationships.

### **6.3.2.2 The physical and emotional aspect of interprofessional collaboration**

Interprofessional collaboration as an important overarching process to understanding interprofessional relationships was found to include both physical and emotional interactions. Physical and emotional interprofessional collaborative interactions, like the professional and personal interactions discussed above, were found to be the context in

which the interactions in the four categories were grouped. While the interactions within the stroke MDT context under study were described as either being of a personal and professional context, the physical and emotional dimensions add further descriptive insight into the collaborative interactions, referring to either the response or the effect of the interactions on the participants.

Acknowledging human actions and reactions as a method to help convey meaning has been recognised in the interprofessional literature (Adamson *et al.*, 2018a) as well as the symbolic interactionism literature (Mead & Morris, 1934; Blumer, 1969; Charmaz, 2014). While physical and emotional interactions within collaborative stroke care practice refers to the direct and indirect actions, the physical aspect refers to the physical effect/response that interprofessional collaborative actions had on the interprofessional participants. An example of this is the direct action of professionals showing other professionals from different disciplines new skills. This 'professional' interaction, or in this case interprofessional professional action, resulted in the 'physical' effect of obtaining new knowledge or a new skill. Direct and indirect actions were found within my model's interprofessional collaborative process to be both actions of a personal (non-work) and professional (work) nature, which according to Chadsey and Beyer (2001) are the two general types of social interactions that occur between individuals in work contexts.

Recommendations have been made for organisations to focus more on the emotional aspects of working life (Verbeke, Belschak & Bagozzie, 2004). This is supported by Martin and Manley (2018), who state that learning is only one aspect of professional development. Furthermore, as discussed in the literature review, Weatherston and Osofsky (2009) make the point that part of the learning process is through emotions, which are awakened when individuals interact via sharing knowledge. This supports my findings of

work interactions being more than a process to merely develop professionally or physically. The emotional element in this study refers to the positive and negative feelings that were created from the collaborative interactions within the four categories. Emotional responses or reasoning behind MDT interactions emerged from participants during interviews, through the process of storytelling and reflective practice. The process of storytelling and reflecting upon interprofessional practice for understanding work relationships is supported by the RCC model, which found that the characteristics for relationships in healthcare transpire from reflective and storytelling practice (Safran, Miller & Beckman, 2005).

Reflective practice and storytelling are known tools to aid successful collaboration, as they allow practitioners to gain new understandings and draw on their personal and professional feelings (Kuiper & Pesut, 2004), which can fortify relationships and connections (Dutton & Heaphy, 2003; Safran, Miller & Beckman, 2005). An example of this from the data is the stories about acts of venting out frustrations. These were found to provide professionals with increased feelings of being supported and a coping strategy, which supported them to manage the pressures and emotions of day-to-day MDT working life. The presence of emotional interactions as a process found in this study's explanation of IPW relationships is additionally supported by the IPW relationship literature that was explored in Chapter Two. Explanations into emotional interactions were found in the IPW relationship literature, with relationship formation, quality and strength being influenced by interprofessional acts of compassion, emotional intelligence, and empathy (McCalin & Bamford, 2007; Adamson *et al.*, 2018a, 2018b).

The overarching process of interprofessional collaboration being an emotional, physical, professional, and personal process advances knowledge, by highlighting that

interprofessional relationships like other social relationships i.e. romantic relationships, are not instantaneous or one dimensional. Relationship perceptions instead occur through a process of varying collaborative interactions, articulated by my model. Thus, merely ensuring that interprofessional interactions occur is not enough to warrant the development of interprofessional relationships. This claim is further supported by King *et al.* (2017), who state that collaborative relationships do not just occur but rather occur because of effort.

## **Part 2: Discussing new insights: Experiencing growth through interprofessional relationships: A stroke care MDT setting**

### ***6.4 Introduction***

Part two presents an explanation of the theoretical perspectives of the model's finding of experiencing growth through interprofessional relationships. Links to existing knowledge are made, along with clarification of the new advances in knowledge that have been gained from the study. The discussion begins by returning to the theoretical position, interpreted through the conceptual framework, which is identified in Chapter Three. The discussion concludes by providing insight into how the findings contribute to other relationship models.

### ***6.5 Returning to the conceptual framework***

As discussed earlier within this thesis, as a result of the in depth analysis and advanced conceptualisation of the findings, a propositional grounded theory was constructed to represent interprofessional relationship understanding within a stroke care MDT setting. This is presented in Figure 19 as *The experiencing growth through interprofessional relationships model: the stroke care setting*. As discussed, the model has been derived from, and is grounded in, the research data and incorporates the four interrelated categories

and the physical, emotional, personal, and professional dimensions of interprofessional collaboration. The next section of this discussion chapter will explain the theoretical assertions of the model. The theories of social exchange, social capital, and self-expansion (Figure 20) collectively, along with the methodological approach, comprise the conceptual framework that supports this thesis in the generation of a new multi-dimensional model for understanding the interprofessional relationships of a stroke care MDT.

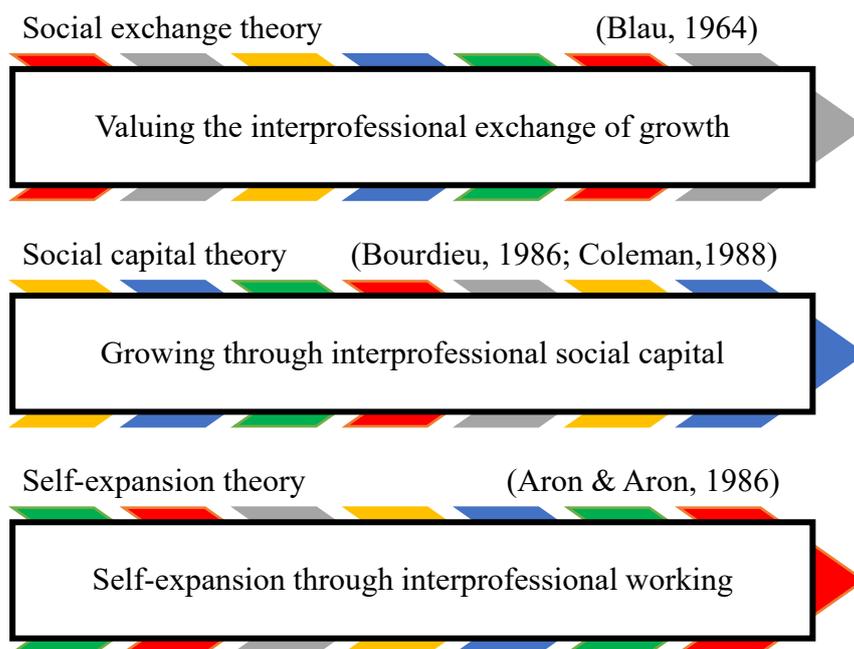


Figure 20: The three theoretical perspectives for understanding the research finding of experiencing interprofessional growth through relationships.

The discussion that follows will explicate how each of the three propositional, theoretical assertions support the core concept of experiencing growth for understanding the function, process and motive of stroke interprofessional relationships. Key literature sources will be referred to, to support the application of the theories.

### **6.5.1 Valuing the interprofessional exchange of growth**

The previous sections, explained how analysis led to the identification of experiencing growth from a personal, professional, physical, and emotional perspective to be the core social process, through which stroke care professionals understood their IPW relationships. These experiences of growth were interpreted to be positive in nature with participants valuing the benefits of growth that were exchanged through collaborative practice (Figure 18). Understanding human relationships through perceived benefits and gains, has been discussed within the reviewed literature (Price, Doucet & Hall, 2014; Arnold *et al.*, 2016; Staniuliene & Kucinskaite, 2017; Persson *et al.*, 2018; Pillemer & Rothbard, 2018). My interprofessional relationship finding is interpreted to be closely related to the theoretical process of social exchange, with the exchange of ‘growth’ emerging as a process for explaining how stroke care interprofessional relationships are formed and maintained. As discussed in Chapter Two, the theory of social exchange is a prominent relationship theory that provides a theoretical reasoning into why individuals enter into, seek, and stay in relationships (i.e. via patterns of commodity exchange) (Homans, 1961; Blau 1964; Emerson, 1976; Cropanzano & Mitchell, 2005; Ferris *et al.*, 2009; Cropanzano *et al.*, 2017; Chernyak-Hai & Rabenu, 2018).

Following the proponents of social exchange, the idea that work relationships are understood through interactions of valued resource exchange, resonated with my finding, with the process emerging in the voices of the interprofessional participants. My findings indicated that the commodity of growth experienced from the exchange of resources, through collaborative practice, provided theoretical insight into the process and motivation for how and why stroke care professionals enter into and stay in work relationships.

Rooted in sociology and social psychology, social exchange theory is concerned with the quality of interactions within social networks. The theory's focus for explaining relationships is the action of reciprocal exchange, with the process leading individuals to commit to one another (Brandes, Dharwadkar & Wheatley, 2004; Clark & Mills, 2012). Dominant resources for exchange, found in earlier relationship literature includes money, advice, trust, social support and positive feelings (Clark & Mills, 2012; Xerri, 2013; Colquitt *et al.*, 2014; Wang *et al.*, 2005; King *et al.*, 2017; Mavronicolas *et al.*, 2017). My findings are consistent with previous relationships research, with popular resources found to be exchanged among the different professionals to include knowledge and skill development, personal and professional support, personal information, positive feelings (confidence, praise etc.), food and gifts.

From analysis, these resources were additionally found to correspond to the pre-existing interprofessional relationship literature, with support and trust being dominant behaviours and characteristics found in IPW relationships (Safran, Miller & Beckman, 2005; McDonald, Jayasuriya & Harris, 2012; King *et al.*, 2017; Coissard *et al.*, 2017; Tang *et al.*, 2018; Persson *et al.*, 2018). However, as discussed in Chapter Two, these characteristics are scattered across the literature, resulting in the current IPW relationship terms/definitions being one-dimensional, ambiguous, and inconsistent. The use of the social exchange framework as one of the model's theoretical anchors, therefore, helps eliminate these inconsistencies. The theory does this by accounting for the different proposed relationship characteristics, terms and qualities, i.e. trust, with them being represented and understood through the process of exchange. My proposed model of experiencing growth through interprofessional relationships, therefore, adds to the current IPW relationship knowledge base through its ability to unite the multiple behaviours, characteristics, and qualities found in IPW relationships, which are currently scattered

across the literature. This contributes to the model's multi-dimensional claim, with the theory of social exchange providing a framework of interprofessional relationship understanding that includes the interprofessional relationship characteristics within it.

The application of the social exchange theory implies that relationship connections in the stroke MDT under study were understood through collaborative interactions of exchange. Rocha & Chellauri (2011) propose that feelings of being cared for through actions of reciprocal exchange are triggered via the process demonstrating a willingness to care about the welfare of an organisation and of the individuals who make up the organisation's workforce. This process of reciprocal exchange was apparent in my findings, with examples including the exchange of learning opportunities, venting, and protecting one another. These interactions were interpreted as actions that benefited the welfare of the participants via the exchanges leading to experiences of growth. In addition these interactions of learning and/or venting exchange were interpreted as a process that brought professionals within the MDT closer together. However, while the data found the process for IPW relationship perceptions to be embedded in growth experienced from the process of exchange, my findings were interpreted to not always be confined to the principles of social exchange. Not forcing data to fit into theoretical perspectives is a process documented throughout the GT 'family', with theoretical explanations instead being a process of emergence (Glaser & Strauss; 1967; Charmaz, 2014; Vickers, 2016). The discussion that follows critically explains how the rules of reciprocal exchange were found to vary, adding new knowledge to the application of social exchange within the context for understanding stroke care interprofessional relationships.

While some research advocates and argues the presence of reciprocal exchange for understanding the properties of work relationships, in both a general and in an IPW sense

(Gitlin, Lyons & Kolodner, 1994; D'Amour *et al.*, 2005; Xerri, 2013; Sims, Hewitt & Harris, 2015a), there is an argument that in different relationship contexts different rules that govern the social exchange behaviours exist, with not all relationships being restricted to the reciprocal rules of social exchange (Clark & Mills, 2012). This is the case for my findings, with receiving growth from valued resources shifting beyond Blau (1964) process of exchange being reciprocal or based on explicit agreement. Interactions across the four data categories instead showed examples of reciprocal absence. Participants were found to receive growth through valued resources without having to reciprocate a return. This is supported by Ryan, Emond and Lamontagne's (2014) interdisciplinary social network research. Their study found a variation in reciprocal interactions within collaborative working, with the reciprocal process being dependent on how professionals rated their relationship ties with others.

This variation in the process of the exchange being reciprocated or based on explicit agreement could be explained via stroke collaborative interactions being found at times to be unplanned, with them instead arising out of circumstance and governed by the needs of the team and the needs of the individual involved. An example from my findings is the actions of protecting one another from the interprofessional compassion category.

Compassion in the workplace has been defined as employees expressing affection, empathy, concern or tenderness to fellow workers who appear to be suffering or in need, which is said to occur without expecting benefits in return, i.e. it is perceived as a 'non reciprocal' process (Sprecher & Fehr, 2005; Dutton, Workman & Hardin, 2014; Eldor & Shoshani, 2016). However, organisational life is frequently portrayed as an arena for pain and suffering, regardless of whether the pain is caused by the activities occurring in the organisation or in the individual's personal life (Dutton, Workman & Hardin, 2014). Places

of work are additionally viewed as places of healing (i.e. places for growth), where care and compassion are given (Frost *et al.*, 2000).

In my study, acts of compassion were interpreted through the interactions of dealing with conflict, protecting one another, and via the concerns stroke care professionals had for one another. However, while acts of compassion are seen as proactive actions (Sprecher & Fehr, 2005), my findings interpreted actions of interprofessional compassion to have both reactive and proactive properties, with them being reactive in the sense that compassion as a non-reciprocal action was given or received when personal or professional difficulties occurred. Examples of reactive acts of compassion that did not fit the reciprocal exchange process include a senior staff member supporting P127 when they were accused of bullying, and P124's account of a team member from a different discipline comforting and supporting them during a difficult patient case. Proactive interactions of compassion included actions that aimed to prevent suffering. This was evident in P129's account of professionals from different disciplines helping them to survive the day, by pointing out their potential mistakes.

It could be argued that actions of protecting each other is an exchange process. However, pre-empting or assuming that someone is going to eventually suffer and need protecting in the future is difficult. In addition, the team's solidarity approach found, as a sub-category property, indicated an 'in it together' attitude, with help and support being interpreted as an automatic response and/or out of a sense of duty, with benefiting in return not being a factor. This supports the claim that reciprocal actions of exchange vary within IPW relationships and additionally suggests that acts of compassion within my relationship finding have the potential to be predicted. This notion to predict behaviour i.e. acts of compassion such as protecting one another is suggested within the symbolic interactionism

premises (Blumer, 1969). As outlined in Chapter Three, Blumer (1969) proposes that the meanings humans attach to objects and each other arise from the interactions and the way one prepares oneself to act in relation to the object or person in question. This assumption is considered in Homan's (1961) operant approach to social exchange through the acknowledgement that pre-empting all returns is unrealistic. These actions of compassion being non-reciprocal within my findings therefore, go against the basic assumption of social exchange that individuals make relationship decisions based on their perceived benefits (Scarnera *et al.*, 2009; Clark & Mills, 2012; Cropanzano & Mitchell, 2005, 2017). This assumption has additionally been questioned by other social exchange theorists, Cropanzano and Mitchell (2005) report that although the norm of reciprocity may be universally accepted, the degree to which individuals and cultures demonstrate reciprocity in their relationships varies. Others, while to a degree advocate a reciprocal process, make reference to the ambiguities in the way in which reciprocity can be defined (Gouldner, 1960; Bordia *et al.*, 2017), doubting Blau's (1964) perception that individuals upon developing relationships are only self-interested and motivated by returns (Emerson, 1976).

