Complex Organisational Integration: A Case Study of Health and Social Care Integration in England

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How to cite:

GROEN, BERNARD,MAARTEN (2015) *Complex Organisational Integration: A Case Study of Health and Social Care Integration in England*, Durham theses, Durham University. Available at Durham E-Theses Online: http://etheses.dur.ac.uk/11270/

Complex Organisational Integration

A Case Study of Health and Social Care Integration in England

A dissertation

submitted to the Durham University Business School

and the committee on graduate studies

of Durham University

in partial fulfilment of the requirements

for the degree of Doctor of Business Administration

"Something is always impossible until it is done."

Mediba

This work is dedicated to all those who felt they were held back by being told;

"You will never be able to reach your potential."

BMG 2015

I certify that I have read this dissertation and that, in my opinion,

it is fully adequate in scope and quality as a dissertation

for the degree of Doctor of Business Administration.

Prof. Dr. Laszlo Pólòs, Principal Supervisor

I certify that I have read this dissertation and that, in my opinion,

it is fully adequate in scope and quality as a dissertation

for the degree of Doctor of Business Administration.

Dr. Paul Hughes, Second Supervisor

Approved for the University Academic Support Office.

Acknowledgements

What you have in front of you is nearly five years of exertion, toil, and strive. This challenge is by no means an individual effort. My wife Dominique has had to miss me for a total of 2,675 hours (111.5 days) during the research phase of the programme alone (2012-2015). She has stood by me with unwavering support even though my usual calmness and pragmatism at times was nowhere to be found. For her care and loving kindness during this challenging time I am deeply indebted.

To state that starting this programme in April 2010 was a daunting prospect would be a severe understatement. During the preceding Christmas my then manager Rob White suggested that I would take up the challenge of the Durham Doctorate in Business Administration. His rationale was clear. Health and social care integration, a topic that was very much within my portfolio of work at the time, would significantly increase in importance and empirical research would enable a more robust approach to the matter.

How premonitory in nature, as the topic was mentioned over half a decade later during Her Majesty's most gracious speech to both Houses of Parliament at the State Opening of Parliament 2015[1]:

> *"In England, my government will secure the future of the National Health Service by implementing the National Health Service's own 5 year plan, by increasing the health budget,* ***integrating healthcare and social care****, and ensuring the National Health Service works on a 7 day basis."*

It was this initial trust and confidence in my ability to deliver on this programme that inspired me to write this dissertation, and I thank Rob for providing this opportunity at the time. Having said as much, this is not an ordinary doctoral dissertation. Indeed, starting very much from scratch (in hindsight rather clueless) I have learnt a great deal during the programme. For most of this learning, I am indebted to Professor Laszlo Pólòs. This learning journey has taken me from the insights of organisational ecology to the

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[1] 27 May 2015 (Transcript of the speech, exactly as it was delivered) and page 8 of the briefing notes to the queen's speech.

discernments of social psychology. Eventually settling on the main implicit and explicit cognition and the ‘dissonance’ between these two concepts.

Over the course of the programme a lot of individuals helped me along the journey; I would specifically like to thank my current manager, Derek Marshall, has significantly supported me by agreeing flexible leave of absence for write up, without this support I would probably still be writing. Gillian Cresswell has been very helpful at crucial stages, especially during the data collection phase of the programme with useful suggestions on how healthcare participants could be recruited, thank you, Gill. In addition, my thankfulness extends to Professor Moira Livingston (for providing executive support for the course), and numerous close colleagues that I worked with during the time of the doctoral programme, most of which had to endure (and suffer) my trials and tribulations of research at doctoral level.

Discussion with fellow academics that have proved particularly useful and I would like to specifically mention the following:

Dr Paul Hughes (Durham University) on the statistical approach taken in this dissertation. In relation to the methodological approach I would like to thank Professor John W. Creswell (University of Nebraska-Lincoln), Professor Burke Johnson (University of South Alabama), Professor Anthony Onwuegbuzie (Sam Houston State University). Dr Eli Lieber was very helpful with suggestions on mixed method data interpretation.

Professor Richard Bourhis (Université du Québec à Montréal) was instrumental in providing his view on chapter seven, particularly in relation to the method of data analysis and interpretation using the Tajfel matrices for which I am very grateful indeed.

In addition, I would like to thank colleagues at Harvard University for working with me on the creation of a tailored implicit association test, specifically Emily Umansky of Harvard University’s Project Implicit.

Finally, I would like to thank my parents, in particular, my Father. I know we have not always seen eye-to-eye on many subjects, but your support has made me the person I am today for which I am eternally grateful.

BMG – Summer 2015

Abstract

This dissertation aims to provide a strong contribution to the public debate which centres on health and social care integration in England. With ever increasing demands on the health and social care system, politicians have championed the integration between the two sectors as a major element to cope with this challenge. Indeed, verbal opposition to this policy is scarce, yet integration efforts do not tend to be readily observable and wide-spread. Moreover, service redesign efforts cost multiple millions of pounds, therefore, what could be done to improve these processes is critical and pertinent at this time of great challenge for our care services.

The main objective of the goal-directed research in this dissertation is to uncover to what extent social psychological processes play a role in this seeming ‘disconnect’ between what people ‘say’ and what they actually ‘do’. To create this insight, a series of five social studies were designed using a mixed research methods approach, using new and interactive technology to capture this data.

A total of sixty-three individuals volunteered to participate in the study. The results indicate that comparatively healthcare participants indicate higher levels of social empathy, social perspective taking, and willingness to reach out and share funding with those in social care during the explicit studies. Yet, the implicit data suggest a moderate to strong automatic preference for healthcare over social care by participants from the healthcare sector.

The findings in this cast a certain doubt over the use of traditional behavioural analysis techniques such as surveys and interviews. We provide a way forward to increase the validity of these methods and provide recommendations for policy for health and social care integration in England.

Table of Contents

Notes on Style

Recommendations with regards to style were accepted by the author from his supervisory team. Therefore, the text in this dissertation is written in plural form (i.e. instead of ‘I’ it will refer to ‘we’). However, this does not imply multiple authorship. Indeed, this dissertation has a sole author (Bernard Groen) and is submitted as such.

All works of others, cited in this dissertation, are duly and explicitly acknowledged and every effort has been made to avoid errors.

In addition, each section of text is broken up in smaller subsections and paragraphs to enhance readability and focus.

Total length of this dissertation comprises a net 164 page count (211 pages gross), with a net word count of 48,900 words (gross word count 61,065) . The total submission for this doctoral programme, which comprises six modules, one transfer document and this dissertation stands at 475 pages and 126,877 words.

This dissertation forms the first part of the final examination of the doctoral programme, the second part of examination consists of a formal viva voce (oral defence).

List of Abbreviations

NHS	National Health Service
NHS IRAS	National Health Service Integrated Research Application System
HSCIC	Health and Social Care Information Centre
NHSE	National Health Service England
DH	Department of Health
KF	Kings Fund
HC	Healthcare
SC	Social Care
P	Parity resource allocation strategy
FAV	Ingroup Favouritism resource allocation strategy
MJP	Maximum Joint Profit resource allocation strategy
MIP	Maximum Ingroup Profit resource allocation strategy
MD	Maximum Difference resource allocation strategy
OF	Out-group Favouritism resource allocation strategy
IAT	Implicit Association Test

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Introduction

> *"There is always the danger that those who think alike should gravitate together into 'coteries' where they will henceforth encounter opposition only in the emasculated form of rumour that the outsiders say thus and thus. The absent are easily refuted, complacent dogmatism thrives, and differences of opinion are embittered by group hostility. Each group hears not the best, but the worst, that the other groups can say."*
>
> — C.S. Lewis

This quote by C.S. Lewis seems a poignant introduction to this dissertation for several reasons. Firstly, with the key factor of this dissertation centring on healthcare and social care integration; the question that it attempts to answer is simple. "If health and social care integration is so desirable, why is it not (systematically) observable?" The C.S. Lewis quote well conveys part of the answer that is presented in this dissertation to this question.

Framed in a more theoretically underpinned way it seems that social cognitive psychological processes (at least partly) prevent groups from integrating or collaborating successfully. This dissertation uses several relevant social psychological theories to attempt to explain why sustainable health and social care integration seems so hard to achieve. The next section is a five minute practitioner introduction to this dissertation, this is followed by a five minute acadmic introduction, readers are not required to read both of these sections.

The five minute practitioner introduction to this dissertation;

Motivation: Why should we care?

It is estimated that health and social care integration efforts have cost the UK tax payer up to £3.8bn during the coalition's time in office[2]. Indeed, these costs are directly associated with policy making as they include policies such as the Better Care Fund amongst others. Furthermore, indirect costs associated with health and social care integration are not to just be measured in pound sterling. Costs such as human resources, and associated integration costs, the cost of not integrating/collaborating can also be measured in way which impact on the quality of patient care.

Problem statement: What was being addressed?

When integration efforts fail, people suffer as a direct consequence. A blood test result not shared with a community worker by a GP, may at best delay additional care, and at worst may kill an individual. It does not have to be this way, this dissertation seeks to understand why these sectors find it so hard to integrate in a meaningful and sustained way.

Therefore, there is a real cost associated with non-integration both economically and existentially. Evidence from around the world suggests that fruitful and sustainable integration between these sectors is achievable. However, it is important to note that the context in which these sectors can collaborate and integrate in a meaningful way is very different to the English context.

With an entirely publicly funded health service (which is unique) and a mixture of privately and publicly funded social care, there is a real tension between these two sectors in England. In addition, this issue will face everyone in England at some time. We will all be touched by either the health service or (and) social care provision at some point in our lives. Therefore, having a better understanding as to how these two sectors could collaborate and integrate better in a meaningful and sustained way will have a positive impact on all readers of this dissertation (at least as long as you live in England that is). Wider context is important as well, the findings in this dissertation are not just applicable to health and social care integration efforts, indeed, some of these results have relevance in merger and acquisition research and wider organisational change research.

Approach: How was the problem be addressed?

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[2] NHS England estimates, January 2015

What follows in this dissertation is one study and a series of four ‘experimental’ studies. The first study uses social categorisation theory and self-categorisation theory as the underpinning theoretical framework to elicit categorical preference and demographic data from participants. This is followed by a series of experimental studies, three of which are aimed at gaining explicitly collected empathy, dominance, bias, and prejudice data from participants, with the fourth one measuring implicit bias/prejudice. All of this is put into place to create a better understanding as to why individuals are inclined not to collaborate with others that are not like them, which is a commonly (and well) studies area of research within social psychology. Therefore, the premise that underpins this dissertation is simple in nature; to understand why integration efforts fail, we need to understand better why collaboration between different groups is challenging. This dissertation employs a study design that aims to shed light on the intergroup dynamics between individuals employed in healthcare and individuals employed in social care.

Results: What was the result of this study?

The data collected during this research indicates that there is a significant difference between ‘saying and doing’ i.e. what people say and what people actually end up doing. This seems to make intuitive sense. However, intuition and evidence are not the same. Therefore, the ‘so what?’ question is a pertinent one to answer; not only does the data indicate that there is a greater difference between what healthcare participants say and actually do (when compared to the social care participants) research methods designed to conduct research in an innovative way which made it possible to *measure* to what extent this is the case.

Comparing the explicit data to the implicit data indicates a significant dissonance between the two in both groups, however, individuals in social care tend to be more implicitly positively biased whereas individuals in healthcare tend to be more implicitly negatively biased. The detail behind this conclusion will be outlined on the following pages.

Conclusions: What are the implications?

The discussion and recommendation chapter will discuss in detail the implications of the findings. In general, the recommendations will fall into two distinct categories; theoretical, and, this being a DBA submission, and practical implications for the practising managers. These recommendations will be particularly relevant to those tasked with leading complex organisational integration efforts such as large scale integration which is the particular topic of this dissertation or those having to lead successful merger and or acquisitions. Anticipating that practising managers are more likely to read this five minute introduction, the practical implications centre around the following three major recommendations.

Firstly, recommendations in terms of the leadership recruitment process will be made, which will ensure that people applying for leadership positions that are specifically tasked with complex organisational integrations efforts are 'screened' or 'tested' for implicit and explicit prejudice by adopting part of the research methodology used in this dissertation.

Secondly, for those managers finding themselves in the privileged position of leading such complex organisational change and integration efforts, the final recommendations centre around the identification process of priorities to ensure the useful lessons learnt in this dissertation are applied to have a maximum effect on their current situation.

For academics that have read this far into this five minute practitioner introduction, there are significant theoretical implications flowing out of this dissertation which will be specified in both the discussion section and the recommendation section. Briefly, though, these centre around the minimal group paradigm study (study 4) and the implicit association test study (study 5) as these have not been conducted as part of the same body of research to date.

The final academic innovation is the interactive research methodology used as part of this study, which should also be seen as a significant contributor to existing knowledge and use of research methods.

The five minute academic introduction to this dissertation;

Why is it that organisations do not tend to collaborate much? Sure in certain industries organisations do collaborate, however, in most industries competition would provide the logical and obvious answer as to why organisations do not tend to collaborate; the fear of losing any competitive advantage such organisations may have (amongst other rationale). This study was carried out as part of the doctoral programme and attempts to provide multiple answers the central question; 'Why does complex organisational integration seem so hard to achieve successfully? Especially when it seems so desirable?'

There are, clearly, numerous ‘reasons’ that could justifiably be seen as central to answering such a question. The underpinning principle of this particular study is not to provide a ‘all encompassing’ answer to this question, rather, through rigorous research, suggest at least several possible phenomena that significantly impede on successful collaboration and integration between organisations. Drawing on established social psychological experiments which were amended to be used with the latest interactive technology to infer possible answers to this central question which is concerned with organisational integration.

Indeed, this dissertation comprises of five distinctly different, yet interdependent studies, which are divided into two sections; explicit behavioural testing, and implicit behavioural testing. With studies two through to four assessing explicit behavioural preferences, and study five measuring implicit behavioural preferences.

In the first study participants were requested to ‘self-categorise’ using an iPad exercise, the aim of this study is to measure participants’ self-anchoring preference, in other words, participants indicated which professional group they identified most with.

In the second study, the aim was to demonstrate explicit empathy tendencies using the same latest technology (i.e. iPad). Participants were requested to complete a social dominance orientation scale with a focus on empathy preferences. The aim was to measure the tendency to which participants are like to ‘reach out’ to others, particularly those they would consider outside of their normal group (i.e. out-group members). Indeed, in theories which aim to explain intergroup bias, the evaluations that one holds of ‘the self’ tend to play a major role (Roth and Steffens, 2014), a component of which this concept of ‘the self’ is made up of is empathy.

The third study is experimental in nature, in that, participants were asked to complete an interactive task to rank job-titles according to their notion of social status. The aim of this study was to elicit status attribution preferences, this relates to the overall study in that it provides an ability to contrast the empathy study with the status attribution data. In addition, it also provides an additional comparison between status attribution preferences, and resource allocation preferences (study four). This exercise was followed up with an open-ended reflective question, which has provided additional inferences as to the cognitive process participants go through when thinking about social status, this is in addition to the quantitative data collected in the earlier part of this study.

The fourth study amends the matrices that Tajfel and colleagues first designed in 1971 in their minimal group experiments (Tajfel, Billig, Bundy, and Flament, 1971). However, this study departs from the original, and subsequent, studies in three fundamental ways; firstly, participants have already self-categorised in the first study, therefore, associative groups are more salient to participants that took part in the original study, therefore, participants in this study are not technically subjected to the minimal group paradigm. Secondly, where the original, and subsequent, studies used paper booklets and pencils, this study utilises new technology in the form of an iPad to distribute the original Tajfel matrices. Thirdly and finally, where the study design in the original study was mainly (arguably solely) quantitative in nature, in this study participants were asked an open ended reflective question immediately following the completion of the exercise. This last amendment was added to create further insight into the ‘why’ participants chose to complete this exercise in the way they did. Indeed, this has led to some very interesting additional data, which will be reported in the relevant section.

The final study aims to demonstrate implicit intergroup bias with participants completing a customised implicit association test (IAT) (Greenwald, McGhee, and Schwartz, 1998). Participants started this task with two practice tasks, which is in line with a standard IAT design. During this task participants had to categorise healthcare and social care stimuli to the categories healthcare and social care. The IAT task order was randomised to increase its predictive reliability.

1.1 Dissertation Overview

The central contribution of this dissertation is threefold; firstly, the creation of enhanced understanding of the social psychological factors that impact on successful organisational integration. Secondly, a methodological contribution to the field of mixed methods research in the form of introducing rapid sequential mixed methodology. The final contribution is the aim of drawing meaningful inferences of combining explicit and implicit cognitive studies to advance our understanding of intergroup behaviour. In addition to this, to provide practitioners with solid and empirically grounded guidance that may help achieve better integration/collaboration between organisations.