The concept of sustaining and entering relationships for motivations of self-interest (Blau, 1964) was also inconsistent in aspects of my findings. This is supported by Ragins and Dutton (2007) who believe that the social exchange perspective adopts a selfish perspective on an individual's motivation for seeking relationships at work, with the process failing to address shared social norms. They note that the theory assumes resources are fixed and fails to acknowledge relationships that generate and create new resources that expand individuals. Finally, Thistlethwaite, Jackson and Moran (2013) agree with idea that successful collaboration is not solely reliant on the process of exchange, they, as previously

discussed question the idea that individuals will only work together and remain so when gains are made.

Experiencing growth from the learning and development opportunities, were found to be accessible to all disciplinary team members and occurred even when they were not sought after or desired. In addition, data showed that participants did not always have an awareness of receiving the valued resources from others, which provided further evidence to support the claim of actions not always being reciprocal or motivated out of self-interest. An example of not having an initial awareness of receiving valued resources and receiving resources without desiring them (i.e. the self-interest assumption) was seen in data collected from participant P129. While P129 had little desire to continue to work in stroke care, they described, on reflection how the consultants were developing and testing them. Not acknowledging the benefits of valued resources is not unusual in the work context, with benefits such as learning opportunities often going unnoticed because they occur intuitively as part of the working day (Bunniss & Kelly, 2008). Therefore, if individuals are unaware that they are receiving a valued commodity, then the reciprocal principle is unlikely to occur. This highlights the complexities of IPW and explaining IPW relationships in stroke care, with the social process that develops and sustains them being bound by or restricted to a single theoretical explanation.

Ferris *et al.* (2009) and Dutton and Heaphy (2003) reported similar conclusions. They found that social exchange, as a single theoretical concept, could not fully explain their multi-dimensional model of dyadic relationship dimensions. Despite this, they both used the theoretical concept within stages of their relationship models. This not only reiterates the complexities of explaining work relationships but supports the use of the social exchange theory to partially account for the motivations behind the interactions, which

gave participants their interprofessional relationship perceptions. The idea of the partial use of the social exchange theory to explain new models and original findings, like the findings in my study, is additionally supported by Emerson (1976), who states the partial use is appropriate because social exchange is not a theory but a framework against which other theories can be compared and contrasted.

The social exchange assumption that relationships will only be sustained if the exchange of value resources continues, with relationships ending once behaviours of exchange stop (Blau, 1964; Emerson, 1976; Scarnera *et al.*, 2009), was apparent in my findings. An example includes the absence of a relationship connection when experiences of growth from collaborative interactions were not present, leading the participant to desire to leave the MDT. As discussed in Chapter Two, unlike non-work relationships where individuals leave friendships or reduce interactions when a relationship ends, unless an individual resigns from their job they will not leave the work environment and will continue to work with others (Sias & Perry, 2004), who do not provide them with experience to grow. Although no professionals who had recently left were interviewed as part of this study, the professionals who did participate acknowledged that they left to progress within their career, suggesting that experiences of growth for these professionals were absent. This claim is supported by participant P134 who was contemplating leaving the stroke MDT due to the shift patterns and working hours. P134, however, decided to stay after a senior member of the team went out of their way to adjust their working hours. From these actions the participant experienced personal and professional growth i.e. via a new increased feeling of value from being asked to stay and an increase in job satisfaction from the resource of working desirable hours. This flexibility in meanings being attached to social objects is in keeping with the topic of human relationships and the symbolic interactionism stance, with meaning being flexible and open for review (Chamberlain-

Salaun, Mills & Usher, 2013). While growth remained the core social process for underpinning relationship understanding, the process i.e. the interaction for how this growth was experienced has changed. Charon (1979) agrees in meanings for social objects as being ever changing due to the nature of being defined and redefined as individuals interact.

The sub-category of dealing with conflict supports the significance of the value of exchanging growth in determining interprofessional relationships. As discussed in Chapter Two, Wellman and Wellman's (1992) Toronto study, which focused on women working despite not liking each other, found social exchange to be the core reasoning behind their behaviours. Their study indicated that the women helped each other, despite not liking each other, in order to receive the valued resource of support. This was also found in the data through actions of dealing with conflict, although disliking one another was not made explicit within my findings. Despite feelings of discomfort, professionals dealt with conflict and continued to interact with individuals they had conflict with, as growth was still experienced through being the 'bigger person'. Although there is a considerable amount of research that explores the negative effects of work conflict, the positive effects of conflict have been reported (Todorova, Bear & Weingart, 2014). Todorova, Bear and Weingart's (2014) survey of 232 USA healthcare participants found episodes of task conflict to have positive effects. Their results presented the positive emotional effects of work conflict with employees feeling more active and energised at work, which increased levels of job satisfaction. Their findings, like mine, contradict prior research by showing the benefits for conflict in the work place. It additionally supports the concept that for stroke care professionals the value of growth that is exchanged through interprofessional practice, is the motivation behind developing and sustaining IPW relationships and can occur out of conflict and when professionals dislike one another.

Focusing on the value of the resource over the process of exchange in social relations has been commented on by Emmerson (1976) and Mavronicolas *et al.* (2017), with them both making reference to the quality of exchange being the focus on social relations, rather than the process of it simply occurring. This element of my findings supports the exchange theory in that relationships dissolve once the value of growth is absent. It also adds to the pre-existing IPW relationship literature, as unlike the literature discussed in Chapter Two, my model provides an explanation of how relationships in stroke care be sustained.

As illustrated in Figure 18 the concept of interprofessional growth was found to occur in a range of ways, with growth occurring from the exchange of valued resources in the form of skill ability to job satisfaction. Equality in the resource exchanged, or in this study's case the equality in the growth experienced, has been noted by other authors (Calhiun *et al.*, 2007; Tanskanen, 2015). My findings indicate that equality in the growth experienced from the resources gained from social exchange was not of significance. My interprofessional relationship finding claims that it is not about the amount of growth, but its presence from the collaborative. An example includes participant P122 reflection on teaching another professional a new skill. While this professional experienced growth through their knowledge base expanding, P122 experienced growth in their perceived levels of job satisfaction from seeing someone flourish at work. As social exchange is a process identified to occur over a period of time (Calhoun *et al.*, 2007). Arguably a longer period of data collection may have produced evidence of reciprocity. However, because the process of social exchange occurs over a long period and includes unspecified obligations to reciprocate, resources argued to be unequal or unpaid, actually indicate the presence of trust within the relationship (Calhoun *et al.*, 2007). This suggests that my interprofessional relationship perception of experiencing growth through interprofessional relationships is

one that demonstrates the dominant relationship characteristic of trust, supporting the research discussed in Chapter Two and adding rigour to my findings.

This thesis contributes knowledge in the narrative for explaining IPW relationships through the discovery that IPW relationships are understood through the interaction process of reciprocal and non-reciprocal collaborative exchange. This again supports Hammrick *et al.* (2009) view for being interprofessional, with effective team working being based on the connections that develop from every person's way of being with others when in a team context. As this model identified the reciprocal and non-reciprocal process of exchange in understanding IPW relationships, it supports the alternative ways that growth can be experienced when professionals work with others in an interprofessional stroke care context.

### **6.5.2 Growing through interprofessional social capital**

Social capital is a theory closely linked to social exchange, with both theories referring to the resources that are made available to individuals or teams through their work social connections and networks (Kawachi & Berkman, 2000). The theory of social capital provides an additional approach to studying human relationships within work environments (Lee, 2013), and as discussed in Chapter Two, specifically regards relationships as a type of currency that gives individuals access to desirable valuable resources that they wish to use so that goals can be accomplished (Hafen, 2004; Hean *et al.*, 2012; Yuan, Hanrahan & Carroll, 2018). While the previous discussion highlights the process in which growth was received, i.e. through reciprocal and non-reciprocal exchange. The theory of social capital supports the finding's interpretation of IPW relationship being understood through the value of the resources they have access to, with

the concept of growth being the valuable capital for determining interprofessional relationship understanding, development, and sustainability.

The theory of social capital has been researched extensively and applied to multiple different disciplines, i.e. sociology and political science, which has resulted in multiple conceptualisations and definitions of the theory (Bourdieu, 1989; Coleman, 1988; Putnam, 2001; Seibert, Kraimer & Liden, 2001). However, these conceptualisations and definitions have a basic concept in common, which is the focus on the quality of relationships and networks available to individuals within communities or organisations that provide them with resources of benefit (Sheingold & Sheingold, 2013). This thesis expands on this with a multi-dimensional model that provides insight into the function of social capital within interprofessional relationship perceptions.

Social capital networks have been grouped into three interrelated concepts: bonding, bridging, and linking (Putnam, 2001; Grootaert *et al.*, 2004; Szreter & Woolcock, 2004; Sheingold & Sheingold, 2013). Bonding capital describes the connections people have within groups (e.g. individuals who are similar in terms of their demographic). The bridging concept refers to the horizontal connections between groups of people of more or less equal social standing, whilst the linking concept of social capital refers to ties between people of different power status (Grootaert *et al.*, 2004). My study's aim, however, was not to identify the type of social capital networks that exist within the stroke MDT, but instead how stroke care professionals working in a collaborative MDT environment perceive their interprofessional relationships, which, from the data, is grounded in the functions of the resources to which they have access to as a result of their daily collaborative practice. This is in keeping with Coleman's (1988) suggestion that social capital exists in relationships among 'actors' and that social capital is defined by its functions. This is further supported

by Danchev (2005) who reports a function of social capital is development and sustainability. In this study, the function of growth is present in determining understanding of interprofessional relationships. The discussion that follows focuses on the function of social capital for explaining my relationship finding of experiencing growth through interprofessional relationships.

Understanding relationships and team working through social capital has been found within nursing and interprofessional contexts (Kowalski *et al.*, 2010; Hsu *et al.*, 2011; Hean *et al.*, 2012; Sheingold & Sheingold, 2013; Lee, 2013; Read, 2014; Eliacin *et al.*, 2018). Read (2014) perspective claims that nurses made strong relationship connections with other medical professionals via the process of social capital, with capital including sharing of ideas and knowledge. Read (2014) further notes that medical professionals perceive each other as valued resources for being able to successfully carry out work duties, with capital including emotional support. This was evident in my findings with data showing that growth gained through actions from the four categories was not only of a physical capacity but had emotional benefits. Examples include the ability to vent to others, team equality, and being involved in ward humour, emerging to result in experiences of emotional growth via value and confidence that supported participants to complete work tasks. Thus, suggesting that my original interprofessional relationship perception can influence successful collaboration, a concept supported by Read (2014) who states that the presence of social capital has been found to aid the success of work duties. This further supports the recommendation for further research to examine whether relationships of experiencing growth through interprofessional relationships can affect interprofessional collaborative practice.

In addition to the emotional growth, from the opportunities to learn, participants experienced growth via the physical knowledge gained from other professionals, which was found to occur across professional groups. My findings of job satisfaction occurring from valued resources within relationships, as well as resources being categorised as having emotional value is supported by previous social capital literature (Kowalski *et al.*, 2010; Strömngren *et al.*, 2016; Rydström *et al.*, 2017; Eliacin *et al.*, 2018). This was particularly relevant in supporting the interactions found within the proposed model's categories of interprofessional compassion and inclusive working and learning.

Acts of compassion have been interpreted to build interpersonal valued resources, thus the process has ties to the conceptual framework perspective of social capital (Eldor & Shoshani, 2016). Eldor and Shoshani's (2016) work, although from a quantitative approach outside of the healthcare setting, examined compassion between teachers. While Eldor and Shoshani's participant population was different from this study, there were similarities. Like this study, they researched a professional group whose acts of compassion are normally directed towards others (patients, students) and not each other (other professionals). Their findings directly relate to my findings as they demonstrate that everyday acts of compassion from workplace social networks can generate feelings that can affect and/or alter attitudes and behaviours which allow humans to thrive. While their findings were steered towards compassion as a form of social capital for emotional support and work outcomes, they failed to mention or incorporate how interactions of compassion affected work relationships. Their descriptions only outline positive outcomes, along with vague statements of compassion being a key concept in building professional work relationships. My findings add to this knowledge base by taking the next step in interpreting the function of compassion as a product of social capital for understanding interprofessional stroke care relationships. The proposed model does this by providing

specific insight into the actions of compassion that can influence interprofessional relationships by providing professionals with experiences of growth. In addition, my model identifies the collaborative interactions of how growth as a form of capital can be created, supporting the sustainability feature of social capital.

Through the inclusive working and learning category, professional proximity, creating a positive environment, and having an interdependent ownership of collaborative practice led stroke care participants to develop social capital relationships. An example includes the interprofessional proximity properties of time spent integrating and designated space.

These properties were interpreted to create capital as they led participants to grow in confidence and in their social circles, with designated space and time integrating enabling professionals to get to know one another personally and professionally. This is supported by King *et al's.* (2017) interprofessional study, which explored collaboration through a personal relationship lens. In their findings they identified how proximity offered opportunities for informal contact (i.e. social capital), where information can be shared and relationships can be built. Furthermore, this finding of how social capital can be created in an interprofessional setting is supported by the reviewed social capital literature, with Gaddis (2012) highlighting the current lack of clarity in the explanation of what is important for the creation of social capital.

The process of social capital to explain my findings was further supported by the data outlining the breakdown and/or absences of interprofessional relationships. Pursuing opportunities of growth was found in Feeney and Collins (2015) with relationships being sought after and entered into, to actively pursue resources that give individuals opportunities to thrive and grow. Thus, the absence of social capital, i.e. the process which provided participants with resources to experience growth, may explain why

interprofessional relationships in the stroke care MDT diminished or were absent. This is further supported by Eliacin *et al.* (2018), as discussed in chapter two, their study within a mental health setting found links with the lack of social cohesion and social relationships with the absence of social capital. Cohesion, while important to interprofessional practice does not refer to the need for everyone to agree on decisions or develop friendships (Hammick *et al.*, 2009). While positive behaviours for IPW is discussed in the literature, identifying when and why IPW relationships become absent or diminished is a process that is not discussed currently within the IPW relationship literature. This provides further confirmation of the original contribution that my proposed interprofessional relationship explanation has within the pre-existing interprofessional relationship literature and the literature surrounding what it means to be interprofessional.

While the social exchange process, discussed previously, identified the reciprocal and non-reciprocal process of how the resources for growth were obtained. The social capital perspective provides theoretical support via the function of an individual's capital for determining relationship understanding, with my relationship finding not being solely on what the valued resources are, but on the growth that professionals experience from having access to them via their interprofessional collaborative interactions. Thus, experiencing professional and personal growth, both emotionally and physically, through interprofessional relationships is arguably the function of the accessible resources, which according to Coleman (1988) is how social capital is defined. However, because social capital is the sum of the actual or potential resources available to an individual because of their social networks in which they exist in. It has been suggested that the theory of social capital is not a relationship definition but rather a concept, interaction, or behaviour that exists within a relationship to explain its social functions. This claim is supported by the work of Lee (2013), who suggests that the characteristics of social capital i.e. trust, respect

etc. are understood to represent behaviours embedded within relational ties. Therefore, the theory of social capital, like social exchange, helps reduce inconsistencies found in the pre-existing literature, with its theoretical position alongside the other two theoretical perspectives within the model bringing together and providing an explanation for the multiple behaviours and characteristics found within the interprofessional relationship literature. This is further supported by literature that views social capital as providing insight into the quality of relationships and the quality of working environments (Kouvonen *et al.*, 2008; Kowalski *et al.*, 2010; Hsu *et al.*, 2011; Sheingold & Sheingold, 2013; Lee, 2013). Thus, whilst alone the social capital theory does not provide a definition of the interprofessional stroke care relationships, it does further relationship understanding within this study, with the function of the capital i.e. growth emerging as a process for understanding stroke care interprofessional relationships. Finally, as implied by the literature, the presence of social capital is an indication of relationship quality. Therefore, in addition to contributing knowledge on the function of social capital for understanding interprofessional relationship ties, the theory also adds to the IPW relationship narrative by indicating that my IPW relationship finding of experiencing growth through interprofessional relationships is a high-quality relationship. High-quality relationships in the workplace are vital, with positive work relations engaging employees' intention to stay (Abugre, 2017). This would therefore suggest that IPW relationships as a factor/attribute for interprofessional working or as a social relationship type should not be undervalued.

### **6.5.3 Self-expansion through interprofessional working**

Self-expansion is the third theoretical concept which makes up the conceptual framework (explained in Chapter Three) that anchors my findings and provides a new explanation for understanding interprofessional relationships in a stroke care MDT context. Self-expansion refers to relationship formation being based on the principle to 'expand' (Aron & Aron,

1986). The theory of self-expansion, therefore, resonates with my findings, with the experiences of growth which emerged through interprofessional relationships being interpreted as a social process of ‘expansion’ that motivates participants to enter and sustain interprofessional relationships in a stroke care MDT setting.

Originally developed to explain relationship phenomena, in particular the motivation behind why individuals form and sustain romantic relationships (Aron & Aron, 1986), the self-expansion theory is based on the concept that individuals have a natural and basic desire towards expanding their sense of self through their close relationships with others (Aron & Aron, 1996). The theory, therefore, posits that self-expanding opportunities underlie all love-related phenomena, ranging from their initiation to their maintenance (Aron & Aron, 1986; Aron, Aron & Allen, 1998; Aron, Aron & Norman, 2008). While the application of the self-expansion theory is starting to branch out for understanding human relationships outside of those classified as romantic, research is still in its infancy. To date, self-expansion as a motive for explaining work relationships in a stroke interprofessional setting does not feature in research.

While there are differences in the interactions and behaviours found in romantic relationships compared to workplace relationships i.e. actions of intimacy, there are similarities (Ferris *et al.*, 2009). As discussed in the literature review chapter, in western societies relationship formation regardless of their type i.e. friendship, are driven by the fulfilment of personal needs (Duck, 2011). Fulfilment as a driver can be seen in my data, with IPW relationships fulfilling the participants’ needs to learn new skills and to feel protected and supported. Differences between romantic and work relationship are articulated in the literature chapter, via how they develop. As previously discussed, work relations i.e. IPW relationships do not develop in the usual sense, as professionals often do

not get to choose who else works for the organisation or in this case the stroke MDT. IPW relations therefore develop out of circumstance (Argyle and Henderson, 1985). Despite these differences, romantic and IPW relationships do have similar formation principles (Duck, 2011). These similarities can be found in the characteristics and behaviours of romantic and work relationships, with both relationship types being found to be influenced by behaviours and/or interactions of shared goals, trust and proximity (Gere & Schimmack, 2013; Day, 2013; Arnold *et al.*, 2016 Campbell & Stanton, 2019). These relationships characteristics of trust and shared goals not only appear throughout the IPW literature (Pullon, 2008; Day, 2013; Prystajecy *et al.*, 2017) but have also emerged within my findings, with proximity being a key findings and subsequently a sub-category for explaining the IPW relationships within a stroke care MDT. These similarities between romantic and IPW relationships, supports the use of the self-expansion theory, which has predominantly only been used to explain romantic relationships.

As previously discussed, my study identified expansion to be the symbol of growth that occurred from daily collaborative interactions and occurred both personally, professionally, as well as physically and emotionally. Experiencing growth through interprofessional relationships caused participants from different disciplines to thrive and flourish, as the growth experienced led to a sense of learning and a sense of vitality (the two principles that make up thriving at work) (Spreitzer *et al.*, 2005). While thriving in the workplace from relationships has been noted to positively affect an individual's mental and physical health, fluctuations in relationships and their perceived benefits have been found to occur over time (Tucker & Aron, 1993). This, however, was considered when selecting a methodology for enquiry and is therefore in keeping with the study's theoretical framework of social constructivism and symbolic interactionism, with meanings not being static (Charon, 1979; Blumer 1969; Thomas *et al.*, 2014). The social constructivist

approach to this study was applied to understand and learn how stroke care MDT professionals create knowledge and social reality, focussing on the relationship process as well as the product (Sias, 2009).

Related to other psychological models such as motivational theory, self-efficacy, self-actualisation, and interdependence theory, the self-expansion model which has positive effects is based on two fundamental principles (Aron & Aron, 2006). The first is the motivational principle which articulates that individuals have a motive to self-expand. Importantly, the motivation is not simply to achieve the desired goal but to attain the resources needed (i.e. the knowledge or skills) (Aron, Aron & Norman, 2008). Considering my proposed model, this principle relates to the desire to expand by experiencing growth in a personal and professional capacity, as well as in a physical and emotional sense. An example from my data findings includes participant P123 acknowledging the stroke MDT setting as a place that can aid professionals to develop valuable skills.

The second principle of the self-expansion theory is that individuals achieve self-expansion (in this case growth) through their close human relationships, which allows for the inclusion of others in the self (Aron *et al.*, 2004, 2011). This inclusion of the other in the self, refers to the degree to which individuals will include other individuals in the self to gain something from the other, which will ultimately help with achieving a goal (Weidler & Clark, 2011). Examples of this process from my findings include the inclusion of other MDT professionals as ‘family’, or the inclusion of others who helped in the experience of growth. Gravenkemper (2007) states that communities are created when individuals are willing to sacrifice and choose to be part of something bigger than themselves, reiterating that the inclusion of others in the self is a way to create and understand human relationships. According to Aron *et al.* (2011), the theory has the unique feature that

supports my findings that dissimilar others, i.e. different professional disciplines can and do form close relationships, with differences suggesting multiple opportunities for experiencing growth.

The notion of growth as a form of expansion in this study occurred in a professional, personal, emotional and physical sense, but also in an interprofessional manner in that participants grew together and from each other, i.e. experienced growth together from daily collaborative interactions, or experienced growth because of one another, i.e. from having the ability to vent. As discussed, the literature surrounding self-expansion in other contexts outside of loving relationships is scarce. However, examples show that it relates to other relationship types as well as non-relational domains. As Mattingly and Lewandowski (2014) point out, self-expansion can be achieved through any activity deemed challenging. With collaborative practice being deemed challenging, arguably by their very nature, implies that collaborative contexts promote self-expansion relationships. In addition, Aron and Aron (1997) have acknowledged the restricted focus of their theory, with the requirement for further research being needed on the theory outside of romantic relationship settings.

As discussed, self-expansion as a theory for explaining work relationships in a stroke care context does not feature in research. However, from a work relationship perspective, the theory of self-expansion (although not specifically mentioned), does appear in Dwyer, Schurr and Oh's (1987) model for explaining the relationship development process between business buyers and sellers. Their model for undertraining work relationships identifies a number of phases that relationships evolve through, which aim to explain why buyer-seller relationships develop and subsequently end. One such relationship phase is titled 'expansion'. Although the context of this research differs their descriptions within

the expansion phase of their relationship model resonate with the findings from my study. Dwyer, Schurr and Oh's expansion phase is characterised by the process of obtaining continuous benefits and the increase of interdependence, two processes found within my data findings. Dwyer, Schurr and Oh frame the expansion process from each party's (i.e. the individuals) satisfaction with the other's performance and associated rewards received. This supports the study's claim that the absence of growth (the satisfaction and associated rewards) can lead to relationships ending or breaking down. While Dwyer, Schurr and Oh's expansion phase supports my findings, they do not discuss specific interactions of expansion that give benefit or satisfaction to the individual parties involved. My proposed models adds to the existing work of Dwyer, Schurr and Oh by contributing this knowledge, with collaborative interactions identified in the four data categories providing examples of how personal, professional, physical and, emotional growth (expansion) can be achieved, i.e. through the ability to vent, protect one another and through perceptions of belonging.

Finally, Dwyer, Schurr and Oh's (1987) model incorporates social exchange to describe another phase of relationship formation. This shows that the theory of self-expansions and social exchange can work together to help interpret and understand relationships within a work context, in this case the IPW relationships of a stroke care MDT. Aspects of the self-expansion model were also found in the RCC model (Beach & Inui, 2005; Safrand, Miller & Beckman, 2005; Gaboury *et al.*, 2011; Soklaridis *et al.*, 2016) and the high-quality connections model (Dutton & Heaphy, 2003). How these models support my findings and my original contribution to knowledge is discussed further in this chapter.

The inclusion of the self (IOS) as the second principle of the self-expansion theory articulates that relationships are motivationally driven towards a union with one's partner, and consequently, inclusion of the partner's resources and perspectives (Aron *et al.*, 2004,

2011). Perspectives within the theory for understanding relationships refer to sharing one's partner's points of view and the inclusion of a partner's cognitive and attributes as one's own (Aron *et al.*, 2008). In the self-expansion literature, measuring relationships that include others in the self has been operationalised into a scale (Aron, Aron, & Smollan, 1992). The IOS scale consists of several pairs of circles. One circle in each pair supposedly represents the self and the other a close other. The overlapping of circles is the visual representation that purports individuals' general sense of interconnectedness (Gachter, Starmer & Tufano, 2015). Empirically, the IOS scale has been established as an effective measure of subjective closeness, with it being shown to predict the maintenance of romantic relationships and explain social behaviour (Aron & Fraley, 1999; Gachter, Starmer & Tufano, 2015). The IOS scale is noted to be a simple and highly intuitive tool that can capture a participant's perception (conscious and unconscious) of a social relationship that is consistent with many other theoretical explanations (Gachter, Starmer & Tufano, 2015).

Although the IOS scale is typically used to measure closeness by examining the inclusion of others in the self in romantic relationships, research while limited has used the scale within other interpersonal relationship contexts. Woosnam (2010) applied the scale to the field of tourism by measuring the closeness of tourists and residence. Although my study did not use the IOS scale to determine perceived levels of closeness for the expansion principle of including others in the self, my findings do suggest that participants working in stroke care did just that, with an example being the attributes and opinions they had for developing a sense of belonging and in team equality within the inclusive working and learning category. Gachter, Starmer and Tufano (2015) work into evaluating the IOS scale provides further comprehensive support that the IOS scale can be applied to other relationship types. Their worked evaluated the IOS scale via a three study approach in

which the IOS scale was used and compared to other relationships scales such as the Personal Acquaintance Measure scale (PAM) and the Relationship Closeness Inventory (RCI) scale. Their third study in particular, explored the application of the scale in relationships that were categorised as ‘friends who are more than acquaintances’ and ‘acquaintances who are closer than strangers’. A central observation made by Gachter, Starmer and Tufano (2015) following their evaluation study is that the IOS scale is strongly correlated with other scales that measure relationship closeness, this is despite the scales having different conceptual foundations. They concluded that the IOS scale is a highly reliable tool for any researcher who is interested in understanding human relationships.

A new contribution to the literature can be made by confirming that the inclusion of the self-principle can be applied to interprofessional relationships. Further research from this study’s findings could include applying the IOS scale within an interprofessional context, as this has not yet been done. Currently in the literature there are derivatives of the IOS scale (Aron *et al*, 1992), which have been developed and validated in the context of understanding different social relationships (Mashek, Cannaday & Tangney, 2007). Examples include Blanchard, Perreault, and Vallerand’s (1999) version of the IOS scale which, was used to understand sport relationships, in particular perceived closeness between the participants, their coach and other team members. Tropp and Wright’s (2001) inclusion of ingroups in the self, which found over-whelming evidence that the degree to which an ingroup is included in the self is based on ingroup identification such as self-esteem. Self-esteem, self-value, self-worth and confidence are findings that additionally emerged from my data.

Finally, Mashek, Cannaday and Tangney (2007) inclusion of community in self (ICS) scale, further supports future research and the application of an interprofessional IOS scale. Their two study project applied the ICS scale to two different participant groups (university students and imprisoned offenders). Behaviours found by Mashek, Cannaday and Tangney that determined relationship closeness via the inclusion of the self from a community perspective are again similar to the findings of this study. Activities of belonging, helping and not hurting were all found by Mashek, Cannaday and Tangney as factors for determining the inclusion of others in the self. Further research that would look at applying the IOS scale to an interprofessional context would confirm claims that professionals within stroke MDT working include other professionals from different disciplines within the self, thus adding additional rigour to my findings. Further research could additionally contribute a new derivative of the IOS scale, which would further continue to the narrative for explaining IPW relationships.

Including the self has also been found to have links with the concept of trust (Dansereau *et al.*, 2013), a concept interpreted to be present in my findings, as well as within the IPW relationship literature. Anderson and Chen (2002) and Dansereau *et al.* (2013) note that trust in self-expansion theory comes from the self, i.e. 'I trust myself' and because the theory involves incorporating others in the self, those who are included in the self are therefore trusted. This supports the concept that trust is not a relationship type, which it is often described as in the IPW relationship literature. Instead trust is a quality or behaviour that exists within a relationship.

The concept of the inclusion of others additionally emerged in the verbal communication used within, with participants describing the interprofessional team as 'us' and 'we'. As in romantic relationships when two become one (Aron *et al.*, 2011), inclusion of other

professionals within the self is suggested here through the connective language used.

Dansereau *et al.* (2013) make some intriguing points in using self-expansion to explain leadership and leader-follower relationships, with the concept that followers expand from including the leader in the self. In simple terms, they claim that when a team or a team-member succeeds, so does the individual (the self) involved. As individuals include others' resources and perceptions as their own, they get a sense of expansion. This is supported by the theory's founders who state that if a relationship partner is involved in an experience of self-expansion, then the expansion may be attributed to the partner, resulting in relationship satisfaction (Aron & Aron, 2006). Relationship satisfaction was interpreted in my findings with participants gaining growth through increased positive feelings of self-value, esteem and job satisfaction from the process of including others in the self. This was created from seeing others develop, being involved in ward humour, from helping others develop, by resolving conflict and by looking after one another through actions of compassion. While Dansereau *et al.* (2013) presents findings that self-expansion can inform leadership development via the theory explaining leadership and leader-follower relationships. My finding contributes further knowledge with self-expanding relationships occurring within a stroke interprofessional MDT as opposed to merely between two individuals.

Experiencing growth at work through episodes of difficulties, conflict and relationship break down has been found by other researchers (Rusbult & Van Lang, 2003; Mattingly & Lewandoski 2013; Overall, Girme and Simpson, 2016). Overall, Girme and Simpson (2016) propose that when individuals put aside their differences to resolve conflict, they are demonstrating actions of commitment, investment and trustworthiness. Putting aside difference to resolve conflict was seen in my findings with participant P133 describing how they dealt with conflict for the greater good of the team, which led them to experience

growth of value from being the bigger person. Mattingly and Lewandoski's (2013) work continues this discussion with conflict causing episodes of expansion outside of a relationship context by specifically examining self-expansion activities. They discuss relationship quality from self-expansion as an outcome from the efforts made in the self-expanding activities. They then linked this to human relationships in that even in the breakdown of marriage, if efforts are made, even though the relationship was unfixable, benefits i.e. expansion were still experienced.

This was seen in my research, with P127 and P133 making efforts with other individuals even though conflict had occurred, and their relationships had broken down. These benefits presented as emotional growth for being the bigger person and reducing a negative work atmosphere for other team members. This provides insight into an individual's motives and gives information about that person to other individuals, i.e. that he is reliable and trusting (Rusbult & Van Lang, 2003). All of which are qualities identified in the literature review as valuable characteristics for IPW relationships. This further supports my study's original claim in that the self-expansion theory can be applied to interprofessional relationships within a stroke care setting, with it providing an explanation into the collaborative interactions for relationship development and suitability that are embedded in the proposed model of experiencing growth through interprofessional relationships.