1.1.1 Dissertation Roadmap

We have tried to write this dissertation in a manner that will hopefully make it accessible and interesting to a broad range of readers, including health and social care managers though, we anticipate, may not be familiar with the detailed theoretical frameworks that underpin this work.

The ultimate aim is to add value to the patient experience through the publication of the findings that came out of the studies that were carried out as part of this doctoral dissertation. It is anticipated that these findings will be published more widely than this dissertation, with detailed planning underway with NHS communication department colleagues on which publications would be most suitable, for this research will only achieve its maximum potential when published widely so that people understand and are aware of its implications.

The figure below is a map of some suggested paths that the reader may wish to choose through the coming chapters, with the subject matter that one will find in each of these. For ease of accessibility we have written each study chapter with the same format. Each of these consist of an introduction to the study, an overview of the relevant literature, the actual study design which includes an overview of the research methods, and each of the study chapters conclude with data analysis and a discussion. In the discussion paragraphs of each study chapter links will be made to the other studies carried out as part of this dissertation in addition to contextualising the findings to the overall research aim of this dissertation.

Chapter 1
Introduction

Chapter 4 | Chapter 5
Self Categorisation Study | *Social Dominance Study*
Chapter 6 | Chapter 7
Status Attribution Study | *Intergroup Dynamics Study*
Chapter 8
Implicit Association Study

Chapter 9
Discussion
Chapter 16

Recommendations

Therefore, we anticipate that managers and practitioners will be most interested in the discussion in sections of the study chapters (4, through to 8) and may wish to start their reading in each of these sections following the reading of this introductory chapter. For those keen to understand the theoretical/conceptual frameworks which underpin each of the studies we recommend to read the relevant literature section of the study of interest as this provides a relevant overview to the interested reader.

The discussion/data analysis sections of the individual chapters assume knowledge of mathematics at the level of a first year undergraduate course, but the data analysis elements of these sections are not essential for the reader to develop the right intuition and digest the main ideas presented in this dissertation.

Finally, chapters 4 through to 8 may be read in any order, however, they do present the sophisticated insight and detail into the studies carried out as part of this doctoral research project. Though readers should note that they do employ more specialised terminology associated with the underpinning theory of the study.

1.1.2 Chapter Descriptions

- Chapter 2 provides a sound justification for the study to be carried out.
- Chapter 3 outlines the ethical considerations, including NHS IRAS
- Chapter 4 introduces study one and outlines the rationale and relevance to the overall study
- Chapter 5 – 8 introduce the four separate studies each of these have their own discussion sections, which may be most of interest to practising managers
- Chapter 9 – discusses the results from the studies carried out in this dissertation and provides recommendations for practitioners and academics alike.

2

Research Objective and Justification

2.1 Introduction

During winter 2009, the Department of Health asked the then existing Strategic Health Authorities to lead their local health economies on the topic of health and social care integration. It was during this time that we were asked by the then Director of Workforce and Postgraduate Dean of the North East Strategic Health Authority to conduct an academic study to answer the question; 'what would be the implications for the NHS workforce should health and social care integration become a reality?'

This being the original brief, it will not take readers long to discover that the research objective of this dissertation has significantly changed from its original brief. There are several reasons for this.

One of these reasons is practical in nature; rigorous academic study requires a clear objective, and significant investment in terms of time, therefore, the initial research request was amended to have a clearer objective, which is grounded in academic rigour and built on robust theoretical frameworks to derive meaningful recommendations.

These recommendations would also need to be able to, at least in part, answer the original research question that initiated this process as will become evident in the coming chapters. The second reason for a 'drift' of focus and emphasis of this study is the nature of academic inquiry at doctoral level; the need to expertly create measures and research methods which suitably explain the studied phenomena necessitated a shift to a more theoretically focused area of research.

With the requirement of reaching a deeper understanding of concepts such as justifying the research methods used (we used mixed methods research) and why it is important to make distinctions between the research methods were chosen and why these are relevant to the study at hand.

Indeed, it became rather evident during the taught elements of the programme that doctoral level research is not simply an ‘extended masters programme’ certainly, the difference is, at heart, the fact that at doctoral level, one needs to contribute to existing knowledge, rather than applying knowledge which came out of research efforts of others.

Once grasped, this is a daunting task indeed, which justifies a shift towards a more research (or academic) question; ‘why is it that health and social care integration seems to hard to achieve successfully?’ There are possibly a multitude of reasons that could provide a helpful, if not credible answer to this question. The answers that are presented in this dissertation will centre around the theory of social psychology of intergroup dynamics, (which deals with concepts such as the creation and effect of prejudice, stereotyping and discrimination).

2.2 Theoretical Journey

With a major part of this study centring around the distinction between explicit social cognition and implicit social cognition and with relevant hypotheses related to theoretical issues such as the impact of social status on the way status is attributed by individuals. In-group and out-group favouritism and the dynamic interplay between these two concepts all of which helped to refine the evolution of this study.

Because of the evolutionary nature of this study which partly arose with further reading around the social psychological literature mentioned earlier which led to the creation of several interdependent studies. During this study, we became increasingly aware that the participants were telling the researcher what they believed to be was the ‘correct answer’, as opposed to what they truly believed.

Whilst there are very robust and well-established methods to test for inter-group dynamics (such as prejudice and favouritism etc.) these methods test the explicit cognitive behaviour of participants in studies. With a political dimension featuring strongly within the context of the study, the researcher was acutely aware of the fact that participants’ responses to explicit methods may suffer from ‘strategic responding’. To reconcile the strategic responding and the objective of the study two strategies were employed with the objective to achieve more ‘credible’ results.

Firstly, in study three, rather than designing this study by directly asking participants their attitude towards ‘health and social care integration’ participants were instead requested to respond to a specifically designed survey to test their ‘social dominance’ and more specifically their ‘level of empathy’ which was used as an proxy of their propensity to collaborate with others (see Chapter 5 for a detailed outline and discussion). It was hypothesised that the degree to which a group expresses social dominance would directly impede on successful ‘integration’.

The second strategy to alleviate the impact of ‘strategic responding’ was the implementation of study five, which tests participants’ implicit preferences. This is done by implementing a customised ‘implicit association test’ (or IAT) which is a well established method for obtaining implicit preferences which was finds its origin in a paper by (A G Greenwald & Banaji, 1995) in which they draw out a clear distinction between explicit and implicit cognition. Subsequently, the IAT method has emerged as the method of choice to test for implicit bias and prejudice. The IAT used in this study was co-designed with colleagues at Harvard University, which has led to a robust and strong collaborative relationship between the researcher, and colleagues at this university. The co-design took the form of the researcher leading on concept and construct development specific to this study and the data interpretation, with colleagues at Harvard mainly hosting[3] the study on their server and leading on the creation of the underlying computer design framework of the eventual IAT used in the study.

These two strategies attempt to mitigate for participants providing the answer they are expecting to provide (which is mainly applicable to higher educated and higher salaried participants, as results will show) a rounded investigation which has, when taken together with the other studies conducted, produced a useful insight into both the implicit and explicit cognitive barriers that exist to achieve successful integration between organizations and an indication of factors which impede stronger collaboration to take place for the benefit of patients.

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[3] https://implicit.harvard.edu/implicit/Launch?study=/user/emily/clients/groen/care14.expt.xml

So why is it so important to concentrate on health and social care integration? There are, obviously a multitude of reasons for this both economically and culturally. The economic case, which is often used by politicians, for better health and social care integration. Over the last five years the coalition government (Conservative/Liberal Democrats) in England have 'championed' health and social care integration as a matter of English policy (the devolved administrations of Scotland, Wales and Northern Ireland are not included in these policy efforts as health and social care are devolved to these administrations) policies introduced in this area have cost the tax payer in excess of £4bn by the end of the current parliament[4].

2.3 Government Policy Background

However, the 'integration' effort is not limited to the current government, indeed, this has been a consistent theme of policy over at least the last four decades, some may argue since the creation of the National Health Service in 1948. Indeed, under the previous Labour government there was a similar drive to improve collaboration between healthcare and social care systems. To that effect, that government passed the Health Act 1999 in an attempt to remove some of the perceived barriers to integration. The Health Act 1999 allowed statutory bodies to pull budgets and jointly commission public services.

Subsequently, the government created primary care trusts with the aim to provide organisational capability to achieve health and social care integration. In addition to this that Labour government introduced specific measures such as the single assessment process (SAP) to improve joint working, however, in practice, these policies did not have enough time to 'embed' fully to maximise its intended impact. As previously mentioned, the current coalition government further pursued plans to make the integration agenda a further reality. In the 2010 white paper 'Equity and Excellence: Liberating the NHS', it set out the aim of 'simplifying and extend the use of powers that enable joint working between NHS and local government' with the aim to streamline local partnerships to reflect local needs. In addition to this, the economic context has significantly changed since the last Labour government, with austerity and funding squeezed,

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[4] NHS England estimates, evaluations of Better Care Fund Plans and Five Year Plans received from CCGs

efficiencies would be required to be able to keep providing services to the public, both health and social care services.

Finally, in October 2014 the NHS 'Five Year Forward View' was published by five governmental bodies (NHS England, Public Health England, Monitor, NHS Health Education England, the Care Quality Commission, and the NHS Trust Development Authority). In it, the case for change is made quite poignantly; "Changes in patients' health needs and personal preferences. Long term health conditions – rather than illness susceptible to a one-off cure – now take 70% of the health service budget.

At the same time many (but not all) people wish to be more informed and involved with their own care, challenging the traditional divide between patients and professionals, and offering opportunities for better health through increased prevention and supported self-care. Indeed, changes in treatments, technologies and care delivery is transforming our ability to predict, diagnose and treat disease.

New treatments are coming on stream at a rapid pace, unprecedented in history. *And we know, both from examples within the NHS and internationally, that there are better ways of organising care, between health and social care, between generalists and specialists – all of which get in the way of care that is genuinely coordinated around what people want and need.*" (NHS England, 2014; p.6 emphasis added by the author).

The report also highlights the economic challenge; "the changes in health service funding growth, which are influenced heavily by the global recession, most western countries will continue to experience public funding pressures over the next few years, and it is implausible to think that over this period NHS spending growth could return to the 6%-7% real annual increases seen in the first decade of this century." (2014, p7)

It recommends that, in order to close the care and quality gap that; 'unless we reshape care delivery, harness technology, and drive down variations in quality and safety of care, then patients' changing needs will go unmet, people will be harmed who should have been cured, and unacceptable variations in outcomes will continue to persist." (2014, p.7)

Integration features heavily throughout the document with not just focus on health and social care, indeed, it mentions an artificial divide between general practice and hospitals, between physical and mental health, between *health and social care*, between prevention and treatment. It envisions a future that "[…] no longer sees expertise locked into often out-dated buildings, with services fragmented, patients having to visit multiple professionals for multiple appointments, endlessly repeating their details because they use different paper records. A future in which people with multiple health conditions are supported as well as those with single conditions currently. A future that sees far more care delivered locally but with some services in specialist centres where that clearly produces better outcomes for patients. One that recognises that we cannot deliver the necessary change without investing in our current and future workforce." (NHS England, 2014; p. 8).

In order to achieve such a future, it is very clear that further, and more meaningful, integration is required. There are several care models suggested by the report, amongst which is the Multispecialty Community Providers (MCP) model of care. These centres would become the focal point for a far wider range of care which is more responsive to the care (both physical, mental, and social care) needs of the population that they serve.

The aim of this is to 'shift' the majority of outpatient and ambulatory activity from secondary (i.e. hospital) care to primary care, which would also offer a range of services which are currently only provided by larger hospital organisations.

It is envisioned that in time these organisations could take on delegated responsibility for managing health service budgets for the population that they serve, and, over time, to pool budgets with local government, creating in effect a 'one-stop-shop' for health and social care needs for patients and the public.

The second new model of care, which is relevant to this study as both of these models require a significantly increased degree of integration between existing providers of care, is the primary and acute care systems (PACS).

NHS England will now allow the creation of new variations of integrated care by permitting a single organisation to provide NHS list-based GP and hospital services, together with mental health and community care services. Such organisations would be referred to as primary and acute care systems (or PACS) the report states; "at their most radical, PACS would take accountability for the whole health needs of a registered list of patients, under delegated capitated budget – similar to the Accountable Care Organisations that have emerged in Spain, the United States, Singapore, Sweden, the Netherlands, and a number of other countries." (2014, p. 21)

However, in terms of how this will be achieved the report is not explicit admitting; "PACS models of care are complex, they take time and technical expertise to implement. As with any model of care, there are also potential unintended consequences that may need to be managed. We (NHS England as the leadership organisation for the NHS nationally) will work with a small number of areas to test these approaches with the aim of developing prototypes that work, before promoting the most promising models for adoptions by the wider NHS." (2014, p. 21).

It is the aim that the results of this study will feed in directly to the development of these new organisational changes and structures within the NHS, with this study being jointly commissioned by NHS England and NHS Health Education England.

The final relevant new care models is the increased health provision within care homes, which is of particular pertinence to this study. Currently, one in six people over the age of eighty-five lives permanently in a care home, yet data suggests that this number will grow over the next five years. However, in addition to the data quoted in the report, the national 'end of life care' programme has uncovered a rather unnerving statistic: "once permanently admitted to a care home, an individual has a 80% chance of dying within 12 months immediately following admission"[5]

Therefore, "in partnership with local government social service departments, and using the opportunity created by the Better Care Fund, we will work with the NHS locally and the care home sector to develop new shared models of in-reach support, including medical reviews, medication reviews, and rehabilitation services. In doing so we will build on the success of models with have been shown to improve quality of life, reduce hospital bed use by a third, and save significantly more than they cost." (2014, p. 25)

All of these recommendations seem to make inherent sense, almost to the extent that some individuals reading these recommendations want to 'go on and

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[5] National End of Life Care Programme, which was sponsored by the ten nationally allocated Strategic Health Authorities, unpublished report on programme implementation, dated July 2012.

do it', which is why the five year forward view has generally been accepted by all parts of the health service, which is rather unique.

Where the studies presented in this dissertation will add value is that the gap between supporting the concepts and recommendations of the NHS Five Year Forward View and 'the doing and making them happen' is a very real one.

2.4 Organisational Theory

In general, groups of people (and individuals for that matter) prefer to retain the status-quo. Very clearly, the recommendations in the five year forward view do not allow for the current status quo to remain in place.

Additional issues around organisational factors such as creating and sustaining a shared purpose can prove rather challenging, which is where the 'cultural' aspect comes in. Indeed, several studies exploring the introduction of intermediate care services (as a sample integrated working initiative) report that a lack of understanding of organisational aims and objectives which underpin the integration effort (see Clarkson, 2011; Asthana and Halliday, 2003; and Glasby, Martin, and Regen, 2008 for detailed examples) These studies point out that without a shared understanding of aims and objectives, integration efforts may struggle to develop a sense of purpose at the operational level, which often is compounded by the fact that frequently there is a lack of accountability and leadership for local decision making.

When there are no clear objectives, and with the absence of a clear service specification, progress becomes very hard to measure in an objective manner. Where the study in this dissertation departs from these, rather traditional, yet prevalent, perceptions of 'aims and objectives' which seem rather vague and non-specific, is that this dissertation argues that the (cognitive) social psychological factors of intergroup dynamics play a large part which prevent such integration efforts from being successful, essentially applying advanced social psychological theories into the realm of practical application.

The social psychologists reading this may argue (and to a certain extent will be successful in doing so) that their theories are based largely experimental conditions which allow for practical application. However, this dissertation was derived the other way around, i.e. a practical problem required a practical solution, which is underpinned with sound theoretical frameworks. Indeed, it is the rather simplistic view which is echoed by Cameron et al. (2012) that '[…] at a strategic level, competing 'organisational visions' about the joined-up agenda and a lack of agreement about which organisation should lead which ventures appeared to undermine the success of initiatives aimed at joining up services in a system wide approach, as did the absence of a pooled budget or shared budget.' (p.11)

As is often the case, the report does not go into detail as to why this seems to be the case, this is where this dissertation aims to provide additional insight. As organisations (as mentioned in the context of the Cameron quote) are essentially groups of individuals, it seemed logical to search the psychology literature for an answer. Indeed, as this search led to social cognitive behaviour and related theories, the additional knowledge of these social psychological processes that operate throughout any organisation, will provide further guidance on how to create a 'shared understanding' as mentioned by Cameron (2012).

However, what became apparent very quickly is that intergroup dynamics is dominated by concepts such as ingroup favouritism and out-group prejudice which could account for the 'competing organisational visions at strategic level'. Indeed, if these dynamics are at play in any organisation, then these need to be explored in detail, which is essentially what this dissertation aims to do.