In addition to interprofessional actions of conflict causing growth, experiencing growth through actions of compassion while at work, has also been found in several studies (Dutton, 2003; Adamson *et al.*, 2018a, 2018b), including interprofessional contexts (Adamson *et al.*, 2018a, 2018b). While Adamson *et al.* (2018a; 2018b) are not specific in how growth occurs, they do make comments in that growth contributes to the overall wellbeing of an interprofessional team and the interprofessional team members within it

from actions of empathy. Although they are not explicit in stating that expansion occurs, it could be interpreted that the expansion in their study is the overall improved wellbeing felt by the interprofessional team and the individual within the team. Chen *et al.* (2010) make additional supporting comments with episodes of self-expansion that bring about closeness being associated with having greater levels of empathy and understanding in relationships. This again supports my original claim that the theory of self-expansion can be applied to IPW relationships, by providing a new explanation into the collaborative behaviours that provide stroke care professionals with their IPW relationship understanding.

The self-expansion theory as a new concept for aiding the understanding of interprofessional relationship in stroke care, highlights the significant influential narrative growth has as on the development and sustainability of interprofessional relationships within a stroke MDT context. The theory's application additionally reveals behaviour similarities within romantic and IPW relationships, which as discussed offers new opportunities for further research in the application and/or adaptation of the self-expansion scale of IOS. Finally, while other self-expansion studies have discussed the close links in the maintenance of relationships through engaging in self-expanding activities, my original model (Figure 19) provides insight via the four data categories into what engaging collaborative activities need to occur for individuals to feel and sustain expansion (growth) and thus develop and sustain relationships that enable professionals to experience growth. This new knowledge contributes to the narrative of interprofessional relationships by adding to the pre-existing literature on IPW relationships, the literature surrounding the self-expansion theory outside of romantic relationships, the attributes/factors literature for effective IPW working and the literature on being/what it means to be interprofessional.

## ***6.6 Returning to existing work relationships models***

As discussed in this chapter and Chapter Two, there are a number of relationship models that, although not specifically applied to interprofessional working within a stroke care MDT context, aim to explore the concept of relationships within a working domain. These are discussed for relevance to my study's original relationship finding along with how my findings can contribute to expanding the knowledge of these pre-existing models.

### **6.6.1 The high-quality connection (HQC) model**

The high-quality connection (HQC) concept developed by Dutton and Heaphy (2003) was an insightful model that complemented my findings in its acknowledgment for growth as a work relationship determinant. Dutton and Heaphy's (2003) HQC uncovered relationship quality and aimed to explain how work connections can allow an individual to flourish or flounder. While the HQC concept recognises social capital in its discovery for high-quality relationships, the model specifically includes the social exchange paradigm, as a theoretical lens to inform how HQC's can be determined by the imprints they leave on individuals while at work. The HQC concept, therefore, not only supports the inclusion of the social exchange for understanding my interprofessional relationship finding, but supports the concept of the social process of growth being a determinate for relationship understanding. Finally, the concept supports the inclusion of more than one theoretical perspective in explaining the complexities of work relationships

As discussed, the HQC concept explored the quality of relationships in work context.

Although my aim was not to discover quality but the relationship perceptions, Dutton and Heaphy's (2003) HQC concept was relevant with their idea that imprints can include those of growth, supporting my social process finding of growth for providing stroke care participants with their interprofessional relationship perceptions. An example from my

findings is the professional reward of having the opportunity to learn and develop.

Learning opportunities in regard to the HQC concept are interpreted as imprints, as they enable the participants to grow physically in their knowledge base, as well as emotionally with their professional confidence and job satisfaction levels being raised. Learning at work is believed to be rooted in an individual's social systems that take place through activities of doing work, talking about work, and seeing others do work, it is these interactions or learning that are said to bind individuals at work together (Spreitzer *et al.*, 2005). This supports my finding that relationship perceptions at work are socially embedded with them being interpreted from the growth (i.e. imprints) experienced from their daily stroke care MDT interactions.

Although my study did not aim to discover whether HQC existed within an interprofessional stroke MDT context, arguably the relationship perception finding of experiencing growth through interprofessional relationships is in fact an HQC. The argument comes from my relationships finding having positive and beneficial effects via the different professional groups within the stroke care MDT having the opportunities to experience personal and professional growth in a physical and emotional capacity. This is in keeping with Dutton and Heaphy's (2007) explanation of HQC having the cumulative effect of being positive and life enhancing, and Ragins and Dutton, (2007) perspective that positive relationships are defined as mutually beneficial and generative. My findings, therefore, have the potential to add an interprofessional dimension to the HQC concept which currently only takes a dyadic approach to understanding work relationships.

As identified above, the findings indicate that growth occurred from interprofessional collaborations in a personal and professional capacity (Figure 18), with growth being found to manifest in a physical (i.e. expansion in knowledge and in social circles) and an

emotional way (i.e. increase feeling of safety and confidence). While personal growth appears in the literature, it is predominately in the background (D'Amour & Oandansan, 2005). Spreitzer *et al.* (2005) allude to the simultaneous need of professional and personal growth, stating that thriving at work is a joint process of individuals experiencing learning (i.e. skill and knowledge acquisition) and vitality (positive feelings and energy associated with having zest). This again supports the significance of personal growth emerging alongside professional growth as a finding for determining and sustaining interprofessional relationships within a stroke care MDT.

Dutton (2013) identified that the data identifying personal growth is found at work in the spoken words and behaviours displayed in day-to-day interactions with others. This supports the methods used to capture the data and, validates the methodological approach and the emerging finding that personal growth exists within the work context. One way this personal growth was demonstrated was via the perceived expansion participants felt within their social circles, with participants referring to work colleagues as 'family'.

Although only touched upon Dutton and Heaphy (2003) in the HQC work, they discuss growth in forms of expansion. However, little explanation is given of how individuals who have HQC expand within their work relationships. Dutton and Heaphy (2003) do, however, acknowledge that expansion is not just based on knowledge, but the 'self' which again fits with my research findings, by verifying the multiple dimensions for understanding work relationships. This again strengthens the argument that IPW relationships are similar to other important social relationships i.e. romantic relationships as they are understood to be motivated via behaviours of expansion.

### 6.6.2 The relationship centred care (RCC) model

The Relationship Centred Care (RCC) model, previously outlined in Chapter Two, has had a number of scholars dedicate literary work to fully comprehend the varying relationships that affect healthcare outcomes (Pew-Fetzer Task Force 1994; Beach & Inui, 2005; Safrand, Miller & Beckman, 2005; Gaboury *et al.*, 2011; Soklaridis *et al.*, 2016). Like social capital and the HQC concept, the RCC model focuses on the quality of relationships that healthcare professionals need to develop and maintain in practice (Nundy & Oswald, 2014). The RCC model is consistent with my findings in that the model acknowledges the centrality of interactions within healthcare relationships as they can impact on an individual's personhood (personhood relates to the quality of a person) (Soklaridis *et al.*, 2016). Personhood, as an interpretation of the concept of growth occurring from healthcare relationships, further validates the social process of growth from collaborative interactions for determining my interprofessional relationship perception. As discussed in Chapter Two, a number of scholars have extended or elaborated on the RCC model and, although they are vague, all of the different RCC model views refer to the links between the concept of growth and meaningful relationships (Beach & Inui, 2005). This supports my proposed model's findings.

Safrand, Miller and Beckman (2005) have contributed to the discussion of the RCC model, with their focus on the organisational dimensions of the model. Their reinforcement on the importance on the organisation in understanding and creating relationships again transpired within my model's findings. For example, it supports the findings of interprofessional proximity, with the close working quarters allowing participants multiple opportunities to engage in personal and professional interactions. Gaboury *et al.* (2011) examined the RCC model in relation to IPW and has found similar findings with, personal growth being an output of clinician-clinician relationships. However, while it supports the concept of

personal growth, it is unclear as to what it means by personal growth, as well as how personal growth is achieved from interprofessional collaborative practice. This thesis bridges this gap, with my proposed model demonstrating not only how personal and professional growth is created via interprofessional stroke relationships but what growth i.e. job satisfaction, knowledge and self-value, is experienced.

The RCC model has additional links to the self-expansion theory, as it includes the relationship of the 'self', in terms of professional, personal development and the overall self-awareness of being a healthcare professional (Nundy & Oswald, 2014). While the relationship to 'self' is acknowledged as the the least understood component of the model, the Pew-Fetzer Task Force (1994) report, which was the genesis of the RCC model, has articulated the importance of the relationship to one's self, with the need to focus on the promotion of change, i.e. growth. Manning-Walsh *et al's.* (2004) RCC work on expanding the cup model makes interesting comments into self-care within the RCC's 'self' concept. They note that this is where a commitment is made from the professional to develop personally so that effective relationships can be made. Although they are not specific as to who these effective relationships are made with, as the model focusses on four different types of healthcare relationships, they note that the looking after and nourishing of the self is significant in creating high-quality relationships, which are a source of expanded accomplishments.

While the discussion of the self in the RCC is focussed on the individual developing, my findings contribute a new element in that individuals incorporate others in the self via the process of self-expansion. While they specifically do not mention others in the self, Manning-Walsh *et al.* (2004) discuss a concept called 'self-other', in which individuals function, develop and expand as a function of their relationships. This further supports my

findings and the use of the self-expansion model for explaining the interprofessional relationship findings of experiencing growth through interprofessional relationships. In addition, my findings provide a fresh new interprofessional perspective to the RCC model, with it identifying the social process and interactions of growth for understanding IPW relationship perceptions.

The existing relationships models and concepts for relationship development discussed within this section are insightful in providing support for my model's finding of experiencing growth through interprofessional relationships. Finally, this discussion indicates that my model's findings has the potential to further develop these pre-existing theories, by providing evidence that the HQC concept can relate to interprofessional relationships and by elaborating on both models' concepts of the self, through providing a theoretical explanation for its presence.

### ***6.8 Chapter conclusion***

This chapter has presented a comprehensive discussion of the original relationship model of experiencing growth through interprofessional relationships. The discussion elicited links with existing knowledge, clarified new insights into IPW relationships, and discussed the three theoretical perspectives that support the interprofessional stroke MDT relationship findings. All of which have contributed to the narrative for explaining IPW relationships in a stroke care MDT setting.

Overall, the chapter demonstrates that the research question posed at the outset of this thesis has been addressed, via a comprehensive investigation that explored the relationships of the individuals working in an interprofessional stroke care MDT.

Experiencing growth emerged as the social process, which not only explained interprofessional relationship perceptions but the reason why interprofessional relationships develop and how they can be sustained. The following chapter completes the study by clarifying the original contribution to knowledge, identifying the study's limitations, and finally, providing recommendations for further research.



## **Chapter 7: Summary and conclusion**



## **7.1 Introduction**

This chapter concludes the thesis by first returning to the beginning, to consider the fulfilment of the research question:

*“How do professionals working in a stroke care multidisciplinary environment perceive their collaborative interprofessional working relationships?”*

Chapter Five identified and explained the four data categories that emerged from the constant comparative analysis process. It was from these four categories that the social process of experiencing growth was interpreted to provide a conceptualised understanding into the interprofessional relationships of the stroke care professionals' under study.

Chapter Six then provided a comprehensive discussion into the relationship findings of *Experiencing growth through interprofessional relationships model: the stroke care MDT setting* (Figure 19) and its theoretical foundation.

This final chapter begins by first clarifying and summarising the original contribution to knowledge. This is followed of a discussion into the implications for future research. The chapter concludes with the study's limitations and the findings dissemination plan.

## **7.2 Contribution to knowledge**

This thesis has contributed to knowledge by addressing the research and literature gap identified in Chapters One and Two. While it was revealed from the literature that work relationships are acknowledged as an important aspect of working life, there is a scarcity of empirical literature that explores and explains working relationship perceptions within complex and diverse healthcare contexts, such as interprofessional stroke MDTs. My findings, maybe of value and effect change as they present the sole constructivist grounded theory (GT) study that exclusively explores the relationships perceptions of individuals

working in an interprofessional stroke care MDT. The experiencing growth through interprofessional relationships model: the stroke care setting, not only provides a framework for understanding interprofessional relationships in stroke a care setting, but provides a foundation for further empirical research that is both in and outside of a stroke context.

As discussed throughout the chapters of the thesis, this study was based on a qualitative comparative analysis method via the methodology of constructivist GT. The value of a GT study is its ability to make analytical insights within a substantive area. Hence, novel ideas are significant if they can further thinking, research, and practice (Charmaz, 2006). This research project achieved its aim via experiencing interprofessional growth through relationships: the stroke care MDT setting model (Figure, 19). The original model provides a conceptualised multi-dimensional explanation of the interplay between collaborative practice and the working relationship perceptions of interprofessional stroke care MDT professionals. It can be concluded from this thesis that interprofessional relationships in stroke care are embedded in collaborative interactions, in particular the social interactions and behaviours that enabled professionals to experience personal and professional growth in a physical and emotional capacity. Experiencing growth through interprofessional relationships is, therefore, the discovered social process for how stroke care professionals perceive their collaborative MDT relationships and the answer to the research question posed.

This thesis' findings contribute to previous literary work by, revealing the perceptions and value of stroke MDT working relationships and confirms the influencing collaborative interactions for successful relationship formation. The findings additionally challenge previous work by adding a clear, profound and sustainable relationship view that suggests

relationships in the stroke care MDT setting are more than simply a product for financial return or of a one word description. The motivation of self-expansion, a theory which until now that has not been applied to a stroke care setting for understanding relationships, with it predominantly focussing on interpreting and understanding close loving relationships (Aron & Aron, 1986, 1996, 1997, 2006), was interpreted within the findings and introduced as an innovative way to help explain the relationships within an interprofessional stroke care MDT. The application of the self-expansion theory to explain IPW relationships further contributes a possible new perspective of the operationalised inclusion of the self (IOS) scale. Although the IOS scale research has predominantly been conducted on romantic relationships, the scale has been successfully researched and applied to other interpersonal relationship contexts. While my study did not apply the IOS scale to determine self-expansion, my findings did suggest that stroke care professionals working interprofessionally do include others in the self. This opens possibilities for future research endeavours, that contribute to the narrative for understanding IPW relationships and in the understanding of the self-expansion theory.

My findings, therefore, contribute new knowledge that provides a more complete understanding of IPW work relationship realities in a stroke care context. The model does this via its ability to unite the multiple behaviour and characteristics that have often interpreted in the pre-existing literature as relationship definitions and through the three theoretical perspectives that explain the process, the function and the motive for understanding interprofessional stroke care relationships.

It is additionally argued that the model can support the recruitment and sustainability of the stroke care workforce, as it contributes practical knowledge for creating and sustaining positive relationships of experiencing growth through interprofessional relationships. It

provides this new insight via the model's four categories, which offer contextual support for what behaviours and collaborative interactions create and sustain relationships of experiencing growth through interprofessional relationships. This, in today's organisational structure is anticipated to be essential, with organisations operating in an increasingly fast paced and complex competitive context. The ability for employees to continue to develop in their roles, has be articulated to be critical for their survival (Paterson, Luthans & Jeung, 2014). The GT model is therefore contemporary, as strategies in maintaining an interprofessional healthcare workforce is pertinent, as many interprofessional initiatives are short-lived, with them ending either when the funding ends, key team members who are interprofessional enthusiasts move on, or the leadership and management become disengaged or less supportive of the interprofessional system (Freeth, 2001). This model takes the pressures off funding and has the potential to engage the whole team in becoming interprofessional enthusiasts, as it not only identifies how to build interprofessional relationships within collaborative practice, but identifies how professionals can benefit from developing and sustaining interprofessional relationships from both a personal and professional perspective and in a physical and emotional capacity.

The finding of experiencing growth through interprofessional relationships, as a stroke MDT relationship perception, does not suggest that IPW relationship research is now complete. Rather, the findings explain the relationship realities that exist within a stroke MDT, as without them it is not possible to gain a true and accurate understanding of how they can influence interprofessional collaboration. The model, therefore, sets out to address the knowledge gap that surrounds the complexities of interprofessional relationships (D'Amour *et al.*, 2005). In reducing this knowledge gap, my model opens itself up to new research opportunities, allowing its contribution to the topic of IPW relationships to be ongoing. Although this research was conducted in a stroke care setting, further research

could include applying the model to other specialists setting/units that have similar interprofessional team structures i.e. cardiology teams. Finally the creation of the proposed model supports the belief that team-working theories contribute to evidence-based practice (Salas, Reyes & McDaniel, 2018).

### **7.3 Limitations of the thesis**

Identifying a study's limitations is important within empirical research, as they place findings into context, supports trustworthiness, and determines the relevance of the original contribution, which in this thesis is the proposed original model that was developed from the findings (Figure 19). Moreover, a study's limitations must be properly identified to generate debate on the topic and stimulate further research recommendations. Given the constructivist nature of this grounded theory study, specific strategies, which were discussed in detail in Chapter Four, demonstrated that the methodology and methods used were rigorous and robust. However, acknowledging limitations is an essential process to demonstrate reflexivity for the research approach that was undertaken (Vickers, 2016), with acknowledging limitations demonstrating the researcher's ability to critique and enabling others to judge its value. Nevertheless, the current study has a few limitations to consider.

While the thesis clearly answers the research question with the relationship perception finding of experiencing growth through interprofessional relationships, there are reservations regarding the transferability of this relationship perception. Therefore, a limitation of this study is that IPW relationship perspectives were only investigated in one stroke care MDT location in one hospital trust within the UK. It is not this study's intention to claim that the findings are transferable to all interprofessional contexts especially as the grounded theory study generates a theory based on dynamic processes and

ranges of experience and perceptions, not static factual ‘truths’ (Glaser & Strauss, 1967). Additionally, as discussed throughout this thesis, interprofessional healthcare teams are complex entities influenced by human and organisational factors and the field of health in which they operate. This makes IPW context-dependent, which means that different teams will succeed in different situations depending upon their processes, participants, and context in which they are based (Sims, Hewitt & Harris, 2015a), Williams (2000) however, suggests that the outcome of research undertaken with any social group is likely to have some degree of resonance with a social group which shares the same history and context.

The lack of transferability and objective measures is a debate that has been raised in qualitative research (Myers, 2000). However, as this research was conducted using a constructivist grounded theory approach, a philosophical and methodological position was maintained that placed emphasis on the construction of meaning (Mills, Bonner & Francis, 2008). This according to Charmaz (2014) determines a study’s usefulness as credibility and originality is perceived, enabling a studies trustworthiness to be establish (Lincoln & Guba, 1985). While originality came via the development of the study’s model, credibility was enhanced further by providing a transparent account of the analytical process and methods. The analysis was further supported by memos, a process used to ensure interactions and interpretations were grounded in stroke care participants lived realities of interprofessional practice. Finally, a detailed profile of the participants was additionally provided, which was completed to maintain the presence of the participants who took part in this study and provided a context of how theoretical sampling was utilised (Figure 16).

Arguably, the findings are not transferable in a predictive sense to other clinical interprofessional contexts, which includes other stroke care MDT settings. Even if all professionals were represented in the study, not all stroke teams follow the same structure

in the professionals that work within them, with inclusions being dependant on a trust's funding and stroke activity, with some stroke teams being solely for rehabilitation purposes. However, due to the multiple sources of evidence and rich explanatory data generated, they are likely to be transferrable to some degree, and therefore has the potential to help, inform, and influence similar interprofessional practice contexts. This is supported by Bechhofer and Paterson (2000), who suggest that where studies identify the workings of social processes, confidence should be had that understanding of these processes, can provide for some generalisation to social settings where similar instances of group activity occur. This is additionally in keeping with Corbin and Strauss (1990, p. 15), who state:

*“...no theory that deals with social psychological phenomena is actually reproducible in the sense that new situations can be found whose conditions exactly match those of the original study, although major conditions may be similar.”*

A GT study is therefore, transferable to the extent that the processes of action and interaction surrounding the phenomenon of enquiry (i.e. interprofessional stroke care relationships) can be known (Corbin and Strauss (1990). However, Vickers (2016) proposes that a theory or in my study's case a model, may never truly be replicable as new social conditions and behaviours are always arising. Therefore, Vickers recommends that future adaptations to developed models may be required as behaviours change. Thus, for a more broader and robust model it is recommended that the model is tested across a wider MDT and interprofessional settings.

Finally, while I aimed to examine relationships in a stroke care MDT, Goodwin, Blacksmith and Coats (2018) demonstrates how research into military teamwork has led to further understanding in a general team sense. This suggests that even though a team context and infrastructure may vary, team performance, behaviours, and the outcome may

be more similar than not (Salas, Reyes & McDaniel, 2018). Like stroke units, other healthcare departments are likely to adopt similar interprofessional approaches and structures. Therefore, this thesis would have national and potentially international relevance.

Another limitation of the study was the sample population. While the recruitment process aimed to collect data from all professionals working as part of the team, some professionals were not included, with examples being the ward clerks and the pharmacists. Additionally, professional populations who participated varied, thus it could be suggested that some professional disciplinary groups compared to others had more of a voice within the data. Arguably, the study does not fully represent all professional working in the stroke care MDT. However, every effort was made to recruit a range of professionals, with most professionals working within the stroke MDT team, in a core and peripheral capacity being recruited and represented in the findings. Additionally, the methodology of grounded theory does not attempt to understand social phenomena as the participants in that social phenomena sees it, but rather it seeks to uncover patterns in their experiences. In this study, the patterns in their experiences of IPW relationships are via their daily collaborative interactions.

This limitation, therefore, is not problematic, as the development of a substantive theory does not claim an objective truth, but rather provides new insight into how the phenomenon is experienced via collaborative interactions. GT studies also do not intend to generate factual results or accurate descriptions, but present an integrated set of plausible, theoretical hypotheses about an underlying pattern of behaviour (Glaser & Strauss, 1967), which this thesis achieved via the original model that explains interprofessional relationships in a stroke care MDT through experiencing personal, professional, emotional,

and physical growth. Considering this and the discussion regarding sample size and theoretical saturation outlined in Chapter Four, the sample population recruited was regarded as being satisfactory for gaining a valid and robust interprofessional relationship perception.

The length of time in the research field collecting data is another limitation of the study, especially with its application of social exchange concept to theoretically underpin the relationship model of experiencing growth through interprofessional relationships. This is due to the theory of social exchange being a process identified to occur over a period of time (Calhoun *et al.*, 2007). While my study claims that reciprocal exchange was at times absent, this could be due to the length of time spent data collecting in the field with the reciprocal exchange interactions occurring after data collection. Thus, as already discussed in Chapter Six, a longitudinal study may have produced evidence of reciprocity. However, reciprocal processes of exchanging resources cannot always be assumed to be returned. This assumption is echoed in Homan's (1961) operant approach to social exchange who states that the process of pre-empting if actions of returns will always occur is unrealistic. Finally, due to the time restraints of the PhD process, the time frame for data collection is limited.

The study's lone researcher approach is an additional limitation of this thesis. Although my institution requires the research to be completed alone, the lone research perspective has its limitations. Gregory (2019) states that for a lone researcher, negotiating fieldwork, writing field notes, coding and analysis, and reflecting degrees of subjectivity are of a singular perspective. However while a singular perspective was given due to the lone research approach to conducting the study, strategies to ensure theoretical sensitivity (a core component of the grounded theory methodology) were utilised (Glaser, 1978; Strauss &

Corbin, 2007; Charmaz, 2014), so that relevance can be identified to aid an emerging theory that is a true reflection of the IPW relationships of the stroke team under study.

#### ***7.4 Implications for future research and practice opportunities***

The thesis contributes new knowledge to the area of IPW and work relationships in stroke care, which has the potential to empower all stakeholders involved in stroke care MDT working. Like all research projects, it stimulates further debate to confirm, enrich, and build upon the conclusions made into IPW relationships within a stroke care MDT context. This process is supported by Charmaz (2014) who highlights that an emerging GT provides a preliminary foundation of knowledge. It is through further empirical research activity that the foundations and credibility for my model can be enhanced. While recommendations for future research have been referred to within Chapter Six, recommendations for practice, policy, education, and research based on these research findings are outlined next.

##### **7.4.1 Opportunities for policy and practice**

As discussed, the original interprofessional relationship model gives insight into the working relationship of an interprofessional stroke care MDT and the processes in achieving them. The model, therefore, has the potential to be a new initiative in supporting the recruitment and sustainability of the stroke care workforce and other similarly structured MDTs. The need to build and sustain the workforce is relevant in the current era of society, where a stroke occurs every five minutes within the UK (Stroke Association, 2018). Measures to keep on top of stroke care recruitment and sustainability is additionally in keeping with the British Association of Stroke Physicians' (BASP) (2019) report for meeting the future stroke consultant workforce. The report documents that to provide

comprehensive care and to support the development of modern, NHS stroke services, an additional 226 full-time stroke consultants are required to be recruited. Although the BASP (2019) document is tailored towards recruiting consultants and doctors, it clearly outlines the need to find new ways for encouraging doctors to specialise in the field of stroke medicine.

Encouraging professionals into the speciality of stroke medicine was found not to be exclusive to doctors, with reports previously discussed, indicating that only 51% of hospitals in England, Wales, and Northern Ireland have adequate numbers of senior nurses (Stroke Association, 2018). Finally, the Kings Fund strategy for improving quality in the NHS argues that more emphasis should be placed on reforming the NHS ‘from within’ by appealing to the intrinsic motivation of the workforce, by providing them with the skills, knowledge, and a working environment in which there is joy (Ham, Berwick & Dixon, 2016).

My proposed model has the potential to be used as a new initiative for encouraging medical professionals to join and remain in the stroke care workforce. As indicated in the literature review, the main social driver to seek and form human relationships regardless of their nature is to fulfil personal and psychological needs (Duck, 2011), with work relationships not just being perceived as a means to an end (Yeoman, 2014), as they have the power to inform an individual’s identity, shape their career, and inform personal and professional value (Gersick, Bartunek & Dutton, 2000; Trefalt, 2013; Abugre, 2017). This is the case for my relationship interpretation with growth being the process, function and motivation for relationship ties in stroke care MDT working.

To help recruit and encourage professionals into the stroke care directorate my model's findings could be disseminated to human resource (HR) departments. By communicating and sharing the knowledge gained in this thesis to healthcare HR department, the relationship perception of experiencing growth through interprofessional relationships can be promoted i.e. during recruitment drives. Encouraging new professionals into the stroke care workforce is only one way to combat the prevailing workforce crisis. Engaging with and sustaining the current stroke care workforce is a task that is just as important.

Disseminating my model's findings to established stroke care MDT's would allow the knowledge gained from this thesis to be put into practice. By disseminating the findings directly to stroke care units, professionals can gain knowledge into the personal and professional impact IPW relationships can have. This may encourage professionals to stay within the stroke directorate.

The current reports identified above highlight the workforce needs for consultants and senior nurses in stroke care (Stroke Association, 2018; BASP, 2019). As the model is from an interprofessional perspective, it is proposed that the relationship model of experiencing growth through interprofessional relationships can be used to recruit professionals from all disciplines. The implementation of this interprofessional relationships model is therefore contemporary as it supports the transformations being made in health and social care by acting as a workforce innovation that supports the British Association of Stroke Physicians' (BASP) (2019) in meeting the stroke care workforce requirements.

Finally, as these relationships provide individuals with the means and resources to fulfil personal and professional needs. The model's use as a workforce strategy supports the need for more innovative, flexible and effective ways of not just recruiting and keeping

professionals but as a method for developing the workforce (Martin & Manley, 2018). This according to Martin and Manley (2018) is a process which uses the workplace as the main resource for change. This opens up further opportunities to share findings with key stroke and IPW policy makers, as well as key institutions such as CAIPE and the Stroke Association.

#### **7.4.2 Opportunities for research**

The proposed finding of experiencing growth through interprofessional relationships could be tested in an applied way to a range of other MDT and interprofessional contexts. This would determine whether the relationship perception found occurs among other stroke care MDT's, as well as other interprofessional teams outside of a stroke care MDT context. Examples of other specialist areas that work in teams considered to be interprofessional in nature include cardiology units, neurology wards and oncology services. If other interprofessional teams such as cardiology MDT's are found to have relationships of experiencing growth through interprofessional relationships. It may lead to the model being used as a universal framework for sustaining interprofessional relationships within the wider healthcare workforce. It may, therefore, be additionally useful to communicate and disseminate the original findings to professionals working in MDT's outside of a stroke care setting settings and to other key stakeholders involved in preparing, structuring and informing interprofessional teams and interprofessional ways of working i.e. CAIPE.

Further research that could add validity to the links made by this study, would be to further explore elements of the self-expansion theory, for example conducting research that explores the theory's second principle of the inclusion of others in the self within interprofessional relationships. While the study found qualitative links to support the identification of including others in the self, further supporting statistical data could be

gained from conducting IPW relationship research that includes the theory's IOS scale. As discussed, empirically the IOS scale has been established as an effective measure of subjective closeness, with it being shown to predict the maintenance of romantic relationships (Aron & Fraley, 1999). Thus, completing further research into the scale specifically within the perspective of IPW could result in the development of a new derivative of the IOS scale. This IOS research could add further value to the narrative of IPW relationships, by predicting the maintenance of the interprofessional relationships within stroke care. This would not only support the use of the model for recruitment and workforce sustainability, but would further support the study's claim that professionals in stroke care include others in the self in their IPW relationships. It would additionally add to the self-expansion literature and the current catalogue of adapted IOS scales that have been developed and validated.

Finally, another recommendation for future research would be to determine whether the relationship perception of experiencing growth through interprofessional relationships improves or impedes a professional's ability to successfully collaborate with others. This would not only compliment the research that has reported links between successful IPW and improved patient outcomes (Baxter & Brumfit, 2008b; Blum, Brehchtel & Nathaniel, 2018), but it would add to the extensive body of knowledge that examines the factors and characteristics that elicit and impede effective interprofessional collaboration and teamwork.

#### **7.4.2 Opportunities for education**

Based on the research claims, moving forward a potential course of action recommended is to promote the IPW relationship perception of experiencing growth through interprofessional relationships during episodes of IPL. This is in keeping with CAIPE's

(2019) view, values and purpose, which is to promote and support engagement into IPL/IPE, as it can aid the development of necessary skills, knowledge, attitudes, values and behaviour that underpin successful collaborative working. It additionally supports the UK's health and social care education stance, which recommends students to develop skills, that will help them to work effectively in practice with others (Baker *et al.*, 2018). In this thesis, implementing the model into IPL provides professionals with the skills and knowledge to develop IPW relationships that enable them to grow and develop.

As discussed, collaborative working relationships do not just exist on their own (King *et al.*, 2017). Building interprofessional relationships early on in undergraduate education settings means IPW relationships of experiencing growth through interprofessional relationships can develop and flourish before qualification. This recommendation of building IPW relationships in IPL /IPE at an undergraduate level not only supports the work relationship literature, with relationships simulating commitment and harmonious working (Abugre, 2017), but it would respond to the NHS expectations to recruit skilled and well-rounded healthcare professional, who can work efficiently with all professional groups (NHS, 2016).

Educational opportunities and recommendations following this project are not exclusive to pre-registration practices. As outlined in the discussion chapter this new IPW relationship model could influence the development of current and future leadership programmes that inform how healthcare teams practice. This is in keeping with the NHS Leadership Academy's philosophy of leadership development being a strategy for improving behaviours and skills (NHS, 2020), and the 'we are the NHS: people plan' 2020/21. The 20/21 NHS people plan is to focus on fostering a working culture that promotes growth

through training staff to work differently together in the delivery of patient care (NHS England, 2020).