Conducting four separate studies in which participants from healthcare and social care organisations are subjected to theories as diverse as social dominance theory, minimal group paradigm theory, intergroup dynamics, and implicit prejudice and testing theories. Intriguingly, most of these cognitive processes (it is argued) happen without conscious endorsement of the individuals, this knowledge alone provides powerful and compelling insight which led to the creation of this dissertation in the eventual form it is now.

Although some studies have been conducted in this area (see Christiansen and Roberts, 2005 for an example) however, studies such as these tend to be overly focused on the operational aspect without an in-depth understanding of the social psychological processes, rather studies such as these aim to improve services operationally, by reporting pilot studies for example, this dissertation has taken the approach of a practical problem (similar to the one reported by Christiansen and Roberts) turn it into a theoretical issue, conduct research in an experimental setting (in contrast to pilot sites, which are not experimental settings) and then turn the findings into practical application.

In addition, the moral case for better integration need not to be missed. Indeed, insights from ‘service users’ (people as referred to by social care professionals) and ‘patients’ (people as referred to by healthcare professionals) and the people that support them and listening to the expectations that they may have for the services that are on offer in a locality may prove to be a wise first step.

When people that need services (either healthcare or social care) are consulted by providers of such services, limited details are often shared (at least publicly) in reports. Nonetheless, many people that require services report high levels of satisfaction when they experience integrated services (for examples see Rothera et al, 2008; Carpenter et al, 2003; Drennan et al, 2005; McLeod et al, 2003; Asthana and Halliday, 2003; Beech et al, 2004; Brooks, 2002). In summary, people report to particularly value the responsiveness to their needs through more timely initial assessment and subsequent interventions delivered by integrated service providers.

In addition, the partnership working and the development trusting relationships with named key workers, they also reported improved communication between care providers. The key named individual often was able to help navigate the unfamiliar and complex system of service providers and their individual policies which ultimately led to people reporting increased independence and they remained longer within a community setting when compared to people that did not have access to such a joined up programme of care. As one older person said as part of the preparatory work for this dissertation; ‘It just seems to make sense that all of these agencies and organisations need to integrate more, they all look after me! Often without even realising that they are doing so, I think this is a major part of the problem.’ [6]

When reviewing the current evidence base on ‘integrated health and social care services’ Cameron (2012) states; “There are some tentative signs that progress has been made since the original review and that it is now possible to demonstrate some positive outcomes for the users of services, their carers and

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[6] In preparation and ahead of this study, I worked on integration between health and social care services for the North East Strategic Health Authority and this allowed me to interview service users (or patients) to gauge their perspective.

service provider organisations. However, the evidence base is patch and more research is required to sharpen and broaden our understanding of these outcomes." She goes on to state; "There is a need for more high quality and complex studies to be undertaken in order to gather sufficient data, on a large enough scale, to demonstrate the effectiveness of joint working for users of services and the wider health and social care economy. Without this evidence base some professionals will remain sceptical about the importance of joint working and integration between health and social care organisations." (2012, p. 18)

This dissertation builds upon this recommendation with a study design which employs advanced (complex) mixed methods research which utilises the latest (and most relevant) social psychological theories to underpin its recommendations.

Finally, interviewing participants who work either in healthcare or social care environments will aid our understanding in terms of the differences in attitudes. Indeed, testing the way they respond to the research methods in this dissertation which measures both consciously endorsed cognitive processes followed with the final study which measures cognitive processes which happen without being consciously endorsed, will provide a series of insights to 'bridge the gap' which exists between the explicit attitude (i.e. "I suppose I have to work together with people in healthcare because you tell me to, so I will tell you I will") and implicit attitude (i.e. "I will not do so, because I do not like them").

Together these recommendations will provide only part of the answer as to what makes successful integration between organisations work, no doubt that other areas of research will prove useful to those tasked with making this challenging change happen. It is anticipated that the studies reported in this dissertation will provide valuable insights into the 'dissonance' between 'saying and doing' which is even the case in relation to health and social care integration efforts over the years, which is not verbally opposed by many. So why has it not been implemented at scale? This is what has led to the creation, and is the very core question, which underpins this research.

3

Ethical Considerations

3.1 Ethical Approval and Philosophical Assumptions

Whilst conducting research with human participants, it is vital to ensure that research ethics are not only taken into account, but given generous thought and reflection on the part of the researcher. This chapter outlines the thoughts and considerations, and the subsequent actions that were taken to ensure all foreseeable ethical issues are approved by the relevant body/organisation. By way of general introduction, (Kimmel, 1988) provides a good overview of research ethics in applied social research; ‘Trust lies at the heart of virtually every decision that must be made by the researcher, and all human participants in the research process depend on the trust of others at all levels.

Research Participants trust the researcher to treat them with dignity and respect, to protect their well-being, and to safeguard them from potential dangers or risks of harm. Researchers trust their Participants to maintain honesty in their responding, to respect the seriousness of the research enterprise, and to maintain their promises not to reveal certain aspects of the study to future participants. Society lends its trust to researchers to pursue worthwhile research questions, which stand to benefit humanity, to protect participants from research abuses, and to maintain honesty and objectivity throughout the research process.’

The study carried out is classed as ‘applied psychological research intended not directly for the benefit the study participants rather it is intended to provide a direct benefit to organizations.’ As such, the individual participants are not the main focus of the study; this concept is described well by (Shipley, 1977); ‘for the most part social scientists do not study the individual but the species.’ (p. 95).

Nonetheless, it is crucial for any social scientist to understand that in order to general any beneficial knowledge, even if this knowledge is limited to an organisational level benefit, that the inferences drawn to support any conclusions come directly from the individual participants in the study. Therefore, the following ethical implications which may impact on the participating individuals have been taken into account; informed consent and confidentiality.

3.1.1 The NHS IRAS System

The integrated research application system (IRAS) is a single system for applying for the permissions and approvals for health and social care / community care research in the UK it enables researchers to enter the information about their project once instead of duplicating information in separate application forms. It uses filters to ensure that the data collected and collated is appropriate to the type of study, and consequently the permissions and approvals required it helps the researcher to meet regulatory and governance requirements. It is designed to retain familiar aspects of the NRES form system. IRAS captures the information needed for the relevant approvals from the following review bodies:

- Administration of Radioactive Substances Advisory Committee (ARSAC)
- Gene Therapy Advisory Committee (GTAC)
- Medicines and Healthcare products Regulatory Agency (MHRA)
- NHS / HSC R&D offices
- NRES/ NHS / HSC Research Ethics Committees
- National Information Governance Board (NIGB)
- National Offender Management Service (NOMS)
- Social Care Research Ethics Committee

The IRAS reference number which was assigned to this study is; 134960/500512/6/994/210800/280938 and the study was submitted on 06 June 2013, and eventually approved by NHS IRAS, through the Joint Research Office, the Newcastle upon Tyne Hospitals Trust on 05 April 2014. The process followed at the Newcastle upon Tyne Hospitals Trust is outlined in the next section. However, it is important to state that the process for social science research to be conducted in the health service, needs to be streamlined and gain more in terms of efficiency. All the documents that were submitted to both ethics committees are included in appendix two for reference.

3.1.2 The Newcastle upon Tyne Hospitals Ethical Board

The Newcastle upon Tyne Hospitals NHS Foundation Trust (NUTH) is the largest NHS trust in the North East of England. As such research is carried out within this organization on a regular basis. Therefore, this organization was the natural choice for this study, it employs the most individuals (13,384 full time equivalent staff[7], as at July 2014), it has the most diverse range of service found in the North of England, and it, therefore, provides the best access to healthcare professionals (as participants to this study) in the region. The process to gain ethical approval to conduct this study started in earnest, during November 2012. Initially, with an application directly to the Joint Research Office (JRO) at NUTH. Their preliminary response the submission was to reject access/collaboration. This prompted the researcher to request a meeting with the senior research team at the request of the executive director for nursing.

Following this initial meeting, agreement was reached that this research at the very least, ought to be evaluated properly, along all other applications. JRO staff related that ‘social science’ research is not something that tends to be reviewed by NUTH’s ethics committees.

In March 2013 a request was received from JRO to create a ‘research protocol’ which was promptly submitted in April 2013. Further clarification meetings were held during May and June 2013, and a final research protocol accepted in September 2013, this is attached in appendix 3.

The appointment of Dr. Christopher Eggett as ‘principle investigator’ for the study was confirmed in October 2013, with a full submission to the ethics committee of JRO/NUTH planned for December 2013, however, this was delayed, and eventually the study was approved during February 2014, evidence of this approval is found in appendix three. There were no concerns raised during the ethics committee, indeed, the notes suggest that some senior clinicians were rather keen to understand the outcome of the research. The data collection

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[7] Source: NHS Electronic Staff Record, Data Warehouse accessed: September 2014)

commenced in April 2014, with the final healthcare interviews held in the first week of June 2014.

3.1.3 Ethical Approval from Care Homes

Although in theory the IRAS system covers both health and social care organisations, in practice most care homes have never even heard of it. This presented me with a challenge as I was keen to ensure that the participating care homes and social care organisations were fully aware of the study. However, all participating social care organisations, including the private care homes, when informed that the NHS had authorised the study within a clinical setting, were satisfied that all ethical issues had been considered appropriately, and were happy to participate on that basis.

3.2 Gaining Ethical Approval from Participants

The principle of informed consent is that participants should be allowed to agree or disagree to take part following the review of comprehensive, yet concise, information regarding the nature and purpose of the research. This principle has its origin in the Nuremberg Code (1946) which stated; 'The voluntary consent of the human subject is absolutely essential. This means that the person involved should have legal capacity to give consent, should be situated as to be able to exercise free power of choice, without the intervention of any ulterior form of constraint or coercion; and should have sufficient knowledge and comprehension of the elements of the subject matter involved as to enable him/her to make an understanding and enlightened decision.' (reprinted in Reynolds 1982 p. 143)

Therefore, the approach taken for this study has aimed to set out the nature and purposes of the research, the demands in time upon the participants, the procedures that were adopted, any aspects of the research design that are experimental, information about likely risks or discomforts that participants may suffer as a consequence of participating. In addition, a statement on the confidentiality of participating and the maintenance of data and recordings was also provided to participants. In addition, a statement on compensation or alternative ways to participate was not included, as this was neither deemed necessary nor relevant for this study.

Finally, contact details were provided to participants at two stages, firstly as part of the consent form, and secondly, upon completion of the study participants were offered a contact card, with further information should they wish to receive this. However, only a small proportion of participants were interested in taking the card, indeed, only one participant requested the contact card before it was offered to him.

A more manageable formulation of informed consent is provided by (Homan, 1991) 'there are two elements implied in being 'informed' and two elements that constitute 'consent';

Informed =

1. That all pertinent aspects of what is to occur and what might occur are disclosed to participants;
2. That the participants should be able to comprehend this information.

Consent =

1. That the participants are competent to make a rational and mature judgment;
2. That the agreement to participate should be voluntary, free from coercion and undue influence. ' (p. 71)

Given that the above approach to informed consent seems reasonable and practicable, this was fully adhered to during this study. A copy of both the consent forms and the participant information sheets are available for reference in appendix three of this dissertation.

In addition to this, all signed informed consent forms are available upon request. However, please note that due to NHS IRAS guidelines, and the guidelines from the Newcastle upon Tyne Hospitals NHS Foundation Trust, participants were only requested to initial the forms, rather than providing their full names. As such, all interview procedures carried out for this study have been fully recorded, to provide evidence of authenticity and to ensure academic rigour and replicability is maintained.

3.3 Philosophical Assumptions

This section outlines the philosophical assumptions that underpin the perspective that is adopted on the topic of research outlined in this study. It also provides insight into how these assumptions shaped the nature of the investigation, the methods chosen and the questions that were generated as part of the study. Finally, this chapter concludes with pointing out the kind of conclusions that can, and cannot, be drawn on the basis of the investigation.

As it is possible to approach the social world from different perspectives and to see things differently depending on the philosophical perspective taken, alternative perspectives are not only different, they are generally incompatible with the views set out in this study. Hence the need to clarify the assumptions made during this investigation, and evaluate the competing alternatives, and provide a rationale as to why such alternatives were rejected. It is important to note that world views such as those expressed in this study differ in nature in terms of reality (ontology), how knowledge is gained (epistemology), the role values play in research (axiology) the process of research (methodology), and the language of research (rhetoric).

As the philosophical assumptions are the broadest set of assumptions, this section will be rather broad and general in nature with the mere aim of this section being to clarify the stances taken, not to necessarily to defend these.

3.3.1 Ontological Stance

Ontology 'refers to the nature of social phenomena and the beliefs that researchers hold about the nature if social reality.' (Denscombe, 2010) As such this investigation has assumed a realist approach with regards to the social world.

As the possibility to be able to measure the social world and assuming that structures and relationships within this make up reality which is objective in nature and applies to everyone without exception.

The methods that that were chosen for this study reflect this philosophical stance as the data generated using these methods are objective, measurable and independently verifiable. Realism, within this context seems to fit most with the worldview of the researcher. Hence the fact that this stance seemed to fit more naturally when conducting the investigation for this study. Reality applies to everyone equally whether one is in agreement or not.

To suggest the possibility of ‘multiple realities’ which logically leads to the possibility of ‘multiple truths’ which cannot be defended objectively as this requires an absolute statement. For example; ‘the truth is there are multiple truths’ which is an example of a required absolute statement to defend such stance. If reality is subjective, than all of reality will have to be ‘relative’ which excludes the possibility of absolute statements being made.

Therefore, philosophically the author has chosen to align with the realist approach to reality. However, it is important to note that this section merely clarifies the stance taken, it is not meant to defend this stance nor argue for it beyond this section. Finally, it is important to note that the following principles were adopted before, during and after the study was conducted (adopted from Denscombe, 2010 p.43);

- Reality exists independently of any individual experience or interpretation of it. Reality, as such, exists independently of any individual’s knowledge or opinion of it;
- Reality is not always observable. Reality exists whether one decides to believe in it or not, social constructs such as social class, mental health etc., may not be directly ‘measured’ they are, nonetheless, still very real.
- The impact of reality is not always predictable. As such the stance taken here means that something is ‘real’ if it has an effect which is measurable. An effect is something that probably will occur along discovered patterns and expressed using implicit or explicit preferences;
- Social reality is complex and sometimes only partially revealed by things that can be measured and observed;
- As there is no direct way of representing social reality, it has to always be seen through theories that were created by social scientists to explain reality;
- Finally, research methods are ‘theory-laden’ meaning that the role of theory is deeply embedded in the understanding of social reality. This means that the methods that were used in this study to collect data are not to be considered neutral tools. Instead, these tools are actually infused

with assumptions, which is why theory and method need to be tightly connected.

A suitable extension for the above is provided by Sayer; ‘Although social phenomena cannot exist independently of actors or subjects, they usually do exist independently of the particular individual who is studying them. Social scientists and historians produce interpretations of objects, but they do not generally produce the objects themselves. (Sayer, 1992 p.49)

3.3.2 Epistemological Stance

Epistemology ‘refers to the ways that humans create knowledge about the social world and involves philosophical debates about the bases in which we can claim to have knowledge of social reality. Epistemology, then, is not concerned with what social reality actually ‘is’ so much as the logic behind our ability to acquire our knowledge of what it is.’ (Denscombe, 2010).

Taking this definition of epistemology together with the following definition of ‘positivism’ which ‘centres on the idea of using scientific methods to gain knowledge, and it regards the observation and measurement of the properties of objects as crucial to the way we find out about reality.’ (p.119) positivism seems to be the most logical choice when reasoning through the philosophical epistemological stance. Therefore, some of the following assumptions have formed part of the author’s philosophical framework when conducting the investigation (adopted from Denscombe, 2010);

- There are patterns and regularities, causes and consequences, in the social world just as there are in the natural world. There is an order to events in the social world which lends itself discovery and analysis just as there is order in the natural world;
- The patterns and regularities in the social world exist quite independently of whether they are recognised by people. It is presumed that there is an objective reality (as aforementioned) ‘out there’ waiting to be further discovered. Therefore, it is assumed that research does not create patterns and regularities of social science, it discovers/uncovers them;

- Empirical observation is crucial in the sense that theories and explanations can have no credibility unless they can be corroborated through observation of events in the world;
- Social research should make use of the reliable tools and techniques that provide accurate measures of the social phenomenon being studied. These research tools must not impinge on the object being measured, not disturb it nor alter it in the process of data collection
- Finally, researchers should be objective. They are expect to retain a detached, impartial position in relation to the phenomena being studied and not let personal feelings or social values influence the questions pursued, the results reported or analysis of the findings.