Finally, as the model found interprofessional relationships to be based on experiencing professional and personal growth, it could be implemented as a coaching tool for achieving CPD activity. Coaching is a key strategy that is widely promoted in both educational and healthcare settings for aiding the success of professionals and students (Narayanasamy & Penney, 2014; Norman, Fritzen & Gare, 2015). This further reiterates the importance of continuing to conduct research on the topic of IPW relationships, as it supports and contributes to the concept that the workplace is a key resource for initiating change (Martin & Manley, 2018).

### ***7.5 Dissemination of the thesis findings***

Dissemination of research findings is an important part of the academic PhD process, with it being a means to grow a researcher's career and to enable communication of the generated findings to diverse audiences (Gerrish & Lacey 2010; Derbyshire, 2017; Odendaal & Frick, 2018). Disseminating findings can take various forms. The traditional route to disseminate nursing PhD findings is to seek publication in relevant peer-reviewed academic and professional journals (Macduff, 2009). Examples of research and academic journals, which I intend to publish my research findings include the Journal of Interprofessional Care, Journal of Advanced Nursing, Human Resource Management and Human Relations.

However, recent changes to the nature and scope of how universities disseminate and promote accessibility to doctoral work have resulted in the creation of institutional e-thesis repositories that house doctoral work. These e-thesis repositories systems have been shown

to increase traffic in accessing doctoral work and allow for an audience that is national as well as international (Macduff, 2009). The findings of this thesis therefore, will be disseminated by being readily accessible via its electronic presence within Northumbria's university library. I additionally aim to gain international interest by having the thesis readily available on well-established online repository's such as EThOS and Networked Digital Library of Thesis and Dissertation (NDLTD).

Finally, as IPW is a global phenomenon the findings will continue to be presented at relevant local, national, and international conferences. To date, I have disseminated early research findings at several Northumbria university PGR school conferences as well as at the North East postgraduate conference. Most recently an oral presentation was delivered in Dublin at the 2019 IPL/ IPE focused European Conference of Health Workforce Education and Research.

## ***7.6 Chapter conclusion***

In conclusion, this study has provided clarification as to what IPW relationship perceptions exist within a stroke MDT from collaborative practice. The rationale for this study arose from a personal passion for understanding IPW within a stroke context, as well as the topic lacking empirical work, resulting in an ambiguous conceptual understanding of IPW relationships. My findings echo current interprofessional relationship work, with trust and support emerging as characteristics and qualities found within the IPW relationship perceptions of stroke care professionals. However, the study contributes new theoretical insight in uncovering the social process, of how relationship understanding in stroke care is navigated through the core social process of experiencing growth. Together, the three theoretical perspectives of *social exchange theory*, *social capital* and *self-expansion theory* provided an original multi-dimensional explanation of the process of growth as a

relationship undertaking and how it emerged as the motivation behind developing and sustaining IPW relationships between stroke care MDT professionals.

The findings of this study have the potential to contribute positively to improve interprofessional relationship engagement, with the findings identifying how interprofessional relationships are viewed and how they are an important entity to an individuals' working life and the lives of a stroke care workforce. As this thesis has identified that interprofessional relationship perceptions in stroke care are embedded in collaborative interactions that instil growth, it feels fitting to end this thesis in the same way it started, with the quote below accentuating how interprofessional collaboration for all stakeholders is limitless:

*“Almost anything is, in principle, possible through collaboration because you are not limited by your own resources and expertise.” (Huxham & Vangen, 2005, p.3)*

## **Appendices**



**Appendix 1:** The three key versions of the grounded theory methodology explained

	<u>Charmaz</u>	<u>Glaser</u>	<u>Strauss and Corbin</u>
Philosophical stance	Constructivist	Positivism	Pragmatism
Initial Literature review	Yes	no	yes
Theoretical sampling	Utilised When preliminary categories or concepts start to emerge	Begins after the first analytic session and continues Throughout the research process	Begins after the first analytic session and continues throughout the research process
Analysis method	Initial coding Focused coding theoretical coding  Constant Comparative	Open coding Selective coding (Substantive) Theoretical coding (Theoretical) Constant Comparative	Open coding Axial coding Selective coding  Constant Comparative
Reflexivity	Yes – central element to this constructionist vision for generating theory	warns of reflectivity paralysis promotes theoretical sensitivity	advocate a reflective journal

## Appendix 2: University ethical approval

*Executive Dean*  
**Professor Kathleen McCourt CBE FRCN**

**This matter is being dealt with by:**  
Professor Pauline Pearson  
Ethics Lead  
Department of Healthcare  
Faculty of Health and Life Sciences  
Coach Lane Campus  
Newcastle upon Tyne  
NE7 7XA  
Tel: 0191 2156472  
Email: [pauline.pearson@northumbria.ac.uk](mailto:pauline.pearson@northumbria.ac.uk)

Dear Laura and Alison

### **Faculty of Health and Life Sciences Research Ethics Review DHCPark100815**

#### **Title: Understanding The Meanings Of Inter Professional Relationships Within A Stroke Care Multidisciplinary Team**

Following independent peer review of the above proposal, I am pleased to inform you that University approval has been granted on the basis of this proposal and subject to compliance with the University policies on ethics and consent and any other policies applicable to your individual research. You should also have recent Disclosure & Barring Service (DBS) and occupational health clearance if your research involves working with children and/or vulnerable adults.

The University's Policies and Procedures are available from the following web link:  
<http://www.northumbria.ac.uk/researchandconsultancy/sa/ethgov/policies/?view=Standard>

You may now also proceed with your application (if applicable) to:

- Health Research Authority or NHS R&D organisations for approval. Please check with the NHS Trust whether you require a Research Passport, Letter(s) of Access or Honorary contract(s).
- Research Ethics Committee (REC). [They will require a copy of this letter plus the ethics panel comments and your response to those comments]. If your research is subject to external REC approval, a 'favourable opinion' must be obtained prior to commencing your research. You must notify the University of the date of that favourable opinion.

You must not commence your research until you have obtained all necessary external approvals. Both the University and NRES strongly advise that the supervisor accompany the student when attending an external REC.

All researchers must also notify this office of the following:

- Commencement of the study;
- Actual completion date of the study;
- Any significant changes to the study design;
- Any incidents which have an adverse effect on participants, researchers or study outcomes;
- Any suspension or abandonment of the study;
- All funding, awards and grants pertaining to this study, whether commercial or non-commercial;
- All publications and/or conference presentations of the findings of the study.

We wish you well in your research endeavours.

Yours sincerely

A handwritten signature in blue ink that reads "Pauline Pearson". The signature is written in a cursive, flowing style.

Professor Pauline Pearson

Ethics Lead for Healthcare, on behalf of the Faculty Research Ethics Review Panel



## Health Research Authority

### East of England - Cambridge South Research Ethics Committee

The Old Chapel  
Royal Standard Place  
Nottingham  
NG1 6FS

Telephone: 0207 104 8144

02 February 2016

Miss Laura Park

Coach Lane Campus West

Benton

Newcastle upon Tyne

NE7 7XA

Dear Miss Park

<b>Study title:</b>	<b>Understanding the Meanings of Interprofessional Relationships within a Stroke Care Multidisciplinary Team.</b>
<b>REC reference:</b>	<b>16/EE/0020</b>
<b>IRAS project ID:</b>	<b>194431</b>

Thank you for your letter of 26 January 2016, responding to the Proportionate Review Sub-Committee's request for changes to the documentation for the above study.

The revised documentation has been reviewed and approved by the sub-committee.

We plan to publish your research summary wording for the above study on the HRA website, together with your contact details. Publication will be no earlier than three months from the date of this favourable opinion letter. The expectation is that this information will be published for all studies that receive an ethical opinion but should you wish to provide a substitute contact point, wish to make a request to defer, or require further information, please contact the REC Manager Ellen Swainston, nrescommittee.eastofengland-cambridgesouth@nhs.net. Under very limited circumstances (e.g. for student research which has received an unfavourable opinion), it may be possible to grant an exemption to the publication of the study.

### Confirmation of ethical opinion

On behalf of the Committee, I am pleased to confirm a favourable ethical opinion for the above research on the basis described in the application form, protocol and supporting documentation as revised.

### Conditions of the favourable opinion

The REC favourable opinion is subject to the following conditions being met prior to the start of the study.

Management permission must be obtained from each host organisation prior to the start of the study at the site concerned.

*Management permission should be sought from all NHS organisations involved in the study in accordance with NHS research governance arrangements. Each NHS organisation must confirm through the signing of agreements and/or other documents that it has given permission for the research to proceed (except where explicitly specified otherwise).*

*Guidance on applying for HRA Approval (England)/ NHS permission for research is available in the Integrated Research Application System, [www.hra.nhs.uk](http://www.hra.nhs.uk) or at <http://www.rdforum.nhs.uk>.*

*Where a NHS organisation's role in the study is limited to identifying and referring potential participants to research sites ("participant identification centre"), guidance should be sought from the R&D office on the information it requires to give permission for this activity.*

*For non-NHS sites, site management permission should be obtained in accordance with the procedures of the relevant host organisation.*

*Sponsors are not required to notify the Committee of management permissions from host organisations.*

### Registration of Clinical Trials

All clinical trials (defined as the first four categories on the IRAS filter page) must be registered on a publically accessible database. This should be before the first participant is recruited but no later than 6 weeks after recruitment of the first participant.

There is no requirement to separately notify the REC but you should do so at the earliest opportunity e.g. when submitting an amendment. We will audit the registration details as part of the annual progress reporting process.

To ensure transparency in research, we strongly recommend that all research is registered but for non-clinical trials this is not currently mandatory.

If a sponsor wishes to request a deferral for study registration within the required timeframe, they should contact [hra.studyregistration@nhs.net](mailto:hra.studyregistration@nhs.net). The expectation is that all clinical trials will be registered, however, in exceptional circumstances non registration may be permissible with prior agreement from the HRA. Guidance on where to register is provided on the HRA website.

**It is the responsibility of the sponsor to ensure that all the conditions are complied with before the start of the study or its initiation at a particular site (as applicable).**

#### Ethical review of research sites

The favourable opinion applies to all NHS sites taking part in the study, subject to management permission being obtained from the NHS/HSC R&D office prior to the start of the study (see “Conditions of the favourable opinion” above).

#### Approved documents

The documents reviewed and approved by the Committee are:

<i>Document</i>	<i>Version</i>	<i>Date</i>
Covering letter on headed paper [ clarification/amendments letter to provisional opinion letter]		
Evidence of Sponsor insurance or indemnity (non NHS Sponsors only) [Northumbria University insurance letter]		
Interview schedules or topic guides for participants [version 2]		
IRAS Checklist XML [Checklist_04012016]		04 January 2016
IRAS Checklist XML [Checklist_26012016]		26 January 2016
Letters of invitation to participant [version 2]		
Letters of invitation to participant [version 2]		
Other [university ethical approval letter]		
Other [University ethical approval reviewer comments]		
Other [Insurance certificate]		
Other [demographic questionnaire version 2]		
Other [research poster - version 2]		
Other [Research Poster version 3 with tracked amendments]		
Participant consent form [version 2]		
Participant consent form [version 2]		
Participant information sheet (PIS) [version 2]		
Participant information sheet (PIS) [Participant information sheet version 3 with tracked amendments]		

REC Application Form [REC_Form_17122015]		17 December 2015
Research protocol or project proposal		
Summary CV for Chief Investigator (CI) [CV cheif investigator]		10 December 2015
Summary CV for supervisor (student research) [supervisor summary CV]		

### Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

### After ethical review

### Reporting requirements

The attached document “After ethical review – guidance for researchers” gives detailed guidance on reporting requirements for studies with a favourable opinion, including:

- Notifying substantial amendments
- Adding new sites and investigators
- Notification of serious breaches of the protocol
- Progress and safety reports
- Notifying the end of the study

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

### Feedback

You are invited to give your view of the service that you have received from the National Research Ethics Service and the application procedure. If you wish to make your views known please use the feedback form available on the HRA website:

<http://www.hra.nhs.uk/about-the-hra/governance/quality-assurance>

We are pleased to welcome researchers and R & D staff at our NRES committee members’ training days – see details at <http://www.hra.nhs.uk/hra-training/>

**16/EE/0020**

**Please quote this number on all correspondence**

With the Committee’s best wishes for the success of this project.

Yours sincerely



Dr Leslie Gelling Chair

Email: nrescommittee.eastofengland-cambridgesouth@nhs.net

Enclosures: *"After ethical review – guidance for researchers"*

Copy to: Mrs Lynne Palmer. □

□

□

## Appendix 4: Trust ethical approval

To maintain confidentiality the name of the participating NHS trust has been blacked out



Miss Laura Park  
Coach Lane Campus West  
Benton  
Newcastle Upon Tyne  
NE-7 7XA



Dear Miss Park

Study title: Understanding Interprofessional Relationships within a stroke team

I-IRA Reference: 16/EE/0020

Reference: 16-15

Reference: 194431

Thank you for your recent application for Trust approval. Approval has now been granted for the research to be carried out within [redacted]

Site Specific Assessment has been undertaken by Research and Innovation [redacted]

Please note if approval is based upon a generic patient information sheet and consent form template, this must be localised using [redacted] letterhead and contain contact details for research staff prior to use.

It is a requirement of the approval given by the Trust that as Chief/Principal investigator you should be aware of, and have a duty to, comply with the Research Governance Framework 2005 ([www.doh.gov.uk/research](http://www.doh.gov.uk/research)) throughout the duration of the research. We also draw your attention to the need to comply with all relevant legislation including for example; the Medicines for Human Use Clinical Trials Regulations 2004, Health and Safety at Work Act 1974, the Data Protection Act 1998 and the Human Tissue Act 2004.

This project has been registered on the Trust research database and you should keep the R&D team informed of your progress, which includes the submission of an annual report. In addition R&I must be notified of;

- Commencement and completion of the study
- Any significant changes to the study design as submitted to the Medicine and Health Regulatory Authority and Health Research Authority, ie, amendments
- Any changes to research teams (copy of the delegation log must be submitted with the annual report)

[REDACTED]

ø/SABÝ••

Chairman: John N Anderson QA CBE

In association with the [REDACTED]

LP58339 WZ1824

Any changes in the circumstances of researchers that may have an impact of their suitability to conduct research

Any suspension or abandonment of the study

Any subsequent funding, awards or grants pertaining to this study post approval

All publications and/or conference presentations

Any serious breach of Good Clinical Practice

Copy of any external monitoring/auditing report must be submitted to Research and Innovation for review

Please ensure that all serious/clinical incidents are reported via the Incident Reporting System accessed via the Trust intranet.

Trust Standard Operating Procedures must be adhered to and can be accessed via the intranet, under central services, research. Some trials are supplied with SOP's please review in parallel to Trust SOP's and inform R&I Manager immediately should any discrepancies occur.

Yours Sincerely

Dr J le Cox  
 Deputy Director of Research  
Consultant Radiologist

Approved documents

The documents reviewed:

Document:	Version/Reference:	Date:
IRAS Application Form	194431/893883/14/258	14 December 2015
SSI Form	194431/893885/6/201/307 779/337709	14 December 2015
I-IRA Approval letter		02 February 2016
University ethical approval letter		16 February 2016
Demographic questionnaire		20 June 2015
Research Poster [version 3 with tracked amendments]		25 January 2016
Patient information sheet (PIS) [Participant information sheet version 3 with tracked amendments]		25 January 2016
Participants consent form Interviews		20 June 2015
Participants consent form Observations		20 June 2015
Interview schedules or topic guides for participants		20 June 2015
Letters of invitation to participant		20 June 2015
Investigators GCP: Laura Park		22 February 2016
Investigator CV: Laura Park		20 November 2015
[Research protocol or project proposal]		
PI Agreement for Research.		18 February 2016

CC .