Considering the above it is clear that the philosophical stance adopted during this study is that of ‘realist positivism’ stance. This seems to be in contrast to the traditional stance taken for a mixed methods approach to research. Traditionally, mixed methods is associated with the philosophical stance of ‘pragmatism’ according to Creswell and Plano Clark (2011).

4

Study One – Self-Categorisation

4.1 Introduction

The studies described in this dissertation, with the exception study five, focus on eliciting explicit behaviours from participants. In this first chapter participants were requested to supply demographic data using the underlying principle of 'self-categorisation'.

In short, self-categorisation theory assumes that the self can be categorised at various levels of abstraction, which consists of; 'the personal, the social, and the human' (Haslam, 2001). This chapter, begins by outlining the relevant literature to introduce the reader to key concepts conveyed in classic and recent relevant publications on this topic, before moving on to describing the design of the study. The chapter concludes with an outline of the study outcome (data analysis and interpretation) and a discussion of the relevance within the context of the overall objective of this dissertation, and how they relate to the other studies conducted.

4.2 Relevant Literature

"Categorisation is the process of understanding what some thing is by knowing what other things it is equivalent to and what other things is it different from." (McGarty, 1999) Categorisation is widely studied in fields as diverse as cognitive psychology, social psychology, social- and behavioural economics, and wider social sciences. There are several averred statements that need to be made;

Firstly, people categorise people, especially themselves. Secondly, "different people commonly categorise the same things in the same way. Thirdly, people often categorise themselves in the same way as do other people. Fourthly, people often categorise things in the same ways as do other people whom they categorise themselves to be similar to." (McGraty, 1999)   Indeed, "not only do people see themselves as group members, but to a greater or lesser degree, other people see themselves as sharing or not sharing our group memberships. That is, the other people in the crowd can potentially see themselves as being the same as us or different to us.” (McGraty, 1999)

Moreover, as part of the research objective of this dissertation, McGraty makes a valuable statement; " […] this last claim is perhaps the most controversial … if we accept that people categorise themselves, and they can share categories of things and persons with other people, than it follows that one excellent basis for deciding who we are similar to and different from should be the way those people categorise." (McGraty, 1999) Indeed, if we can determine the allegiances of people around us merely by observing their behaviour it should follow that people, in general, categorise by aligning their categories to those that are socially acceptable.

Although the above seems evident, within the field of social psychology these are theory fragments that are heavily debated. Statements such as; 'the contents of different people's mind cannot be directly communicated', and 'there is a seemingly infinite number of different thoughts that any individual can have about any one of an infinite number of different things.' make generalisations rather more complicated than they appear to be at first sight.

Indeed, one is reminded of the old adage; "too often one enjoys to comfort of opinion rather than the discomfort of thought." This section of the literature review will ensure that the relevant theorists' opinions and thoughts are reviewed and relevant conclusion drawn from these. Which will enable the case to be made for use of the relevant social-psychological theory which underpins the categorisation process to make sense of the data collected study number one.

As a broad introduction to the literature, the social cognitive literature on the subject of categorisation could be split into three overarching principles; 1) categorisation involves biased stimulus processing, 2) categorisation involves the activation of previously stored constructs, and 3) categorisation is constrained by motivational and evaluative concerns held by individuals. Early writings within the field of biased stimulus information processing research is very well summarised by a textbook which was edited by (Hamilton, 1981).

Indeed the chapters by Rothbart (1981), Taylor (1981) and Wilder (1981) [all same volume] are possibly the best place to start a literature review on this subject. They highlight that the basis for the current thinking on biased processing of information comes from cognitive psychology work conducted in the 1960s which suggested the metaphor of the human mind as an information processing device with a fixed level of processing capacity.

However, other antecedents include the work of well known authors such as Allport (1954) and Tajfel (1969) who wrote about categorisation and stereotyping. Allport and Tajfel took the view that the social environment makes extreme demands on attention owing to the large number of individual people that we all encounter. (McGraty, 1999) states; "an adaptive response to this situation is to treat individuals as indistinguishable from other members of the same group, because it would take too much effort to distinguish all of them. As a consequence selective generalisations are made and these represent a solution to the problem of overload." (p. 54)

An additional contributing factor in the formation of this theoretical concept is that of 'attribution error'. This concept reached significant prominence in social psychology in the 1970s, most notably the 'actor-observer' effect seemed to confirm that when individuals made judgements, these judgements were characterised by errors and biases that the individuals made were overly attentive to stimuli that were highly available and to possibilities that seemed 'representative' or ‘socially acceptable’. (see Tversky and Kahneman, 1974, for a detailed discussion).

The above literature on the subject of ‘social categorisation’ provides an introductory wider context which is useful to understand the theoretical background which underpins of the concept of ‘self-categorisation’ for which the relevant literature will be reviewed in the following section.

Self-categorisation theory is derived from cognitive psychology, indeed, it seems to find its origin in Rosch (1978), who suggested very helpfully, that social categorisation tends to be hierarchically organised, as was mentioned by Haslam earlier in this chapter, however, Rosch goes in further detail when theorising on this idea.

This conceptualisation seems to make sense logically; for example, if we know that all persons are susceptible to a particular social behaviour and that someone who works in healthcare is a person, then we could know with absolute certainty that healthcare workers (or social care workers for that matter) are susceptible to such behaviour. Indeed, to Rosch (1978) 'categorical structures can be distinguished into three levels of abstraction (which increase inclusiveness): the subordinate, the intermediate, and the superordinate'. For any given categorical system Rosch (1978) further argues that one of the levels tended to be the basic level at which perception tends to be located and where objects (or people) would be spontaneously named (or categorised).

For example, for care workers, at the basic level may be at the level of healthcare workers and social care workers, rather than less abstract (doctor), or more abstract (people who provide care). This first process of hierarchy creation tends to be referred to as vertical structure of categorical systems, however, Rosch et al. made added the notion of horizontal hierarchal structures. 'Their approach specified that there was a variation within categories in terms of the degree to which the members were representative or prototypical of the category.' (Crisp and Hewstone, 2006).

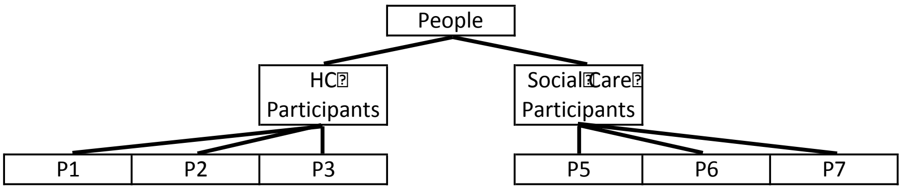

Figure 4.0-1: A tree diagram showing three levels of hierarchy (based on McGarty (1999) who adapted it from Oakes et al. (1994).

This is an important extension which aided the evolution and the way we think about categories now as opposed to the classical view that categories have all or nothing defining features and therefore had fixed boundaries that separates each category. Indeed, there seems to be a tension between these two views. 'On the one hand, the hierarchical structure of categories means that common higher-order category membership enables powerful logical inferences to be made about *all* members of lower-order categories'. (Crisp and Hewstone, 2006).

On the other hand, members of categories are supposed to vary in their prototypicality, and logical inferences are actually made more easily about these prototypical members, this notion lays the foundation for prejudice formation, which could be described essentially as a category miss-match.

The evidence for hierarchically structured categorisation, however, seems variable in nature which suggests that hierarchies and categories can be more 'fuzzy' in nature as opposed to having clear cut boundaries. To a certain extent Turner et. al. (1987), highlight the idea of flexible and context dependent perception to a first principle of cognition, which is where they depart, in terms of ideology, from Rosch (1978).

This is important in light of the current study, as participants are asked to self-categorise, however, participants may struggle to do so using strict categories, especially when boundaries between healthcare and social care are blurred/fuzzy, however, this depends on what is asked and how this is asked of participants, which will be outlined in the next section of this chapter.

In addition to the above, and with the aim of drawing this section to a natural end, one theoretical model is particularly useful to take into account when dealing with *the way* in which individuals categorise themselves, which is the common ingroup identity model, which draws upon the hierarchical categorisation theoretical framework but adds; 'that two separate groups of people *recategorise* so that they perceive themselves both to be contained within the same group' (Gaertner and Dovidio, 2000).

This is a very useful addition as in the case of the study at hand, the healthcare and social care categories are distinctly different at one level (professional status, funding, social status, etc.) however, if recast, they do fall into the same category of care providing groups.

Indeed, it is this realisation that most groups of people have something in common, albeit, non-obvious (in cognition terms, non-salient) to the usual cognitive process of categorisation. Certainly, Gaertner and Dovidio (2000) suggest that the development of a common identity (i.e. the perception that both healthcare and social care really are contained within the larger group of caring for people, albeit in a different setting) could motivate individual group members to perceive individual members of the other group (i.e. out-group members) in a more positive light.

Such a common identity as this could induce and stimulate cooperation with several studies providing support to this assumption which are summarised in a review by (Anastasio, Rust, Gaertner, and Dovidio, 1997). Indeed, McGarty (2006) states that " […] part of the appeal of the idea of hierarchies in social psychology is for providing solutions to the scientific problem of establishing identity (deciding when two things are the same).

The additional dividend that flows from this first idea, though, is the solution to the social problem of *collaboration*.” He goes on to elaborate on this; “[…] If people perceive themselves to be the same as others in some way, then the possibility exists that there is an increased likelihood that they will act in a cooperative manner (or at least not in a conflictual manner).” (2006, p. 33)

This same notion is contained within the common ingroup identity model (Gaertner and Dovidio, 2000) and (Mummendy and Wenzel, 1999) in which higher order *sameness* is a precondition for cooperation or “specific psychological states that predispose people toward *positive social behaviour*. (McGarty, 2006).

However, the fact that hierarchies do not always work the way they ought to according to literature proves rather problematic. Indeed, the fuzzy and non hierarchical nature that the world seems to be consist of is rather obvious when reflected on in the context of intergroup relations.

Furthermore, self-categories are categories that are perceived to apply to the self, therefore, it is difficult, though not impossible to have self-categories that are not known to participants (see chapter 7, study 4, for further detail on Tajfel’s extension of this argument by creating the minimal group paradigm studies).

The most common way to solve the problem which presents itself when dealing with the process of hierarchical categorisation is to consider the two reference groups (in this case HC and SC) to be subsumed within some superordinate group and then attempt to convince members of these respective groups to identify with the sharing of such a superordinate category membership.

Although this approach has its limitations, within the context of this study, this approach will be most appropriate, as generally participants seem to be agreeable to such an over-arching superordinate group (i.e. looking after people) for that category to become psychologically salient and significant to members of the two groups.

It is therefore, not necessary to review additional literature which would cover areas such as ‘opinion-based’ group designs, albeit, that these areas are closely related, however, it is a conscious choice not to broaden the scope of the literature review for this section.

4.3 Study Design

As this is the first section of this dissertation that describes the study design, we have chosen to broaden the scope of this section with the aim for it to serve as a wider introduction to the overall study. Therefore, this section will include details on the overall study methodology and tools used for all of the subsequent studies. Yet, all the following chapters will have a similar lay out and, therefore, will reference specific innovation of research tools used where applicable. It is for this reason that this section will be slightly longer in nature in comparison to the other 'study design' sections.

In order to any social psychological study to have success participants will have to be recruited. As the main objective of this dissertation is to better understand health and social care integration, participants from both sectors would have to take part in this study. Social care participants were recruited from care homes in the North East of England. In the North East there are three main 'Care Alliances', these are; Northumberland Care Alliance, Tyne and Wear Care Alliance, and Durham and Tees Valley Care Alliance. We have worked with these organisations for half a decade and when this research started all three alliances offered assistance.

Therefore, social care participants were employed by care homes who responded to the 'call for help/request to participate' that was advertised and cascaded to care home members of their respective alliance. This has led to four care homes voluntarily participating in this study. These care homes were geographically well distributed with two in the Tyne and Wear area and two in the Durham and Tees Valley area. These care homes provided dates that employees were to be made available to participate in the research and the researcher accommodated these as best as possible.

In contrast, recruiting healthcare participants proved harder than initially anticipated. Recruitment of NHS employees is subject to significant ethical approval and departmental approval for release of staff members to participate.

This has caused major delays as premises and staff time would have to be ‘paid for’ by the researcher’s employing organisation.

In the North East of England there are eight acute care Foundation Trusts. It was decided to approach the largest organisation which is The Newcastle Upon Tyne Hospitals Trust, which employs approximately 13,000 staff in a range of settings (from community to specialist cancer care).

As each NHS organisation has a separate ethical committee, pragmatism dictated that only one organisation would be able to participate in the limited time of the DBA programme.

Therefore, Newcastle upon Tyne Hospitals was considered to provide a good representation of staff working the in National Health Service in the North East of England across a diverse range of healthcare settings.

However, with a large organisation comes a large bureaucracy. Indeed, during initial conversations with the hospital two things became apparent; 1) the practicalities of releasing clinical staff to participate in the research were almost insurmountable, and 2) as an organisation the clinical aspect of research was well established, however, the ability to participate in social science research was limited. The intricacies encountered during this time warrant inclusion in this dissertation, if only for reproducibility and future social science research within a hospital setting.

Initially, service managers were unwilling to release staff to participate unless they were paid to release their staff. The impracticalities associated with this would make this study unviable as was of real concern to the researcher. How does one pay for a 20 minute release of a doctor or a nurse from a ward? This is quite without considering the implication on their willingness to participate freely in this study. Indeed, if volunteers were ‘made’ to participate a whole raft of implications (both ethical, theoretical let alone their responsiveness to questions) would make the study very hard to complete.

After months of negotiation (even room hire would have to be paid for and negotiated on a case by case basis), a eureka moment occurred.

It was the realisation that all new staff had the obligation to attend induction. As Newcastle upon Tyne Hospitals is such a large organisation, it has a weekly induction for new staff which took place on a Tuesday morning (this has subsequently changed to a full week of induction following the recommendations of the Sir Robert Francis report into NHS care). These induction sessions are attended by all newly appointed staff and are compulsory. A two minute slot was requested at the start of these induction days were volunteers to participate were requested from the attendees.

After negotiation with the relevant departments this approach was agreed and every Tuesday morning the researcher would hold a two minute talk to an audience of between 30 and 50 people. Volunteers would be given an information sheet and participation sheet in their induction packs and later on during the break these forms were collected from willing participants.

This approach not only ensured that a good cross section of employees took part in this research, but that all of the concerns raised by department managers/heads about the cost of releasing staff were no longer relevant (as staff had to already be released for their induction as part of starting with the organisation). We suggest that for further social science studies which require active participants to be conducted in a healthcare setting, the approach outlined above is adopted, as it made this part of the research possible.

When participants agreed to voluntarily take part in this study, they are provided with an outline of the study's aims and objectives in the form of a 'participant information sheet'. This sheet has two main aims; firstly, it provides information with regards to the overall objectives of the study to participants. The second aim of this sheet is to achieve informed consent (for further discussion/outline of this please see chapter 3 on Ethics).

The sheet (which is attached in appendix three for reference) refers to the 'activity' that Participants are requested to join as an 'interview', this was deliberately done mainly for the sake of simplicity.

In fact, none of the Participants have challenged the fact that the research activity in which they have participated was not compliant with traditionally associated views of an interview as such.

Following the allocation of a unique reference number, which was to be used for the sole purpose of data analysis; the first section of questions that participants are requested to respond to is demographic data.

They are requested to provide this information using an Apple iPad mini[8] whilst being monitored in real time by the researcher on a Apple MacBook Pro[9]. The rationale for real time monitoring will be set out in the relevant section, however, and briefly, when open ended questions were asked, the monitoring would provide the research with the knowledge of the kinds of responses the participant made during the questions immediately preceding the open ended question.

The first section that participants are confronted with aims to collect demographic data such as, gender, age, income, and educational attainment. Apart from the income question, participants challenged none of the other questions. A minority (n=12 i.e. 19%) though not insignificant requested clarification as to the purpose of the question. This purpose question is an interesting one; all of the demographic questions were embedded in the survey for one single purpose, data analysis.

The main objective behind requesting this demographic data is that all subsequently collected data can be analysed using demographic returns as independent variables to determine correlation between responses to both explicit data and implicit data.

For example, to review whether there is a difference in empathy scores between self-categorised healthcare participants when compared to social care participants or between participants with differing educational attainments etc. Or, are self-categorised healthcare participants more implicitly biased towards social care constructs when compared to social care participants responding implicitly to healthcare constructs?

These inferences could not be drawn if the research design did not include the collection of this demographic data. However, the usefulness of this collection goes beyond the mere demographic data. Insofar that participants are requested to 'self-categorise' in other words, they are asked with which 'category' they most identify with.