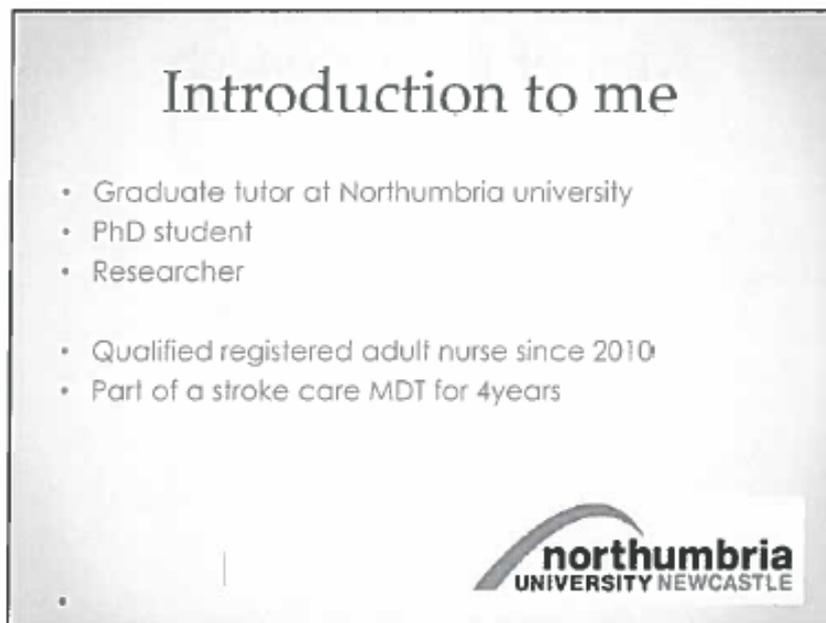
Dr Nick Neave

PR risk assessment		19 February 2016
Insurance		20 July 2015

CC.

Dr Nick Neave  
Northumbria University City Campus  
Newcastle upon Tyne  
**NE1 8ST**  
Northumbria University City Camps

**Appendix 5: Recruitment presentation**



Interprofessional relationships at work: a  
grounded theory study of the perceptions of a  
stroke care multi-disciplinary team

## Aim of the research

The aim of this research is to explore the meanings that professionals within a stroke care MDT attach to their day-to-day working relationships with others.

## What do we already know?

- Teamwork in healthcare is regarded as invaluable.
- Effective teamwork is the basis for accomplishing a successful interprofessional (IP) practice.
- IP working is an undisputed component of evidence based stroke care.
- Relationships are considered to be the heart of teamwork.
- The workplace is regarded as a key site for the development of relationships.
- Different relationships develop between team members.
- Conflict exists within published literature.

**Gap in the research?????**

## Methodology

- in order to achieve the aims of this study a qualitative approach will be used along side the methodological approach of **constructivist grounded theory**.
- Grounded theory is distinguished from other qualitative methods by its aim to move beyond description and to construct theory from the data collected.

## Why have you been selected?

- You are all Healthcare professionals who are employed by  and work within a stroke care multidisciplinary team.
- Your stroke MDT house a range of different Healthcare professionals.

## What's involved?

## Demographic Questionnaire.

- All MDT staff will be asked to complete a demographic questionnaire.

What is the purpose of the demographic questionnaire?

**northumbria**  
UNIVERSITY

Student Email Questionnaire  
Please click on the email address below.

1. Name (as given)

2. Email address (please use your work email)

3. Identify yourself (please use your work email)

4. Select your professional qualifications (if any, you may select more than one)  
 Graduate  First  Second  Doctor  Postgraduate  Diploma  
 Registered Nurse  Speech and Language Therapist  Doctor  Healthcare Assistant

5. What is your highest academic qualification that you have achieved?

6. What year level are you currently?

7. How long have you worked for Northumbria University?

8. How long have you been part of the MDT team?

9. Where are you based?

10. If you have not been part of the MDT team, please provide details of your role and any other relevant information.

11. Do you plan to attend the event?  
 Yes  No

12. Do you anticipate it will be a success?  
 Yes  No

13. How do you rate the event?

14. What is your most important feedback comment?

If you have any other comments, please enter them in the box below.

# Consent

- Informed consent will be gained from all staff members that are willing to participate in the research study.
- Participants will be asked to sign **two** consent forms.

## Withdrawal

- Participants can withdraw from the research study any time, even after data collection has finished.

## Observations

- **What's the purpose of observations?**
- To discover the perceptions of work relationships between stroke care MDT professionals.
- **What's involved?**
- Participants will be observed individually.
- Observations sessions will last up to 4 hours.
- Times and dates will predetermined by the researcher and participant.
- Aim to observe a range of interactions and activities that occur during day-to-day working life.

## What I am there not to do

- Care for patients.
- Observe/inspect the care staff deliver.
- Research the effectiveness of the stroke MDT.
- Research if team members work well together.

### Whistleblowing

## Patients and Relatives

- Patients and relatives will not be participating.
- Patients and/or relatives may be present during observation sessions.
- A poster will be displayed throughout the department informing patients and relatives that research is being conducted on the ward.
- If participants feel for any reason that a patient's presence during observations is inappropriate then they must inform the researcher immediately.

  
**Research** is being conducted in Sunderland's City Hospital  
**stroke unit (Ward 656)** by Laura Park a PhD student from  
 Northumbria University.

Understanding the meanings of inter professional  
 relationships within a stroke care multidisciplinary  
 team.

Research involving the professionals working within the stroke  
 unit's multidisciplinary team will be carried out from (DATE) to  
 (DATE).

**Patients and relatives** will not be participating in the  
 research study however patients and relatives may be  
 present when staff members are being observed.

If you have any queries or require further details about the principal investigator or the  
 research study, please contact:

<p style="text-align: center;"><small>Project investigator: Laura Park</small>  <small>Tel: 0191 275 3337</small>  <small>Email: <a href="mailto:l.park@northumbria.ac.uk">l.park@northumbria.ac.uk</a></small></p>	<p style="text-align: center;"><small>PhD supervisor: D. Assouline</small>  <small>Tel: 0191 275 3378</small>  <small>Email: <a href="mailto:d.assouline@northumbria.ac.uk">d.assouline@northumbria.ac.uk</a></small></p>
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## What will happen next?

- You will be given a demographic questionnaire to complete and a participant invite letter and information sheet.
- You will be given time to consider whether you wish to participate.
- I will attend the ward to answer any further questions.
- Consenting participants will begin.
- Data collection will start.

Ethical approval has been granted by Northumbria University's ethics board department and IRAS.

- Data collection will take up to one year.
- The PhD thess will be submitted in December 2019.
- Participants can request an electronic copy or summary report.
- Researcher and principle supervisors contact details can be found on the Participant information sheet.



**Thank you**  
**Any Questions?**

## Appendix 6: Participant invitation letter

Faculty of Health and Life  
Science  
Northumbria University  
Coach Lane Campus  
Allendale House Room 009  
Newcastle upon Tyne NE7 7XA  
Tel: 0191 2156307  
Email: [laura.j.park@northumbria.ac.uk](mailto:laura.j.park@northumbria.ac.uk)

Dear .....

### ***THIS IS AN INVITATION TO PARTICIPATE IN A RESEARCH STUDY***

In conjunction with Northumbria University, I would like to invite your stroke department to take part in a PhD research study. The study that you have been invited to participate in aims to explore the meanings professionals within a stroke care MDT attach to their day to day working relationships with others.

Participation is voluntary and you have been invited to take part because you are a stroke unit that houses a range of multidisciplinary professionals working as a team within an NHS Foundation Trust.

Enclosed is a participant information sheet, which provides an explanation into what stroke care MDT professional working on your department will be required to do if the department decides to take participate. Please read this carefully.

If the department requires further information prior to making a decision to participate then the researcher can arrange a meeting to discuss the research study further and to answer any questions.

If the department decides to participate all stroke care MDT staff will receive an invite letter a participant information sheet and a demographic questionnaire. The researcher will also attend the ward to give a presentation on the research study and to answer any questions prior to consenting participants.

All of the information collected from the department will be held in the strictest confidence. Deciding to not participate will not affect the department's relationship with the NHS trust.

Thank you for taking the time to consider being involved in this study.

Yours faithfully,



Laura Park  
Graduate tutor  
Principle researcher

## Appendix 7: Participant information sheet

Faculty of Health and Life Science  
Northumbria University  
Coach Lane Campus  
Allendale House Room 009  
Newcastle upon Tyne NE7 7XA  
Tel: 0191 2156307  
Email: [laura.j.park@northumbria.ac.uk](mailto:laura.j.park@northumbria.ac.uk)

### Participant Information Sheet

#### ***Understanding the meanings of inter professional relationships within a stroke care multidisciplinary team.***

##### **Introduction**

I would like to invite you to take part in the above research study. Before you decide, it is important for you to first fully understand why the research project is being carried out and what it will involve. Please take the time to read the following information, if there is anything that is not clear or if you would like more information please contact the researcher named below.

##### **What is the purpose of the study?**

The aim of this study is to gain an understanding of the relationships between the professionals who work within a stroke care multidisciplinary team (MDT). Inter professional (IP) collaboration is an important topic, as the effects of and reason for successful IP collaboration extend beyond the patient. In work environments, professionals often develop relationships with other individuals. However, work relationships are different because they do not form via the usual mechanisms; individuals are brought together by circumstance and not out of choice. This study therefore intends to explore the meanings of these relationships within the stroke care MDT environment. It is hoped that the research study could provide useful information on IP collaboration within stroke care and act as a stimulus for others to conduct/explore other research of this nature.

##### **Why have I been asked to take part in the study?**

You have been approached and invited to take part because you are a member of a stroke care multidisciplinary team, with a view that you might be interested in taking part.

##### **Do I have to take part in the study?**

No, you are not obligated to take part. Participation in this study is entirely voluntary. We encourage you to talk to fellow staff members or other potential candidates if you are unsure about taking part. The researcher will also meet with potential participants to discuss the study in further detail, giving you the opportunity to ask questions about any aspect of the study. A demographic questionnaire will be distributed; here potential candidates can identify themselves as being happy to participate. Data from the demographic questionnaire will not be used within the research study.

##### **What will happen to me if I take part?**

If you decide to take part then you will be asked to sign two consent forms which is evidence to say that you fully understand what your participation in the study will involve and that you agree to take part. By signing the consent forms you are agreeing to first

being observed in practice and then to be individually interviewed. If you decide to take part in the study you will receive a copy of your signed consent forms to keep.

### **What does participating involve?**

Participants will first be observed individually by the researcher in practice. The researcher aims to observe a range of day-to-day work life activities and interactions that occur on the stroke unit. Therefore the observation sessions will occur anytime during the observed professionals shift. Observation dates, times and durations will be predetermined. Each observational session will last no longer than 4 hours, data will be collected during observations in fieldnotes. No data or information will be gathered from patients, however during observation sessions patients may be present. The researcher therefore requires all participants to state at any time to the researcher if they feel that the researcher's presence is inappropriate. If this happens then observations will immediately stop and recommenced when next appropriate. After the observation session is complete the researcher intends to individually interview participants. The researcher and the participant will organise a time and location for the interview to take place. Interviews will be recorded using a digital Dictaphone with the researcher writing additional data in the form of memos. Individual interviews will last between 20 to 60 minutes. Data from interviews, observations and the demographic questionnaire will assist the researcher to select the next participant to be observed and then interviewed. Follow up interviews may also occur after participant's initial individual interview, these interviews will again last between 20-60 minutes.

### **Can I withdraw at a later date?**

Yes, you can withdraw at any time during the study even after signing the consent forms just contact Laura Park whose details can be found below. Once withdrawn from the study you will be asked if you want the data that has already been collected from you to be destroyed or whether it can continue to be used anonymously. If you do decide to withdraw, it will not affect you and will not be shared with anyone else.

### **What are the benefits of taking part?**

You may not gain any direct benefit from taking part in the research. However it is hoped that the results will help us understand not only the relationships between the different professionals of the stroke care MDT but, also further understandings into characteristics of successful inter professional collaboration.

### **Are there any disadvantages in taking part?**

There are no potential disadvantages or risks to participating in this study. You will however if selected for individual interviews give up, between 20-60 minutes of your time. You may feel a little uncomfortable when first being observed or when talking about your work relationships. However, you do have the right to refuse to answer any question(s) as well as the ability to stop the interview or observations at any time you wish to do so.

## **Maintaining Confidentiality**

### **What happens to the data collected?**

All the data collected whether in paper or electronic form will be kept in a secure location within Northumbria University until the research is completed. The only people who will handle and have access to the data will be the research team. Once interviews are completed they will be transcribed verbatim and a written document will be produced. To maintain confidentiality participants will be provided with a unique code as an identifier. No personal details will be printed on any research documents or recorded in any interviews. Only the unique identifier code will be published allowing anonymity to be retained. All

fieldnotes, transcriptions and other research documentation will be kept for one year after the PhD is completed before being destroyed.

### **What will happen to the results to this study?**

The results of this study will be published within a PhD dissertation by the end of 2019. It is hoped that the results will also be published in journal articles as well as possibly being presented at conferences. You will not be identified in any publication or report although your words may be published exactly as you said them during the individual interview. If you would like a copy of the reports or journals please contact the researcher.

Who is funding this study?

Northumbria University School of Health and Life Sciences is funding this research study.

### **Who has reviewed this study?**

This study has been reviewed and given approval by the Faculty of Health Ethics Committee at the University of Northumbria and by the Research and Development department at [REDACTED]

### **Complaints**

If you have a concern about any aspect of this study, you should contact the researcher Laura Park or her PhD supervisor (Details listed below).

### **Research Team**

If you require any further information please contact:  
(First port of contact)

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*Thank you for taking the time to read through this participant information sheet and for considering this request to participate*

**Appendix 8: Demographic questionnaire**

**Demographic Questionnaire**

**Please circle answers where applicable.**

1. Select your gender  
 Male     Female
2. Select your age category  
 Under 21     21-30     31-40     41-50     50+
3. Ethnicity: please specify
4. Select your profession within the stroke care MDT  
 Consultant     Doctor     Nurse Practitioner     Nurse     Physiotherapist  
 Occupational Therapist     Speech and Language Therapist     Dietician  
 Healthcare Assistant     Psychiatrist     Other (Please specify)
5. What is your highest academic qualification that you have achieved?
6. What staff band are you currently?
7. How long have you been a health care professional?
8. How long have you been part of the stroke care team?
9. Where are you based?
10. If not based within the stroke care unit how much of your time in a day is spent on the unit?
11. Do you attend MDT meeting?