This is a *hard* choice, as the study design was such that the categories were pre-populated, and participants do not have any flexibility to change these, which, luckily, none of them tried to do or suggest. Nonetheless, it is, therefore,

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[8] Apple iPad Mini (first generation) 32 GB, black

[9] Apple MacBook Pro fourth generation, mid 2011 13 inch, running Mac OSX 10.09, 32GB RAM, 512GB SSD Encrypted HD.

assumed that these categories are at the same time relevant, on one level, as they create an ‘artificial divide’ between participants, and yet a all participants share a super-ordinate category membership, indeed, they possibly share multiple categories.

For example a self-categorised healthcare (HC) participant and a social care (SC) participant both care for other people professionally and could, therefore, share the category of ‘care-worker’. Even at a more fundamental level, they both would share the super-ordinate category of being human.

However, the saliency of such categories, even though they may exist, varies significantly, and is highly context dependent, hence the design included set categories which participants could chose to identify with.

It is important to note that in no way was any pressure or influence put onto participants, indeed, all of the participants were under the impression that they were not being observed and were merely responding to a survey.

This fact, has more significance which requires further explanation in the context of this dissertation. Throughout all of the individual studies which make up this dissertation, every effort has been made to elicit ‘true’ responses (i.e. to minimise the effect of strategic answers) with the aim to create a true insight into the thoughts and preferences of participants.

However, realistically, these effects cannot be eliminated, however, they can genuinely be reduced, and part of the study design and methodology used in this dissertation was created with the aim to reduce, as far as possible, the factors that lead participants to respond strategically, or not share their true preferences, excepting that there are limitations. Indeed, the explicit/implicit study design used in this dissertation was created to generate true insights into the ‘say and do’ dissonance which so often is associated with large scale change.

Finally, the design for this study, at its most basic, was created to provide readers with an understanding of ‘who participated?’. As such the next section will provide such insight which will aid the subsequent studies as the wide range of data collected in this study will be used to understand the various correlations in terms of the subsequent studies. The fact that social categorisation and self-categorisation underpinned the theoretical foundation of the study should, at this stage, be evident to the reader.

4.4 Study Outcome

In total sixty-three (63) participants took part in the study. Thirty-one (n=31 or 49.2%) self categorised as HC participants and thirty-two (n=32 or 50.8%) as SC participants, which are the categories of main concern in this dissertation.

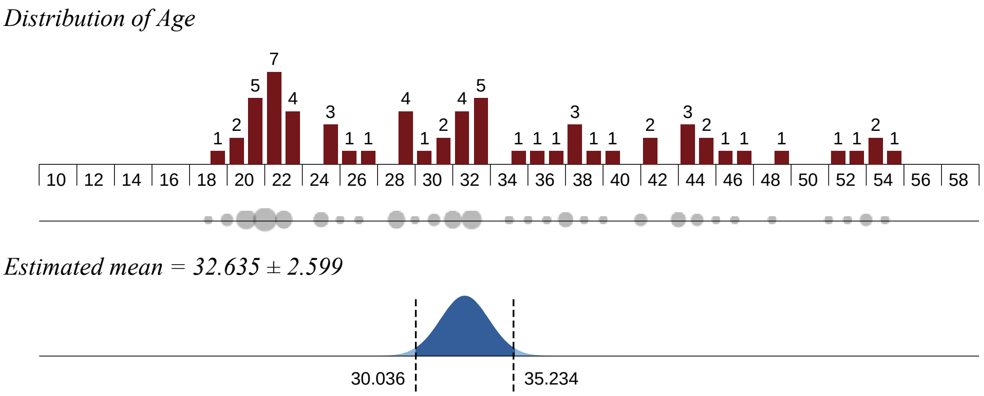
However, a further breakdown of participants will be useful thirty-eight (n=38 or 60.3%) where female with, therefore, twenty-five (n=25 or 39.7%) being male. Table 4-1 provides an overview of the distribution of gender in the sample, and also provides an overview of both the NHS and social care population based on the sample of participants.

	Health and Social Care Gender Distribution				
	Male	Female	Total	Male %	Female %
Social Care	7042	39963	47005	14.98%	85.02%
NHS NE	15334	49009	64343	23.83%	76.17%
Combined Total	22376	88972	111348	20.10%	79.90%
Study Participants	25	38	63	39.68%	60.32%

Table 4-1: Distribution of Gender (NHS North East, Social Care, and Study Participants)

Even though the distribution of the participants does not mirror the wider population is approximately in line with most studies that have carried out research using a similar approach to sampling, namely that of randomised sampling. Generally, the approach to 'recruitment' of participants has been random and self-selecting in nature, especially in the healthcare sector. Which means that the split in gender is still very much evident in the sample, yet not as much as in the wider population.

The age distribution of the sample is shown below for all participants (i.e. health and social care). The average age of participants is 32, and this also reflects in a similar way the wider (reference) population in the North East of England with the average age in healthcare being 34 and in social care being 28.


Distribution of Age

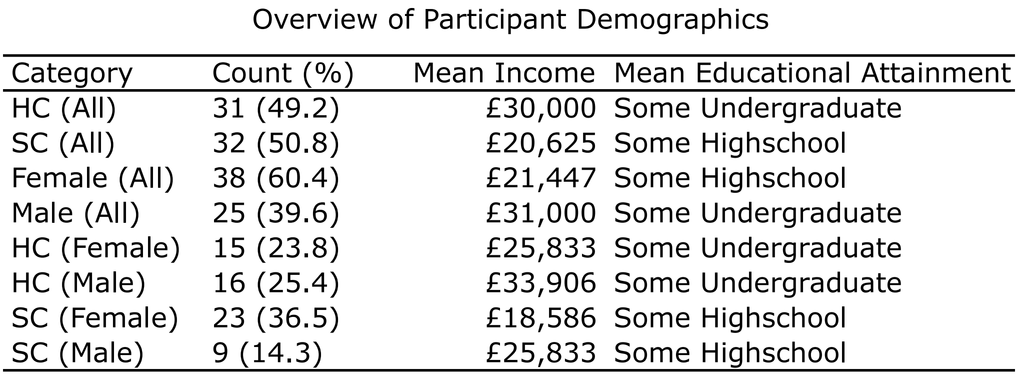
Estimated mean = 32.635 ± 2.599

Figure 4.2: Distribution of Age (Observed Sample)

The mean annual salary for female participants was £21,447 compared to male participants' mean salary of £31,000, accounting for only 69% of male salary. The mean annual salary for female participants employed in the social care sector was £18,586 this compares to £25,833 for males which accounts slightly better at 72% of male income within the social care sector. The mean annual salary for females between the two sectors was the same; £18,586 for SC females, compared to £25,833 for HC females.

As these are mean indicators and with the sample size being relatively small, these figures are interesting yet are a mere statement of fact nothing more, as this data is not central to the overall aim of this dissertation. In addition to these factors, education also provides a valuable insight into both income levels and response rates to subsequent studies.

The mean annual salary for those in healthcare with at least some post graduate education was £42,692 (split male £44,687 / female £39,500). Social care participants with the same educational background were female only and their mean annual salary was £44,166 (however this is based on an extremely low sample of three -3-). In summary, the following table will prove insightful;



Overview of Participant Demographics

Category	Count (%)	Mean Income	Mean Educational Attainment
HC (All)	31 (49.2)	£30,000	Some Undergraduate
SC (All)	32 (50.8)	£20,625	Some Highschool
Female (All)	38 (60.4)	£21,447	Some Highschool
Male (All)	25 (39.6)	£31,000	Some Undergraduate
HC (Female)	15 (23.8)	£25,833	Some Undergraduate
HC (Male)	16 (25.4)	£33,906	Some Undergraduate
SC (Female)	23 (36.5)	£18,586	Some Highschool
SC (Male)	9 (14.3)	£25,833	Some Highschool

Table 4.3: Overview of Participants Demographics

4.5 Discussion

The breakdown of the demographic data of the participants of these studies is relatively straightforward in nature. The most important finding is that women dominate both sectors, and this is also the case in the sample of participants. Overall, it is clear that even though the sample size is relatively small (0.06% of total) is more balanced in nature than of the population as a whole. This will allow for comparisons and inferences to be drawn from the sample of participants.

However, the difference between the demographic characteristics of the sample of participants in this study and the demographic characteristics of the population that they represent will be taken into account when analysing and comparing, and when drawing inferences from the studies which are about to follow in this dissertation.

In addition to the above, it is worth noting that the main criterion applied to the selection of participants was that of the sector in which participants were employed. This was the overriding factor in determining sample size and split between the two groups (i.e. healthcare and social care). The fact that the sample split is balanced between the two sectors is deliberate and will enable comparisons to be drawn between the two constituent participant groups. A lower regard was given to characteristics such as educational attainment, gender and/or age. Whilst these other factors and facets of participants may prove to be influential (and will be controlled for in any subsequent analysis) the main focus of this dissertation, and indeed, the overall study objective, is to determine to what extent the sector category impacts on inter-group behaviour which, therefore, is of paramount importance in the context of this dissertation.

Indeed, further stratification of the data will only be done with the main demographic variables that have been collected, i.e. age, gender, education, etc. In summary, we feel that the sample of participants has provided a reliable set of data which valuable and useful/relevant inferences can be drawn. Yet, even though the sample does not *mirror* the wider population it is intended to represent, we feel confident that not one single factor will be able to skew data interpretations in the subsequent chapters.

Finally in chapter nine comparisons between the findings of this dissertation and the potential impact these may have on the wider population will be taken into account and the slight discrepancies between the sample used and the wider population will be taken into account.

In the following chapters all of the demographic characteristics will be used to provide an overview of the relevant outcomes of the respective experiments.

5

Study Two – Social Dominance

5.1 Introduction

This is the first study in this dissertation which is more experimental in nature. How does one go about asking for opinions from participants about ‘health and social care integration’? As this ‘concept of integration’ is relatively vague and ambiguous. Indeed, in an earlier project we found that people that work in the social care sector really favoured closer collaboration, whereas healthcare colleagues really did not care much about such collaboration. This impression is merely anecdotal in nature, how does one tease out an individual’s preference for collaboration.

In short, we have decided to use the empathy scale from the well-established Social Dominance Orientation scales, to use as a proxy for ‘willingness to collaborate’. Essentially, the assumption made here is; if a participant indicates a higher level of empathy then they are more likely to collaborate with others. It follows from this assumption that those more likely to collaborate are more like to want to integrate. It is this logic that has been applied to the creation of this experiment and we anticipate that this will be a contentious point. We would like to point out that, even though on its own, this may be a precarious assumption to make. However, this experimental study should be seen in light of the wider dissertation and the wider study design context in which it operates.

5.2 Relevant Literature

The main sources which were most influential in shaping our thoughts on this subject were Sidanius and Pratto (1999) and Davis (1980), although other relevant sources have contributed, these are referenced where appropriate. By way of introduction to the relevant literature which underpinned the study design, it is useful to state the underlying assumptions upon which Social Dominance Theory is founded.

In general, Social Dominance Theory is based on three major assumptions[10];

(a) while age- and gender-based hierarchies will tend to exist within all social systems, arbitrary-set systems of social hierarchy will invariably emerge within social systems which produce economic surplus;

(b) most forms of group conflict and oppression (e.g., racism, ethnocentrism, sexism etc.) can be regarded as different manifestations of the basic human predisposition to form group-based social hierarchies; and finally

(c) human social systems are subject to the counterbalancing influences of hierarchy-enhancing (HE) forces, producing and maintaining ever higher levels of group-based social inequality, and hierarchy-attenuating (HA) forces, producing greater levels of groups-based social equality.

Indeed, (Sidanius & Pratto, 1999) go on to provide an extremely helpful overview of Social Dominance Theory;' given the three basic assumptions the body of Social Dominance Theory is concerned with identifying and understanding the specific intrapersonal, interpersonal, intergroup, and institutional mechanisms that produce and maintain group-based social hierarchy and how, in turn, this hierarchy affects these contributing mechanisms.' (p.39)

In board terms, Social Dominance Theory argues that social hierarchy is driven by three 'proximal' processes; 'aggregated individual discrimination, aggregated institutional discrimination, and behavioural asymmetry.

Furthermore, it is proposed that these processes are 'regulated' at least in part, by what is referred to as 'legitimising myths'. (Sidanius & Pratto, 1999) clarify what they mean with 'legitimising myths'; '… [T]he extent to which an individual endorses, desires, and supports a system of group-based social hierarchy or not. We call the generalised orientation toward group-based social hierarchy *social dominance orientation*' (p.39).

This second 'experimental' study was designed to inquire about participants' concern for others. The rationale and justification for incorporating this section is relatively straightforward; it aims to elicit participants' explicit responses toward in-group and out-group members. This is done with the aim of

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[10] As specified by Sidanius and Pratto (1999) p. 38

gathering data that can be compared to the implicit data collected in the final study of this dissertation. Analysing this data in combination with implicit data from the same participants will provide a richer analysis than merely by itself.

The actual scales used in this study are taken from (Davis, 1980) who wrote; ‘For over 200 years, the notion of responsivity of the experience of another has been discussed by social theorists, and from the beginning the multidimensional nature of this phenomenon has been recognised.’

Indeed, (Smith, 1759) in (Davis, 1980) made the initial differentiation between actively experiencing empathy and intellectually pondering empathy; ‘instinctive sympathy (or empathy), which is described as a quick, involuntary, seemingly emotional reaction to the experience of others.’ This is in contrast to ‘[…] intellectualised sympathy, or the ability to recognise the emotional experiences of others without any vicarious experiencing of that the state others are in.’

Furthermore, (Davis, 1983) goes on to state that instruments used to elicit empathy should; ‘provide separate assessments of

1) the cognitive, perspective taking capabilities or tendencies of the individual, and;

2) the emotional reactivity of such individuals.’ He argues that only by separately measuring such characteristics that ‘their individual effects on behaviour can be evaluated’ (Davis, 1980). The scales included in this second section of study one are a multidimensional individual difference measure of empathy. Following recommendations from literature, two considerations have guided their inclusion in this study;

1) that it is easily incorporated within the overall study and, therefore, simple to administer via the tool chosen, and

2) that the design enables the capture of both individual variations of cognitive and perspective taking tendencies separately.

In effect, according to Pratto, Sidanius and Stallworth; ‘social dominance orientation is the degree to which people oppose equality and believe that society should be hierarchically structured, with some groups having higher status than others (Pratto, Sidanius, Malle, Stallworth, & Malle, 1994). A significant number of studies suggest that people with a higher score on Social Dominance Orientation scales are more prejudiced, sexist and racist. (e.g. Altemeyer 1998;

Duckitt 2001; Duckitt 2006. Yet, even though Social Dominance Orientation has been shown to be effective in reporting explicit prejudice and empathy there is no evidence that it can predict implicit behaviours such as prejudice and discrimination. Indeed, the converse is true as well; the lower people score on Social Dominance Orientation scales the less prejudice, sexist and racist they report to be.

It is this ‘upside-down’ reasoning that has questioned whether the claim holds ‘the other way around’ and this has led to construct a customised Implicit Association Test to examine whether this claim of Social Dominance Orientation holds when subjecting the same participants to both the empathy and perspective taking elements of the Social Dominance Orientation scales after which they are required to complete an Implicit Association Test.

In their original proposals and theory creation, Sidanius and Pratto (see; Pratto et al., 1994; Sidanius & Pratto, 2001) suggested that the personality dimension most predictive of Social Dominance Orientation was empathy, or concern for the welfare of others (Pratto et al., 1994; Sidanius & Pratto, 1996; see also Pratto, 1996; Hodson, Hogg, & MacInnis, 2009). Since this original suggestion, a number of survey research has indicated support for this theorised relationship (e.g., Bäckström & Björklund, 2007; Duriez & Soenens, 2006; McFarland, 2010; Sibley & Duckitt, 2010).

Moreover, evidence of the relationship between Social Dominance Orientation and empathy has been found even at the neural level. Sidanius et. al provide examples from “Chiao, Mathur, Harada, & Lipke (2009) who found that Social Dominance Orientation is strongly associated with neural activity within brain regions associated “with the ability to both share and feel concern for other people’s emotional welfare” (Chiao et al., 2009, p.175) (in Sidanius 2015, p.6).

These researchers found strong correlations between Social Dominance Orientation scores, on the one hand, and neural activity in the left anterior insula and anterior cingulate cortices, on the other ($r = -.80$, *and* $r = -.81$, respectively). Both of these brain regions are associated with affective components of empathic experience. (2015, p.6) Similarly, work by Cheon and colleagues suggests that Social Dominance Orientation is associated with neural reactivity within the left temporo-parietal junction, a brain region typically associated with the relative concern for others (in particular, the welfare of ingroup versus outgroup members; Cheon et al., 2011). However, in spite of the growing evidence of a significant association between Social Dominance Orientation and empathy, there is still no agreement as to the *causal* structure of this association.