12.  Yes every time I am on shift  Only when asked  Only if I have time  I never attend

If yes how often

13. Do you participate in joint assessments?

Yes

No

If yes who with

14. What is your most important relationship at work?

**If you have interest to participate in this study please print your name and email address below.**

**Appendix 9: Theoretical sampling table**

<u>Participant ID</u>	<u>Characteristics</u>	<u>Theoretical sampling: key concepts emerging/to explore further</u>	<u>Interviews</u>	<u>Observations</u>
P121 (initial sampling)	Therapist (SALT) – peripheral member, one year experience working on the unit, works in other departments/w ards.	The first participant to sign a consent form, provide dates, and times for the observation session.	✓	✓
P122 (initial sampling)	Consultant, six year’s experience in the MDT, 16 years’ experience in total, core team member, office located off the ward, attends all board rounds.	2nd participant to sign consent forms and showed a keen interest in taking part.	✓	✓
P130	Doctor (F1) temporary core team member, rotates for training, four months’ experience on the unit, attends all board rounds.	This participant was selected as the previous participant noted that they felt they had a stronger relationship with individuals from the same profession as they were responsible for their learning and development.	✓	✓
P124	Nurse, core team member, three years’ experience on the unit. Had transitioned from a student	Chosen as their profession was different from the three previous participants. All participants so far observed and	✓	✓

	to qualified nurse	interviewed noted how closely they worked with them and how vital their role was within the team.		
P129	Doctor (F1) temporary core team member, rotates for training. One month's experience in the unit, attends all board rounds.	This participant was selected to probe responses from the previous participants with regards to initial codes of: <ul style="list-style-type: none"> <li>• Learning and development</li> <li>• Time on the ward</li> <li>• Belonging to a team when working with other professionals</li> </ul>	✓	✓
P127	HCA, core team member, five years' experience working on the unit. Does not attend case conferences.	Chosen due to having five years' experience and although seen as a vital team member did not attend ward rounds of MDT meetings.  Concepts that were probed included: <ul style="list-style-type: none"> <li>• Personal and professional benefits</li> <li>• Caring/protecting one another</li> <li>• Ambition</li> <li>• Teamwork</li> <li>• Time</li> </ul>	✓	✓
P132 (Part withdrew)	Domestic, peripheral team member.	Chosen as they are not a clinical staff member, therefore is not involved in clinical activities or interactions.  Concepts probed:		✓

		<ul style="list-style-type: none"> <li>• Job role</li> <li>• Belonging/ inclusion</li> <li>• Caring for one another</li> <li>• Teamwork</li> <li>• Career development</li> </ul>		
P123	<p>Therapist (OT) – core team member, two years’ experience on the unit, did work in other departments if required. Office located off the ward. Rotated to attend board rounds/meetings.</p>	<p>Chosen as, although worked predominantly on the ward, did attend other referrals if needed. OTs additionally had an allocated work space for when they were present on the ward; concepts that were probed included:</p> <ul style="list-style-type: none"> <li>• Conflict</li> <li>• Belonging</li> <li>• Space</li> <li>• Teamwork</li> <li>• Rewards</li> <li>• Job role</li> <li>• Working on other wards</li> </ul>	✓	✓
P125	<p>Therapist (Physio), core team member</p> <p>Rotated, three months’ experience on the unit, four years’ experience in total.</p>	<p>Chosen as regarded as a core member but rotated to other departments; had experience working in other teams. Their workspace had recently altered from an office on the ward to a designated area</p> <p>Concepts that were probed included:</p> <ul style="list-style-type: none"> <li>• Rotating/time on the unit</li> <li>• Belonging/ inclusion</li> <li>• Other ward experiences</li> <li>• Conflict</li> <li>• Space</li> </ul>	✓	✓

		<ul style="list-style-type: none"> <li>• Learning/developing from one another</li> <li>• Career development</li> </ul>		
P131	HCA, core team member, less than a year's experience on the unit, Does not attend case conferences.	<p>Chosen as they were new to the post and job role. Concepts that were probed included:</p> <ul style="list-style-type: none"> <li>• Time</li> <li>• Belonging</li> <li>• Learning the new role</li> <li>• Personal support from others</li> <li>• Inclusion</li> </ul>	✓	✓
P126	Nurse, core team member, four + years' experience on the unit, had previous experience working on other wards.	<p>Chosen as they worked regularly with all professionals. Concepts that were probed included:</p> <ul style="list-style-type: none"> <li>• Compassion</li> <li>• Self-development (personal and professional)</li> <li>• Rewards (self and team)</li> <li>• Inclusion when working</li> <li>• Experience</li> </ul>	✓	✓
P133	Nurse (Research), five years' experience on the ward. Progressed through posts while working on the unit, attends all case	<p>Chosen as they had progressed while working on the ward and had experiences working at different levels. Concepts that were probed included:</p> <ul style="list-style-type: none"> <li>• Personal and professional growth from</li> </ul>	✓	✓

	conference meetings.	day to day collaborative interactions		
P134	Nurse core team member, had transitioned from a student to qualified nurse, had previously the opportunity to progress.	The four core concepts were probed to ensure saturation had occurred.  1.Rewards and recognition  2.Developing a sense of belonging  3.Inclusive working and learning  4.Interprofessional compassion	✓	✓
P135  (Withdraw)				

**Appendix 10: Structured observation proforma**

**Time:**

**Date:**

**Session duration:**

**Participant Unique Identifier Code:**

<u>Location</u>	<u>Activity</u>	<u>Staff involved (Number/profession)</u>	<u>Duration</u>

**Interaction descriptive information**

**(Actions, behaviours, conversations, language)**

**Interactions reflective information**

**(Thoughts, Ideas, questions)**

FIELDNOTE PRO-FORMA

not sure what to do next  
 Scored 1 have missed something Version 1  
 need to remember not to take date from other staff?

Time: 09:30  
 Date: 2015/16  
 Session duration:

feel a little out of place - people staring at me - showing my heartbeat at every opportunity

Participant Unique Identifier Code:

Location	Activity	Staff involved (Number/profession)	duration
Wed. ESS	Joint assessment/obs	SALT <del>PT</del> <del>PT</del> physio	9:30 - 9:40
ESS	discussion with patient	SALT	9:40-9:50
ESS	discussion about pt case	nurse	9:53-9:55
ESS	SALT therapy	alice	10:00-10:15
ESS	" "	" "	10:15-10:20
ESS	" "	" "	10:23-10:35
ESS	" "	nurse	10:35-10:45

x3 physio  
 x1 physio assistant

7

- see additional notes

Interaction descriptive information

(Actions, behaviours, conversations, language)

caus and physio by her first name  
 as well as addressed names physio  
 staff all female

1

eye contact  
 Smiles - informal greetings hello.  
 discussed patient  
 physio's to observe senior  
 open body language  
 walked together to patient  
 wanted hand held through by physio  
 SALT stood outside of the bed  
 SALT do not use uniforms - smart casual

discussion patient focus  
 used first name  
 SALT showing how to use front  
 - E-transfer  
 Inform, jokes, smiles  
 laughed. involved pt.  
 physio stood by other

patient discussion  
 eye contact  
 gave greeting  
 face to face contact

nurse/physio  
 behind later to  
 convo.

NP - joined interaction - face to face  
 discussion in pt case.

\* see additional field note PATD

nurse led interaction - discussion between SALT and nurse in charge.

handbook  
newer 

Interactions reflective information

(Thoughts, Ideas, questions)

Felt relaxed!  
informal

atmosphere of the work was such  
as relaxed - felt controlled.

? saw a banner 1-2 as had phisio massage - SALT on the  
met.

questions - do this work with other staff or nurses - some  
equipment?

? how many staff in office - ? just SALT

? how come in afternoon.

? does this process fit observational work?

? Time effect of

- doesn't feel  
structured  
- need to type up  
asap.

## **Appendix 11: Initial interview guide**

### **Areas of discussion for interview**

1. Discuss what it is like working within a stroke care MDT.
2. Overview of work relationships, including relationships with other stroke MDT members.
3. Discuss experiences and stories to illustrate work relationships.
4. Discuss relationship formations and the influences that occur.
5. Discuss thoughts, ideas and opinions of work relationships within stroke care.
6. Discuss work relationship meanings and interpretations.
7. Overview of the day-to-day interactions between the stroke MDT staff.

## **Appendix 12: Extract of an interview transcript**

Interview Transcription

Unique identifier: participant122stroke

Date: 23/06/2016 Time: 14:00 Location: Consultants Office

Duration: 25 minutes

Interviewer: Laura Park – Principal Researcher

**Ok so that's officially on I will just leave it there [Dictaphone].**

**So to start with I just want to know what it is like working within a stroke care MDT?**

Ok well the stroke MDT is an essential requirement for the stroke service we can't make the decisions on the care to deliver to patients on our own. Staff include nurse, OT, physio, Salt, mental health, social services, dietician etc then we sit down or meet up and discuss goals for the patients like discharge goals, rehab goals. It's a nice place to work, I have been on the ward for 6 years and still enjoy it and plan to work here in the future.

**The team is very big do you get the opportunity to work with all the different types of professionals?**

Oh yes (pause) I guess I liaise with the nursing staff the most because we generally do the ward round together, our roles complement each other. But with physiotherapists if it is required I will communicate with them as well. But the people that I most have to communicate and work with is the other doctors and nursing staff.

**Can you give me an overview of the day to day interactions you have with other stroke MDT staff?**

Well because my who aim is to care for patients they are the main people that I interact with and I would say that's is the same for everyone. Depending on the patients' needs and what happens that day depends on who I interact with. I guess other interactions would be with the nursing staff, like I said before we often do ward rounds together I may ask them for updates or request that something gets done. I interact with the medical team like the junior doctors. I may need to refer a patient somewhere so even though I won't see a colleague I will interact over the phone numerous times a day. Interactions during the day vary to sometimes I communicate with the domestics but it's not in a professional capacity and sometimes I interact with the porters to ask them to take patients somewhere or if a patient is not by the bed I might ask them if they have taken them somewhere.

**So you said you speak to the domestics but it's not professional what do you mean by that?**

I mean I don't discuss patient care with them, I guess we just talk occasionally. I wouldn't say the interactions with them are important it's about being friendly we work on the same ward. Yes, I wouldn't interact with them outside the clinical team but it's important to why we are here. I patient might ask me for a cup of tea of coffee as a patient has requested one when I saw them on the ward round or at meal times we have staff who specifically hand them out I would go to them if I had a query or request. Regardless of what you do in the team you are valued.

**So tell me about the relationships that you have with other stroke care professionals?**

So with most MDT you typically have the consultants in charge and they discuss with each other about patient care. However here we try and not have anyone in charge we are free to talk. We take out notes randomly to look at and discuss. We ask nursing staff to openly talk about patients as well as the other professionals to see from their perspective what is going on and how to move forward. Others will then speak up on their ideas and thoughts of where to go with patient care. No one is in charge we work together to find the solution there is none who is dominate within these meetings. I think this is important for working together. You know there is hierarchy within the team but its giving people the opportunity to talk given them the equal opportunity to talk. If people are happy they are enthusiastic to get involved within patient's conditions without fear worries or being under pressure. In other team's consultants are in charge they ask a lot of questions in exam conditions therefore sometimes people become reluctant to be involved and voice their opinions. Here everyone is on the same level you have an equal say no one is here to criticise you in front of others which is a good thing. It's a friendly environment its important that staff ask questions, learn and questions things, part of my role is to help that, therefore its important that they feel safe doing that. This is a learning environment its satisfying when you see doctors and nurses progress and over the years and you have played a part in that. it's hard to say what types of relationships I have apart from them being work relationships..... I guess what I am trying to say is that I perceive the relationships with staff as them feeling safe and comfortable enough to approach me to discuss patient issues.

**What do you think impacts and influences staff relationships or the staff confidence to voice their opinions meetings?**

It helps if someone is already confident who feels comfortable to speak up or articulate themselves well in front of others or have good negotiating skills. I think personality helps with getting the work done, which is important when caring for stroke patients.

**It's interesting that you say that personality helps get the work done can you elaborate on that further what do you mean?**

Emm (pause) well I guess if someone is able to articulate themselves as well have the ability to be respectful and listen to other people opinions as well as is speak up and voice their own allows things to get done quicker and work is often more pleasurable.

**Yes, I did notice during observations there were a lot of in house jokes that I didn't get.**

(Laughs) Yes everyone is generally happy on the ward and within the MDT there is no need to be frightened or intimidated by anybody. We can all take part in a joke at work, I guess it's helps makes certain aspects more enjoyable. We encourage each other to participate and speak out that might be right that might be wrong but we don't criticise each other are aim is to find the solution. I don't always have the solution I like to hear other people ideas and thoughts; I think that is the general consensus for everyone on the ward.

**Do you think work relationships in stroke are important?**

Yes of course it helps get the job done, because stroke is go big compared to other areas we obvious have more patients over the year and therefore need more staff to help treat them as most patients needs now are more complex. Therefore, we need all these specialists who form the stroke MDT to get involved and help care for patients. So relationship is important.

How do you think these relationships impact MDT team members? You said previously you still enjoy working here after 6 years has staff relationships got anything to do with this?

So I guess if everyone is happy and getting on with everyone and they have good relationships like friendly, trusting, supporting and encouraging relationships then they are going to be more motivated to work and work at the best of their ability. I think it also sets the standard of what behaviour is expected and how we should act between and around each other. Having a good working environment and having relationships at work impacts on if people want to carry on in the profession. If you unhappy you want wont to stay working here for long. I decided this was my profession this is what I trained in its my passion, therefore making sure relationship are good is important.

**How would you interpret or gain your meanings of your work relationships? what examples or stories do you have to illustrate your work relationships?**

It's important that you give back what you take from relationships because we are all in it together. Like I said you can't do this job on your own and you want be here for long or you won't want to be here for long if you don't have relationships with other staff. Not sure about having any story's but...I guess greetings are a way that I interpret a relationship with someone. Like hi, how are you, how was your weekend. It's nice that it is the first thing that someone asks about you before diving straight into work conversation. The team are very good at doing it has a big impacted you feel respected you feel like people care you feel valued, even though I am the consultant I feel a part of the team. it also shows to me that staff do feel comfortable around me to ask, it goes a long way. Another thing which I like when working with others is politeness, listening to other, saying please and thank you, not talk over someone, remembering first name (laughs) which is hard when it's such a big team and staff rotate frequently, however you can still say hello to someone,. with it being such a big team, saying please and thank you goes a long way, it shows you value them

**So you would also say personal values are important in stroke care relationships?**

Em yes, if someone is respectful and polite, cares and takes pride in what they do it goes along way. If someone is engaging and is motivated to learn and work, then it's great. Sometimes new staff are quite to start with but once we show support and encouragement they do start to speak up more.

**How would you define your relationships you have already mentioned supporting and respect, would you define them in any other way?**

Em I if I had to say anything else about them it would be that they are professional, but that's the nature of the job that we are in. Regardless of if I find a certain professional supportive or not I would still say our relationship is one that is professional. You know we can't come to the ward and give out shots to boost moral (Laughs) there are boundaries within this profession that you cannot cross.

**Do you think amongst the different professions different relationships form?**

Yeh probably I wouldn't know what relationship they have with each other but I am aware people get close at work and see each other outside of the work place. It's difficult to say.... in the medical teams we have different levels from consultant to junior doctors. I would say o relationships between the doctors and medical team is better and stronger then the relationships with the nurses. To be honest we trust each other from the same professions more. That doesn't mean I don't trust nurses or other staff. It's just with other professions you have to discuss and deliberate your decisions more. But I think the nursing staff will have the same strong relationships amongst themselves.

**Why do you think that?**

Well we all have different responsibilities which need to be taken into consideration. The aim at the end is the same but we all contribute differently. So I guess your sharing the same responsibility with that person in the same profession you can help each other out you. It doesn't mean your better than any other profession or you should let pride get in your way when you need help, it's just the way it is. I spend a lot with the other doctors, consultants and junior doctors we have trained the same we still learning in the same environment. Therefore, we have the best understanding of what we do and the pressures we are under and I think that's the same for the other professions to. It's like the F1's they going come on the ward for a certain amount of time before they rotate but I would say I form a better relationship with them in the short period of time then some of the nurses who have worked on the ward for years and thinking about it that's strange

Appendix 13: Exert of mind map







Research is being conducted in [REDACTED]  
stroke unit (Ward E58). By Laura Park a PhD student from  
Northumbria University.

## Understanding the meanings of inter professional relationships within a stroke care multidisciplinary team.

Research involving the professionals working within the stroke  
unit's multidisciplinary team will be carried out from April 19<sup>th</sup>  
2016 to December 2019.

Patients and relatives will not be participating in the  
research study however patients and relatives may be  
present when staff members are being observed.

If you have any concerns or queries please contact either the principal investigator or the  
researchers PhD supervisor.

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