In line with the theoretical expectations of Social Dominance Theory (Sidanius & Pratto, 1999), there is evidence consistent with the notion that the empathy trait is one source, albeit a significant one, of Social Dominance Orientation. For example, using structural equation analysis of data from Flemish- Belgian adolescents, Duriez and Soenens (2006) found results consistent with the idea that trait empathy appears to drive Social Dominance Orientation rather than the reverse.

Structural equation modelling carried out by Bäckström and Björklund (2007) led to the same conclusions concerning the causal effects of empathy on Social Dominance Orientation, rather than the reverse.

In contrast, some studies have found evidence which is consistent with the view that Social Dominance Orientation does have effects upon a broad array of trait-relevant psychological observations, including empathy. For example, McFarland (2010) performed structural equation modelling using student and adult samples and found support for the view that Social Dominance Orientation predicted the personality trait of empathy rather than the reverse.

One factor limiting the deduction we can make from the structural equation modelling of Social Dominance Orientation and empathy carried out by these three research teams (i.e., Björklund, 2007; Duriez & Soenens, 2006; McFarland, 2010) is the fact that all of these studies employed cross-sectional data, (Sidanius et al., 2015).

There is general agreement that the certainty with which one can draw causal conclusions using cross-sectional data is at best variable. In order to be able to draw more convincing causal conclusions when using non-experimental survey data, it is necessary to employ other methodological approaches.

While the some scholars unequivocally discard the very notion of a causal effect of Social Dominance Orientation upon important personality variables such as empathy, proponents of Social Dominance Theory are generally open to this possibility, which is perhaps not surprising. Because Social Dominance Orientation is theorized to condition such a fundamental dimension of human social life as the overall degree of group-based hierarchy. It should not be surprising that it has been found to correlate with a wide range of socially relevant attitudes and behaviours.

It is worth noting that the concept and underpinning assumptions of Social Dominance Orientation as have been reviewed in this section so far has mainly focused on the reviews of proponents of the theory. However, these views are not uncontested.

In particular, opponents of the theory have gone so far as to question its very significance as a generalised trait in its own right (see e.g. Lehmiller & Schmitt, 2007; Schmitt, Branscombe, & Kappen, 2003; Turner & Reynolds, 2003). Instead of positing it as a stable trait that predicts social psychological variables over time, these researchers claim that it is a "mere effect" of prior intergroup attitudes such as racism or sexism (Schmitt et al., 2003).

That is, according to these researchers, rather than representing a general preference for group-based hierarchy across social contexts, Social Dominance Orientation represents little more than an epiphenomenon, with participants' answers on the Social Dominance Orientation scale simply representing their prior attitudes towards whatever particular groups they had in mind at the time. Although there is recent longitudinal data which refutes this view (i.e., Kteily, Sidanius, & Levin, 2011), it remains a topic of debate among intergroup relations theorists.

5.3 Study Design

The social dominance orientation (Social Dominance Orientation) concept is central to this study where Social Dominance Orientation scales where used to infer participants' tendency to support the concept of 'integration' between healthcare and social care services by way of measuring their empathy scores. (Mehrabian & Epstein, 1972) developed the emotional empathy scale that was adapted for this study. The scales used in this study were subject to an initial factor analysis by (Davis, 1980) and he reported that the Jöreskog Factor Analysis; oblique rotation; delta = 0) which revealed four major factors; fantasy items, perspective-taking items; empathic concern items; and personal distress items. For this study only items from the perspective-taking scales and empathic concern scales were used. The rationale for this is rather simple in nature; both these sets of items relate directly to in-group and out-group behavioural trends, bias and prejudice creation. The other two were not included, as they do seem to focus in on introspection and individual behaviour rather than social behaviour, therefore, items from these scales were excluded from the survey.

Items from the two subscales (empathic concern and perspective taking) were randomly ordered to produce a final item (n=23) version of empathy measure. Participants were requested to respond to each item on a five point scale which was anchored by 0 (does not describe me well) to 4 (describes me very well). The Participants (or participants) in this part of the study are described in section 8.3.2. Participants (Ps) were 63; split between employees in healthcare (n=31) and those employed in social care (n=32) all Ps were employed in the North East of England. Indeed, all healthcare Ps were employed by The Newcastle upon Tyne Hospitals NHS Foundation Trust and all social care Ps were employed by four different employers in two different settings (n=22 care home n=10 other (non-direct care providing employers). All Ps were assigned to complete both a high reward and low reward scenario of the questions, which were randomly listed on a social dominance orientation empathy scale.

5.4 Study Outcome

5.4.1 Data Interpretation

A summary of the results of experiment two is shown in table 5.1 below. In order to gain insight into respondents, a t-test was performed with the independent variable chosen as ‘sector’ (i.e. healthcare/social care or HC/SC) to understand whether there are statistically significant differences in responses to the empathy scores between healthcare and social care participants.

		All (n=63)	Healthcare Group (n=31)		Social Care Group (n=32)		*t-Test* *
	Measure	*M*	*M*	*SD*	*M*	*SD*	*p*
1	Empathy (+)	2.667	3.032	0.292	2.312	0.320	0.002
2	Empathy (-)	2.206	2.355	0.385	2.062	0.399	*ns*
3	Empathy (+) Action	2.889	3.290	0.271	2.500	0.275	< 0.001
4	Empathy (-)	2.079	1.935	0.313	2.219	0.339	*ns*
5	Empathy (-) Medium	2.016	1.806	0.320	2.219	0.363	0.088
6	Empathy (+) High	2.571	3.065	0.299	2.094	0.335	< 0.001
7	Empathy Interaction (W)	2.413	2.742	0.211	2.094	0.413	0.006
8	Empathy Interaction (LM)	2.651	3.290	0.254	2.031	0.349	< 0.001
9	Empathy Interaction (LA)	2.556	3.290	0.236	1.844	0.344	< 0.001
10	Empathy Interaction (LA)	2.206	2.194	0.275	2.219	0.407	*ns*
11	Empathy (+) High Action	2.889	3.258	0.231	2.531	0.352	< 0.001
12	Empathy (+) High	2.778	2.774	0.263	2.781	0.386	*ns*
13	Empathy (+) High	2.794	2.806	0.306	2.781	0.286	*ns*
14	Cultural Elitism Class 1	2.000	1.581	0.338	2.406	0.387	0.002
15	Cultural Elitism Capability 1	2.476	2.839	0.343	2.125	0.386	0.007
16	Cultural Elitism Capability 2	2.143	2.258	0.299	2.031	0.310	*ns*
17	Cultural Elitism Class 2	2.667	2.710	0.344	2.625	0.327	*ns*
18	Cultural Elitism Capability 3	2.333	2.129	0.351	2.531	0.259	*ns*
19	Empathy Interaction (M)	2.873	3.258	0.211	2.500	0.439	0.003
20	Empathy Interaction (LSh)	2.619	2.968	0.241	2.281	0.391	0.004
21	Empathy Interaction (FSh)	2.810	3.452	0.282	2.188	0.348	< 0.001
22	Patient Focus 1	2.556	2.613	0.226	2.500	0.333	*ns*
23	Patient Focus 2	2.825	3.194	0.334	2.469	0.317	0.002
24	Proud of Job	2.873	3.323	0.274	2.438	0.316	< 0.001

* t-Test is performed to analyse statistical difference in response between healthcare and social care participants

In total fifteen out of twenty-four (62.5%) measures indicated a statistically significant difference between HC and SC participants. In most cases where there is a statistically significant *difference* in the way HC participants responded when compared to their SC counter-parts. When these responses are significantly different HC participants tend to indicate higher levels of empathy on measures 1 to 6 (block one) and 7 to 10 (block two). In the third block of questions, the only significant finding is measure 11 which indicates a strong willingness to take positive empathetic action to help others, which HC participants’ responses indicate significantly higher inclination to reach out to those in need. However, measures 12 and 13 (which remove the need to take direct action) SC and HC responses are not significantly different. Block four measures participants' tendency/preference to cultural elitism, and was viewed as controversial by most participants (as can be evidenced by the verbal reaction to these questions[11]). The inclusion of these scales was done deliberately to provoke a reaction to the concept of 'equality'.

It is assumed here that responses to these questions provide an indication of a participant's attitude toward both 'equality in society' and a 'willingness to collaborate'. HC participants show a lower score to measure 14 (cultural class statement 'working class people cannot appreciate art') which indicates that a greater preference toward equality in society compared to SC responses. Conversely, SC participants tend to agree more with this statement, which has interesting implications with reference to the self-categorisation and inter-group dynamic studies, especially when taken into the context of 'out-group' favouritism which is also indicated in chapter 7 (study four), where this concept and outcome will be discussed in more detail. This finding seems to corroborate the findings from the other studies.

For now, however, it is important to note that the same trend is indicated in the several different studies conducted as part of the overall study. [12] In contrast, the other significant finding in this block is the fact that HC responses indicate a higher level of agreement on measure 15 ('The ideal world is run by those most capable') compared to SC responses. However, when social interaction is introduced to this proposition in measure 16 ('Someone who is very good at their job but treats other people poorly should still get promoted') both HC and SC responses are similar, with HC responses significantly lower when compared to M15=2.839 with M16=2.258 with the only difference being the social factor between the two questions.

Lastly, block five introduces participants to the final set of Social Dominance Orientation empathy scales. HC responses in this section tend to confirm earlier findings, i.e. higher levels of empathy (measures 19-21) especially when the question indicates that action is required on behalf of the

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[11] https://dataverse.harvard.edu/dataverse/bmgroen all data is available online, including all audio/visual recordings of the interviews.

[12] In order to aid readers, where results do corroborate results from elsewhere in this dissertation, it will be briefly highlighted, the discussion chapter (9) will provide an overview as a whole.

participant, these results show that HC participants are more likely to take positive action within the context of helping other people.

The last two measures (patient focus) statement 22 (‘Often when dealing with patients/service users directly I know what is best for them’) HC and SC responses are not statistically different (HC=2.613, SC=2.500, M=2.556) indicating that all participants tend to indicate a slight paternalistic view of patient care. Measure 23 indicates that HC participants tend to take the ‘human side’ more into account when they do their job, which could be seen as a proxy for a more patient centred care model in healthcare over social care. However, this single measure should be understood within the context of this study, and ought not to be over-generalised, albeit, that this finding is thought-provoking in and of itself.

The last measure (23) which was included in the survey was added to provide insight into ‘job satisfaction’. Here HC and SC responses are significantly different in the sense that job satisfaction is markedly higher amongst HC responses when compared to SC responses. Indeed, on a four point scale the mean score is 2.873 (across all participants) with HC participants indicating a mean score of 3.323 (SD 0.274) compared to SC participants that indicated a mean score of 2.438 (SD 0.316). It is clear that SC participants indicate to have a much lower job satisfaction when compared to HC participants.

Overall, the following conclusions can be inferred from the data. In general, HC participants indicate a higher level of empathy, both when interaction is required and when it is not, and a lower level of cultural elitism. Nonetheless, participants from both sectors are approximately as patient focussed, value equality in similar ways and show a similar willingness to help those that are in need of help.

5.4.2 Detailed Review of Scores

Table 5.4.2.1 below provides a complete overview of responses to each of the survey questions posed during this experiment. A few interesting ‘idiosyncrasies’ in the responses warrant further exploration.

On the empathy scales, out of seven questions three of these questions yielded a statistically significant dissimilar response (i.e. questions 3, 6, and 7) with HC participants responding significantly higher on all occasions (HC mean response of 3.032 compared to SC mean response 2.229). From this specific result one can infer that HC participants indicated a higher level of empathy when compared to responses by SC participants.

On the empathic concern scales, HC participants’ mean score was 3.032 this compares to a mean score of 2.553 for SC participants. This reveals that generally HC participants indicate a higher level of empathy.

The key point here is that we have taken empathy as a proxy indicator for ‘willingness to collaborate’. Therefore this indicator provides the suggestion that HC participants are more willing to collaborate with others, and, in particular reference to this dissertation, they indicate that they are more likely to want to integrate services between health and social care services.

On the perspective taking scales, the responses are very similar, with both HC and SC participants indicating a moderate level of perspective taking. Yet again, HC participants returned a higher mean return when compared to SC participants (HC mean response; 2.752, SC mean response; 2.385).

On the SDO (cultural elitism and meritocracy) scales, both sets of participants returned a similar mean score (HC; 2.303; SC; 2.343). The returns on these scales were different for cultural elitism which SC participants seem to endorse more than HC participants. Conversely, HC participants seem to put more emphasis on meritocracy (i.e. power is more of a function of merit rather than personality). Yet, meritocracy is severely limited when explicitly associated with negative the social construct of treating someone badly. This indicates that, although meritocracy plays a larger role on HC than it does in social care, it is not rated as highly as empathic concerns shown by and to others.

The patient focus scales were designed to capture two key items. The first is associated with the level of paternalistic patient centred care, whilst the second is concerned with the human aspect of the role participants play in caring for people. HC participants' responses indicate a significantly higher level of agreement on the paternalistic scale (i.e. 3.194; SC 2.469). This does not necessarily mean that SC participants indicate a higher level of dependency, they may simply reason that the person they are looking after knows what is best for them, rather than the other way around.

Lastly, the job satisfaction scale was included to elude to the different levels of job 'proudness' in the respective sectors. Interestingly, there is a significant variance in the way HC and SC participants responded to this question. With HC participants indicating a much higher level of agreement than SC participants (i.e. HC; 3.323; SC; 2.328). This may have several reasons, not least the level of compensation and the working hours associated with each of the sectors, which may significantly impact on this factor.

Table 5.2.2 (overleaf) shows a detailed summary of all the responses received during this study.

	Variable	(N)	Disagree (1)	Slightly Disagree (2)	Slightly Agree (3)	Agree (4)	Est. Mean* (ALL)	Mean (HC)	Mean (SC)	t-Test (p)
Empathic Concern Scales	I often have concerned feelings for a person when he/she is less fortunate than me.	63	3 4.76%	19 30.16%	29 46.03%	12 19.05%	2.794 (±0.203)	2.806 (±0.306)	2.782 (±0.286)	0.902
	Sometimes I don't feel very sorry for a person when he/she is having problems.	63	23 36.51%	21 33.33%	14 22.22%	5 7.94%	3.016 (±0.241)	3.194 (±0.320)	2.844 (±0.368)	0.149
	When I see a person being taken advantage of, I feel kind of protective towards him/her.	63	2 3.17%	20 31.75%	24 38.10%	17 26.98%	2.889 (±0.213)	3.290 (±0.271)	2.500 (±0.275)	<0.001**
	Another person's misfortunes do not usually disturb me a great deal.	63	20 31.75%	21 33.33%	19 30.16%	3 4.76%	2.921 (±0.228)	3.065 (±0.313)	2.781 (±0.339)	0.216
	When I see a person being treated unfairly, I sometimes don't feel very much pity for him/her.	63	23 36.51%	21 33.33%	14 22.22%	5 7.94%	2.984 (±0.241)	3.194 (±0.320)	2.781 (±0.363)	0.088
	I am often quite touched by things I see happen to other people.	63	11 17.46%	17 26.98%	23 36.51%	12 19.05%	2.571 (±0.251)	3.065 (±0.299)	2.094 (±0.335)	<0.001**
	Generally during interactions with other people, I would describe myself as a pretty soft-hearted person.	63	13 20.63%	19 30.16%	23 36.51%	8 12.70%	2.413 (±0.242)	2.742 (±0.211)	2.094 (±0.413)	0.006**
Perspective Taking Scales	I try to look at the other side of a disagreement before I make a decision.	63	12 19.05%	13 20.63%	23 36.51%	15 23.81%	2.651 (±0.264)	3.290 (±0.254)	2.031 (±0.349)	<0.001**
	I sometimes try to understand other people better by imagining how things look from his/her perspective.	63	17 26.98%	22 34.92%	18 28.57%	6 9.52%	2.206 (±0.240)	2.194 (±0.275)	2.219 (±0.407)	0.917
Inverted Perspective Taking Scale	If I'm sure I'm right about something, I don't waste much time listening to other people's arguments.	63	17 26.98%	22 34.92%	18 28.57%	6 9.52%	2.841 (±0.244)	2.774 (±0.280)	2.906 (±0.413)	0.593
Perspective Taking Scales	In relationships with other people, I believe that there are two sides to every question and try to look at them both.	63	5 7.94%	14 22.22%	27 42.86%	17 26.98%	2.889 (±0.227)	3.258 (±0.231)	2.531 (±0.354)	<0.001**
	When I'm upset with another person, I usually try to "put myself in his/her shoes" for a while.	63	6 9.52%	16 25.40%	27 42.86%	14 22.22%	2.778 (±0.228)	2.774 (±0.263)	2.781 (±0.386)	0.967
	Before criticising another person, I try to imagine how I would feel if I were in his/her place.	63	3 4.76%	19 30.16%	29 46.03%	12 19.05%	2.794 (±0.203)	2.806 (±0.306)	2.781 (±0.286)	0.902
Social Dominance Orientation Scales (Cultural Elitism and Meritocracy)	Working class people cannot appreciate art and music	63	29 46.03%	12 19.05%	15 23.81%	7 11.11%	2.000 (±0.271)	1.581 (±0.338)	2.406 (±0.387)	0.002**
	The ideal world is run by those most capable	63	14 22.22%	18 28.57%	18 28.57%	13 20.63%	2.476 (±0.267)	2.839 (±0.343)	2.125 (±0.386)	0.007**
	Someone who is very good at their job but treats other people poorly should still get promoted	63	14 22.22%	30 47.62%	15 23.81%	4 6.35%	2.143 (±0.211)	2.258 (±0.299)	2.031 (±0.310)	0.287
	Great art is not for everyone	63	8 12.70%	16 25.40%	28 44.44%	11 17.46%	2.667 (±0.231)	2.710 (±0.344)	2.625 (±0.327)	0.717
	Qualifications not personality should determine who does well in our society	63	12 19.05%	22 34.92%	25 39.68%	4 6.35%	2.333 (±0.217)	2.129 (±0.351)	2.531 (±0.259)	0.063
Perspective Taking Scales	When at work I tend to consider the best course of action by asking colleagues and other staff for their opinion	63	8 12.70%	13 20.63%	21 33.33%	21 33.33%	2.873 (±0.258)	3.258 (±0.211)	2.500 (±0.439)	0.003**
	In situations where several courses of action are possible, I tend to be the main decision maker within a group of people	63	9 14.29%	18 28.57%	24 38.10%	12 19.05%	2.619 (±0.241)	2.968 (±0.241)	2.281 (±0.391)	0.004**
	When someone suggests a course of action I had not thought of I am willing to consider this openly	63	10 15.87%	13 20.63%	19 30.16%	21 33.33%	2.810 (±0.271)	3.452 (±0.282)	2.188 (±0.348)	<0.001**
Patient Focus (Paternalistic Scale and Empathy Scale)	Often when dealing with patients/service users directly I know what is best for them	63	7 11.11%	14 22.22%	25 39.68%	17 26.98%	2.825 (±0.242)	3.194 (±0.334)	2.469 (±0.317)	0.002**
	I always take the account of the human aspect of my job	63	7 11.11%	14 22.22%	25 39.68%	17 26.98%	2.825 (±0.242)	3.194 (±0.334)	2.469 (±0.317)	0.002**
Job Satisfaction	I am proud of the job I do everyday	63	3 4.76%	22 34.92%	18 28.57%	20 31.75%	2.873 (±0.233)	3.323 (±0.274)	2.438 (±0.316)	<0.001**

* At 95% Confidence Level Interval
** Statistically Significant Difference in Response at 95% Confidence Level Interval
For Neagative Statements on the Empathy Scales Inverted Scores were Calculated

5.5 Discussion

The data gathered with this study has shown some interesting findings which fall, broadly, into two categories; a) HC participants tend to report higher levels of empathy when compared to SC participants, and b) SC responses tend to be lower, in general, on all empathy scales, especially on those scales which require action on behalf of the participants.

This seems to indicate that HC participants are more likely to take positive empathic action towards others, especially when compared to the SC responses received. A summary of the key findings of this study is worthwhile;

- HC responses to the empathy scales indicate a significantly higher level of empathy when compared to SC responses;
- SC responses indicate a significantly lower level of empathy, especially when action on behalf of the participant is required;
- HC/SC responses are similar to cultural elitism, with the exception that the HC responses show a greater level of agreement with regards to competency factors being more important than empathy factors when leading others.

Given the above findings, the main conclusion from this study is that HC participants indicate a higher level of empathy, and put a greater emphasis on social equality. Within the context of this overall study, the important inference to be derived from this finding is that the HC participants explicitly indicate that they are more willing to collaborate with others when compared to SC participants.

6

Study Three – Status Attribution

6.1 Introduction

For all the literature that is available in social psychology, few are dedicated to the process of social status attribution. However, such a process may have significant impact on the way groups of people interact. With very limited amount of *actual* literature directly related to this process, the quest to find an study that could *measure* (to some degree) the underlying process of status attribution was even more constrained. Having searched the literature extensively, we have could not identify any publications that were specific in the way theory was derived.

As a result, we have designed a study which utilises both a quantitative interactive method and a qualitative method in rapid succession. First we request participants to complete a ranking exercise where ten (10) job titles need to be ranked in order from 1 (highest) to 10 (lowest). This is followed by a open-ended question; "Can you talk me through that last exercise, why did you *rank people* in the way that you did?"

This chapter will outline the relevant literature and the process of designing this study, before it will analyse the results of the study. The data that came out of this study are both quantitative and qualitative in nature, hence the discussion section is divided into three sections, quantitative analysis, qualitative analysis, and mixed analysis.

6.2 Relevant Literature

According to Sidanius, "… [i]n most societies, it is the social distinctions among *and between* people that are the most important for organising social relations are also status-valued distinctions (Sidanius, 1993 italics added). If this is to be true it implies that in any given society there are widely shared beliefs held by both individuals and groups of individuals. These individuals, in turn, belong to a distinct category (e.g. working women) as such some categories are perceived as more socially worthy and capable than those that belong to another distinct, yet related category (e.g. stay-at-home mothers) (Berger et al., 1977).

Such status beliefs both affirm the significance of a given categorical distinction for social relations in society and justify an inequality in outcomes between the categories by reference to differences in assigned competencies and social worth according to (Ridgeway, 2001).

As a result, status beliefs are a pervasive and fundamental form of legitimising ideology in society. They are, in fact, “cultural schemas for organising interdependent, cooperative social relations across boundaries of social difference in a society - but on unequal terms” (Ridgeway, 2001).

Status beliefs have some distinctive characteristics that are worth noting at the start of this chapter. As social identity research has shown, simply making a distinction between people is enough to foster beliefs and actions that favour the group you belong to (see Brewer and Kramer, 1985, Dovidio and Gaertner, 1993, Messick and Mackie, 1989 for examples)

In contrast to this, status beliefs differ from own-group favouritism effects in that they are consensual. Individuals in all distinct categories within a society tend to agree, or at the very least concede, that one category is considered to be more 'appealing' and members of such a category tend to be seen as more capable than those that are categorised in less attractive category. See Jost and Banaji, (1994) for a detailed discussion.

Consequently, individuals' beliefs in devalued categories tend to be fundamental in the way status beliefs are created and maintained in any given society. This is because, individuals that belong to ‘devalued categories’ (i.e. bin-men) have to overcome their tendency to prefer their own group and come to believe that, as a matter of social reality, “the other group is more socially respected and competent than their group” (Spears et al., 2001).

This implies that; status beliefs are beliefs about what the majority of people within a given society believe to be true. The appearance of consensuality is one of the factors that allow status beliefs to become legitimate ideologies.

This apparent consent between groups and individuals allows the evolution of these beliefs to become socially valid, and this “validity applies to all individuals who encounter these beliefs.” (Zeldtich, 2001). Social validity is the collective aspect of legitimacy, it is the sense that others present accept something and will orient their behaviour towards it. The apparent social validity of status beliefs objectifies these beliefs for people who encounter them, making them “seem like social facts that must be dealt with whether the person likes it or not.” (Berger and Luckmann, 1967). It is the appearance of consensuality, and the social validity that this engenders, “that empowers status beliefs to constrain people's behaviour” according to Ridgeway (2001).

In addition to this, status beliefs have distinctive content, as they tend to ascribe greater competence and social worth to people in one social category compared to another as briefly mentioned above. Research has demonstrated, however, that status beliefs also characteristically assign some lesser-valued, positive characteristics to the categorical group that is status dis-advantaged see for example (Conway et al., 1996), and (Fiske, 1998). In the main though, lower status groups are seen as less competent and less respected, however, these groups tend to be more congenial and sociable than higher status groups this inference is an example of what Glick and Fiske (2001) refer to as ‘ambivalent prejudices’.

The characteristically ambivalent content of status beliefs adds to their power to legitimise inequality between social groups. Ridgeway (2001) states that; ‘In contrast to a purely coercive power relation, status beliefs bind the disadvantaged group to the collective reality not only by persuading them to accept that they are considered less competent, but also by convincing them to accept that they are distinctively better in other, less important ways. The insidious power of status beliefs as cultural schemas for inequality is that they simultaneously include the disadvantaged as people of some value and justify their disadvantaged position in society.’ (p.83)

One of the preconditions for the development of status beliefs is structural inequality; this is an inequality in the distribution of a valued resource, for example, wealth, or knowledge, which bring social power. Another precondition for status beliefs to emerge, according to Jackman, is that “groups need to be tied to each other in terms of cooperative interdependence” (Jackman, 1994). Indeed, unless individuals from structurally unequal groups must regularly cooperate with one another to achieve valued ends, Jackman argues that; “structurally disadvantaged individuals are likely to avoid contact with those who have resource and power advantages over them" (1994).

Furthermore, without the constraints placed on the experience of their own group compared to the other group created by their cooperative interdependence, "members of structurally disadvantaged groups are likely to resist consensual status beliefs that favour the other group over their own". (Ridgeway, 2001) see also Spears et al. (2001).

Thus, without inter-group contact, status beliefs that are consensually shared by groups are unlikely to take hold widely among groups of people or populations. "The importance of inter-group contact, Ridgeway (2001) argues, "makes cooperative, goal-oriented interaction between people of different social groups a prime site for the emergence and spread of status beliefs".

Indeed both (Jackman, 1994) and (Glick and Fiske, 2001) further observe that dominant groups in an interdependent structural inequality have an interest in promoting status beliefs to justify their own superiority and keep subdominant groups peacefully within their subordinate place, this concept is captured well with the phrase 'incompetent but likeable', which may prove especially useful to understand within the context of this study. As the social status that is enjoyed by healthcare professionals, is of higher standing than those professionals that work in social care.

Whilst many theorists within the field of social psychology have attempted to outline some of the pre-conditions of what makes up status beliefs and the interest-based motives that go with these; "the actual mechanisms or social processes by which status beliefs develop" remain to be specified according to (Ridgeway, 2001, p.31). Status construction theory focuses on encounters "where individuals from different social categories interact with regards to a shared goals as crucial contexts for the development of status beliefs" (Ridgeway and Erickson, 1996).

According to Berger et al. (1977) a "significant number of research studies have demonstrated that established status beliefs are powerfully at play in cooperative, goal-oriented interaction. This interaction organises behavioural hierarchies of influence and esteem between people from status advantaged and disadvantaged groups". See also Webster and Foschi (1988) for further discussion.

It may also be reasonable to expect that such interaction also has the power to construct, change, and spread status beliefs. Indeed Ridgeway argues that “the power of interaction to transform structural inequalities into legitimising status beliefs lies in interaction's ability to create local realities for people where a distinguishing attribute appears already to be consensually status valued.” (2001, p.38) She goes on to state that; “this appearance of local consensus in interaction creates the development of an actual broader consensus about the status beliefs” (p.39).

For all the literature that is available on status beliefs, there is a very limited amount of study designs available on how social status is ‘attributed’. However, (Ridgeway, Boyle, Kuipers, & Robinson, 1998) summarise the theory of ‘status construction’ as follows; “status construction theory has a macro-micro-macro form that specifies how structural characteristics of the population (1) constrain who meets whom, (2) what happens in those encounters, and (3) the diffusion processes these encounters jointly create that can result in consensual status beliefs.” (1998, p. 332).

(Ridgeway, 1998) and (Ridgeway, 2001 in Jost and Major (2001), reported an experimental design using “doubly dissimilar interactions” which are defined as interaction which are goal-oriented encounters between actors who differ not only in nominal characteristic, but also in resources (Ridgeway, 1998, p. 334). Ridgeway (1998) uses a concept of (Weber, 1968) to explain this concept; “A correlation develops between an inequality in material resources and a cognitively recognised, but unordered (i.e. nominal), distinction among the population [*or within a society, or within organisations*]. Suppose 60 percent of As are resource-rich while only 40 percent of Bs are. The nominal characteristic (i.e. the A-B distinction) is assumed to be a relatively salient attribute in that people [*within society*] easily perceive one another to differ on it, but it has not yet acquired consensual status value.” (1998, p. 332, italics added).

Usually, people within a society make assumptions about what other people think is the social merit and general proficiency of a specific group of people (in Ridgeway’s example ‘As’ and ‘Bs’) based on a sample of experiences that people have when interacting with individuals that represent or are a part of these specific groups. The more interaction takes place the firmer such emergent status beliefs are reinforced, to eventually become accepted by society as being ‘true’.

Indeed, ‘expectation states theory’, which is closely aligned to and used by Ridgeway to develop her ‘status construction theory’, states that the perception of how individuals value, in terms of competency and worthiness, others can be predicted. Expectation states theory was first developed by (Berger, Cohen, & Zeldtich, 1972) and was established to examine how social hierarchies (and therefore associated status) in small groups (dyads) are formed. Indeed, there are four key assumptions which underpin (Berger et al., 1972) theory;

(1) Activation, (2) Burden of proof, (3) Assignment, and (4) Basic expectation assumption. Berger and his colleagues theorise that these assumptions are (generally) sequential in nature and are a prerequisite for social hierarchies (and therefore by implication social status) to become solidified and generally accepted within a given social context. As with the further iteration by Ridgeway, these assumptions are all based within the contextual research method using ‘goal-oriented’ encounters, which are relatively easy to measure and research.

Yet, existentially, status is attributed to others, even in the absence of such encounters. Indeed, most people hold status beliefs about others they have never encountered them. The study as this part of the dissertation aims to address this ‘gap’ in theory by ‘measuring’ the process of *status attribution* quite outside of a direct encounter between the participants in the study and those that they are required to *attribute* status to.

Therefore the subject of this specific study is status attribution, i.e. how status is attributed to particular groups of people, rather than the status beliefs that people hold on others and themselves. The key difference here is the process, as outlined above a plethora of studies have been undertaken to better understand the status beliefs that people hold, and how these believes are derived from social encounters (such as social reinforcement etc.). Closely related, yet not the same, we argue that the process of status attribution could provide insight on an individual’s ability to *attribute* status to sections of society of which such individuals have no experience of interaction nor are placed in an (artificial) encounter situation.

The next section will draw out this distinction and outline the study design that would begin to provide this insight into the process of status attribution and the extent to which this impacts on status beliefs.

6.3 Study Design

For all the theorising around the topic of status beliefs, relatively little has been published with regards to the research methods used to derive a (sub)theory of status *attribution*. Indeed, some of the studies quoted in the literature review are somewhat obscure on providing insight into how conclusions where drawn and with what specific kind of research methods one could employ to test the process of status attribution. The key distinction here is the difference between status beliefs which are held by individuals, and the process of status attribution (i.e. the process of allocating social status), as described in the previous section (6.2).

What's more, when reviewing theoretical papers, journal articles and book (chapters) it became evident that, generally, specific research methods used to derive theory are habitually under-reported.

This leaves nascent researchers generally in the dark on how to go about conducting research using methods that are relevant to their particular field of study and interest. As mixed research methods are used in this dissertation, and as this is the first part where the study design has a mixed methods approach, it relevant to set out the rationale for designing this particular research method in more detail. It, therefore, seems pertinent to review the selection of the research methods in the next few paragraphs.

6.3.1 Mixed Methods Research - Rationale

During the early stages of the doctoral programme, whilst reviewing literature on both the theoretical subjects and research methodology, it became apparent that the approach taken to research methods seemed almost tribal in nature. During the modular section of the doctoral programme the case was very fiercely made for quantitative methods and whilst this case was argued qualitative methods were portrayed as being grossly inferior in terms of scientifically conducting empirical research. Yet, during a subsequent module these roles were reversed and the opposite, i.e. the case for qualitative research, was made fiercely at the derogation of quantitative methods. Being new to doctoral level research, one could easily be confused, and in relation to the study at hand, it was questioned whether the two approaches were, in effect, mutually exclusive. In hindsight the objective of the modules seemed to be to enable critical reflection on either method, curiously though, no module was delivered on the mixed methods approach to scientific study. There seems to be a fundamental distinction between the two main approaches to research methods, which would seem to find their foundations in the intuitive distinction between 'a priori' and 'a posteriori' knowledge. As 'a priori' knowledge is knowledge that one can derive using reason alone, which seems to be more in line with a qualitative approach to research. In contrast 'a posteriori' knowledge is knowledge that (if proven) is expressed by empirical fact.

"Mixed methods research provides strengths that offset the weaknesses of both quantitative and qualitative research." (Jick, 1979) Creswell and Plano-Clark (2011) provide some additional justification for the use of mixed methods approach, they write; "One might argue that quantitative research is weak in understanding the context or setting in which people talk. Further, quantitative researchers are in the background, and their own personal biases and interpretations are seldom discussed." Creswell goes on to state; "[…] quantitative research makes up for these weaknesses. On the other hand, qualitative research is seen as deficient because of the personal interpretations made by the researcher, the ensuing bias created by this, and the difficulty in generalising the findings to a large group because of the limited number of participants studied. Quantitative research, it is argued, does not have these weaknesses.” He concludes; “Thus it can be argued that, the combination of strengths of one approach makes up for the weaknesses in the other approach.” Adopted from (Creswell, 2011 p. 11). Generally, mixed research methods provide more varied evidence for the study of a research problem than either quantitative or qualitative research each on their own could provide.

Mixed research methods have emerged over time as a consequence of trying to understand the world using both a qualitative and quantitative approach to research a problem or question. Indeed, its origin can be traced to the late 1950s when (Campbell and Fiske, 1959) introduced the initial thinking of the use of multiple quantitative methods when they discussed the psychological traits in patients. Denzin, (1978) took this one step further and discussed the option and potential of using both qualitative and quantitative research methods in scholarly studies. He followed on from earlier suggestions by (Campbell, 1974) and (Cronbach, 1975) to combine qualitative methods with quantitative data results. Indeed, since the early formative period of mixed methods, several stages development of the discipline have passed, (Rossman and Wilson, 1985) discussed the various stances toward combining methods. (Bryman, 1988) advanced this by reviewing the debate on the topic and establishing links between the two traditions (qualitative and quantitative), (Reichardt and Rallis, 1994) discussed the two traditions and tried to reconcile them.

Since then, further iterations on mixed methods were influenced by seminal works on the topic of ‘integrating the two traditions’ by (Creswell, 1994) who identified three methods of mixed approaches; the convergent parallel design, the explanatory sequential design, and the exploratory sequential design.

(Newman and Benz, 1998) provided an overview of procedures to conduct mixed method approaches to research problems they provided an additional three research designs; the embedded design, the transformative design, and the multiphase design.

More recently, (Tashakkori and Teddlie, 2003) provided an in depth overview of many aspects of mixed methods research, this was followed by (Creswell, 2009) who compared qualitative, and quantitative, and mixed methods approaches in the process of research all arriving at the principle that mixed methods research is both credible and scientifically sound, albeit not widely accepted amongst academics in most fields.

Creswell and Plano-Clark (2011) identified and provided an overview of the challenges encountered when using mixed methods research. Furthermore, since then it appears that the very nature of the contemporary posed research questions require a mixed methods approach as the problems seem ever to increase in complexity, with mixed methods best placed to alleviate some of that complexity.

Given the above, this dissertation is partly intended to be a bridge to cross the rather adversarial divide between quantitative and qualitative researchers.

Indeed, this adversarial nature comes to the fore within the earlier mentioned criticisms of some fields (for example organisational ecology) which can certainly be perceived as positively biased towards quantitative research methods whilst at the same time negatively biased towards qualitative research methods. Where other fields the converse bias is held with are more positive attitude towards qualitative research methods.

In addition, a mixed methods study design also seem more ‘practical’ for this dissertation as it allows us to combine inductive and deductive reasoning, which will enable the creation of robust conclusions inferred from both quantitative and qualitative data which was collected the studies.

6.3.2 Rapid Sequential Research Methods

Concurrent methods, essentially, evolved from the concept of mixed methods research, see previous section. Initially the anticipation for this dissertation was that standard mixed methods were to be used to conduct several studies, however, the use of new technology and the way individuals are now interacting with such technology paves the way for a more innovative approach to the conduct of research.

Essentially, what is meant by ‘rapid sequential mixed methods research’ is the administration of both quantitative method (in this dissertation a survey and a group resource allocation study) and qualitative method (open ended questions) in rapid succession of each other.

The concept is rather simple in nature, these methods are delivered ‘sequentially’ by which is meant; ‘taking place at rapid succession to each other.’ As a quantitative study is immediately followed by a qualitative (open ended) question with which participants are requested to reflect on the (quantitative) study they have just completed, i.e. rapidly sequential process in terms of methodological design and administration. Their reaction to both is recorded. Quantitative data is captured using traditional methods such as a survey and a resource allocation experiment in addition to this it is also both video –small sample– and audio recorded, qualitative data is audio recorded, transcribed, coded etc.

Within the mixed methods research literature such an approach is not documented, the concept that comes nearest in terms of research methods is ‘explanatory sequential design’ however, this research design typically only uses quantitative data collection, and requires analysis of this data before moving onto the qualitative data collection and analysis/interpretation.

However, the study design created for this doctoral programme is rather different in nature. Indeed, we argue that ‘rapid sequential mixed methods research’ has only formally been employed and tested within this dissertation. Furthermore, the rapid sequential mixed methods approach advocated and employed in this study is made possible by utilising the full potential which new technology has to offer.

The research method in this study has been designed following extended deliberation and testing methods, incrementally, over an eighteen month period (2012-13) during which several iterations of method testing took place. Indeed, the design process employed throughout this dissertation is ‘emergent’ in nature, and the design of the overall research methods eventually designed and deployed in these studies are not exception to this.

6.3.3 Multiphase Design

According to (Creswell and Plano-Clark, 2011) the multiphase design is an example of a mixed method design that goes beyond the basic mixed methods, such as convergent, explanatory, exploratory, and embedded methods.

They state; "[…] generally, multiphase designs occur when an individual researcher examines a problem through an iteration of connected quantitative and qualitative studies that are sequentially aligned, with each new approach building on what was learned previously to address the overall research objective. Such multiphase mixed method research is usually undertaken in large scale, funded, studies where teams of researchers collaborate and numerous questions being tested with the aim of solving an overarching research programme objective." (Creswell and Plano-Clark, 2011, p68).

Interesting, though this is, this dissertation is neither large scale nor collaborative in nature in the sense that Creswell and Plano-Clark describe. Nonetheless, the researcher has used elements of the multiphase design method in the eventual research design, therefore, it is important to highlight which elements were used and the rationale why these were used.

Therefore, in the absence of concrete theoretical guidance on the topic of mixed methods research a relatively straightforward experimental research design was devised to test status attribution, amongst the participants of this study which is outlined in the next section.

6.3.4 Study Design

In general terms, this study consists of two phases. In phase one, participants are presented with a randomised list containing ten (10) job titles.

All participants are presented with a horizontal list, however, the order at which these job titles were presented was randomised, to ensure that the outcome of the study was not influenced by the way these job titles were presented. The guidance provided to participants was rather simple in nature; 'Please rank (1-10) by your own notion of status associated with each job.'

In addition to this simple guidance, the researcher provided the following verbal guidance which was invariable the same each time; '*So, essentially, what you are being asked to do here is to rank each of the job roles according to your own notion of status. Basically, the ranking works from one to ten, with one being the highest rank, a bit like in the Olympics, if you are number one you get gold.'* Usually, this statement was followed with the sentence; *'Does that make sense?'* Most participants responded either non-verbally by nodding whilst they examined the job roles intensely or with a short verbal agreement.

Participants would then complete the exercise accordingly. The second part of this study is the qualitative follow up question; *'Can you talk me through the way you completed the previous exercise?'* with responses recorded, transcribed and coded to provide the qualitative data which it is hoped will provide further insight into why the job titles were ranked in the way they were.

The rationale for adding the qualitative research method (open ended question) was to further understand *why* participants completed to the status attribution study the way they did. This followed immediately after completing the quantitative phase of the study, which provided the *how/what* participants responded.

6.4 Study Outcome

6.4.1 Quantitative Data Interpretation

In earlier testing of this research design most participants found the status attribution exercise rather challenging. This was not because the objective of the exercise was difficult or challenging. Rather as participants had just completed the previous section of scales on the topic of empathy and social equality, this exercise forced participants to, essentially, measure who they would most likely show benevolence/empathy to. As discussed in the previous chapter, most participants indicated to have a benevolent and empathetic view towards others, and indicated significant social equality.

To be confronted with this exercise seemed to have created quite a bit of ‘dissonance’ with most participants, the qualitative data, which will be discussed below, will summarise the reasons given by participants why they found this study ‘hard’ and ‘challenging’. However, the table below (table 6.1) shows an overview of how participants ranked the various job roles according to their own notion of ‘social status’;

Overview of Status Attribution

Job Role	Mean Ranking HC	Mean Ranking SC	Est. Mean (Var)	t-Test* (p)	Overall Ordered Rank
Doctors	1.613	1.688	1.651 (±0.218)	0.735	1
Nurses	3.290	1.875	2.571 (±0.372)	<0.001	2
Social Workers	5.613	3.000	4.286 (±0.608)	<0.001	3
Council Workers	7.032	5.406	6.206 (±0.583)	0.004	6=
Soldiers	6.452	5.750	6.095 (±0.507)	0.169	5
Engineers	5.323	6.594	5.968 (±0.476)	0.007	4
Care Workers	5.871	7.312	6.603 (±0.480)	0.002	8
Lawyers	5.548	6.969	6.270 (±0.640)	0.025	7
Diplomats	5.645	6.750	6.206 (±0.697)	0.114	6=
Butchers	8.645	9.688	9.175 (±0.358)	0.003	9

* at 95 CI

As the table indicates there are some significant differences in the way HC and SC participants viewed the various job roles. At the same time there were also some similarities.

The similarities are perhaps easiest to summarise, both doctors (1) and butchers (9) were ranked in the same way. This indicates that participants are generally in agreement that doctors have the highest social standing (or status) and, generally, butchers, have the lowest social standing, in this selected group of job roles.

However, as the table also indicates in terms of the allocation of status, there is a significant difference in the ‘status attribution’ between HC and SC participants. When taking the ‘butcher’ category as an example; HC participants ranked this job role with an average of 8.645 compared to 9.688 for SC participants, this indicates that SC participants attributed significantly less (i.e. -1.043) status to butchers when compared to HC participants.

Conversely, both SC and HC participants attached the highest social status to doctors (SC=1.688, HC=1.613 p=*ns*) in which there is no significant difference in the status attributed to this job role, suggesting that there is general consensus that doctors are considered higher social standing by all the participants and between sectors. Yet, even though nurses were ranked by both sets of participants as second, there is a significant difference in mean status attribution with HC participants scoring nurses significantly lower (nurses HC=3.290) compared to SC participants (nurses SC=1.875) meaning that SC participants rated nurses nearly as high as doctors (doctors SC=1.613), this also indicates a slight out-group favouritism, as nurses are largely linked to healthcare over social care.

Equally, HC participants scored nurses, who generally straddle both HC and SC categories, lower than SC participants scored social workers (social workers SC=3.000), which indicates some distance from the mean score for doctors, which does leave doctors with a considerably higher social status than any other job role within the limited context of this particular study.

In similar vein, both mainly HC related job roles (doctors and nurses) were rated highly in this study, which when taking into account that the SC related job roles (care workers, social workers) in this study scored significantly lower by both sets of participants seems to indicate a status imbalance between the two sectors. This is in line with what we were expecting to find. With HC job roles having a mean combined score (i.e. the cumulative score for both job roles) of 4.222 compared to a mean combined score of 10.886 for SC job roles.

In addition, the non-related HC/SC sector professions were included to augment the experience participants would have of the study, rather than creating a clear choice between healthcare and social care job roles the additional job roles were included to ensure that this choice was less salient than otherwise would have been the case.

Even though the main reason why other job roles were included in the setup of this study is outlined above, nonetheless, there are some significant differences in the way some of these were rated by participants. Further investigation of the data shows some interesting differences in the way other variables have an impact on the ranking of these job roles. Examining the data by education level yields the following result (table 6.2);

Overview of Status Attribution (by Education)

Job Role	Mean Ranking SHS	Mean Ranking SUG	Mean Ranking SPG	Mean Ranking NF	p-Value (ANOVA)
Doctors	1.593 (±0.315)	1.417 (±0.425)	1.812 (±0.591)	1.875 (±0.698)	0.562
Nurses	1.963 (±0.279)	2.917 (±1.030)	3.625 (±1.027)	2.000 (±0.774)	0.001
Social Workers	3.148 (±0.637)	5.083 (±1.723)	6.250 (±1.223)	3.000 (±1.264)	<0.001
Council Workers	5.741 (±0.757)	6.000 (±1.299)	7.188 (±1.472)	6.125 (±2.341)	0.257
Soldiers	6.111 (±0.614)	5.333 (±1.564)	6.938 (±1.109)	5.500 (±1.896)	0.156
Engineers	6.074 (±0.580)	5.667 (±1.699)	5.625 (±1.132)	6.750 (±1.072)	0.526
Care Workers	6.407 (±0.770)	6.000 (±1.692)	7.000 (±0.615)	7.375 (±1.259)	0.327
Lawyers	7.037 (±0.915)	7.000 (±1.735)	4.375 (±1.197)	6.375 (±1.544)	0.004
Diplomats	7.481 (±0.824)	7.083 (±1.225)	3.312 (±1.372)	6.375 (±1.839)	<0.001
Butchers	9.444 (±0.457)	8.583 (±1.065	8.875 (±0.951)	9.750 (±0.387)	0.166

* at 95 CI

SHS= some high school, SUG=some undergraduate, SPG= some post graduate, NF= no formal

Interestingly, the statistically significant results tend to reflect the higher the educational attainment the lower status is attributed to those job roles that show a statistically significant result. For example, nurses are ranked by participants with no formal education and those participants with some high school education much higher (cumulative status attribution = 3.963 – or 1.9815 average status attribution) when compared to those participants with some undergraduate and some post graduate education (cumulative status attribution = 6.542 – or 3.271 average status attribution[13]).

Furthermore, job roles that are associated with professional qualification, and as a result with university education, are rated higher by those with a higher university education background. In this case the job roles of diplomats (SPG=3.312) and lawyers (SPG=4.375) are significantly different when compared to those participants with lower educational backgrounds.

In summary of the above analyses, there are some inferences to be gleaned from these. Firstly, on a basic level there is a slight in-group bias indicated by HC participants by ranking HC related jobs higher than any other. In addition to this however, SC participants indicated a marginal out-group favouritism by ranking HC related professions, generally, higher than other professions.

This trend of in-group and out-group bias is also found when performing a similar analysis when taking into account level of educational attainment. Indeed, those with some postgraduate education attribute a higher status to

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[13] Readers are reminded that the status attribution scale slides from 1 (being highest) to 10 (being lowest) therefore, higher actual scores are directly associated with lower status attribution, in other words there is a directly converse relationship between status allocation intentions and the number associated with this allocation (i.e. lower scores indicate a higher status attribution)

professions which require a similar educational attainment, therefore, indicating (at the very least) a slight in-group favouritism over the other professions.

When taking into account the status attribution of participants who hold no formal education, they tend to indicate a slight in-group favouritism for social care professions[14] by ranking these slightly higher than other professions. The next section will provide an overview and analysis of the qualitative data collected as part of this study, which will provide further insight into the rationale employed by participants when they completed this study.

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[14] Readers are reminded that participants with no formal education are exclusively employed in the social care sector. Also, this sample is rather small (*n*=7 i.e. 0.11 of all participants)

6.4.2 Qualitative Data Interpretation

According to (Elliott, Fischer, & Rennie, 1999) the aim of qualitative research 'is to understand and represent the experiences and actions of people as they encounter, engage, and live through situations. In qualitative research, the researcher attempts to develop understandings of the phenomena under study, based as much as possible on the perspective of those being studied.' (p. 216)

The main method for collecting the qualitative data for this and the subsequent chapter's study is the recording[15] of each of the interviews/individual studies. In order to ensure that this recording provided the relevant qualitative data, the method chosen to interpret this data was a partial transcription of each of these interviews.

The rationale for doing a partial transcription is directly related to the fact that for a qualitative study the sample size is rather considerable (63). With the average interview taking between 18-22 minutes, a full transcription of the whole interview would take between three and eight hours each, which is a considerable commitment in terms of time and resource. With limited time available to conduct the study[16], it was decided that a partial transcription could be done without compromising the integrity of the data. Therefore, this section will only provide verbatim transcripts of quotations which are deemed relevant to the study[17], for further detail on the data see (Groen, 2015). This approach will enable a methodical thematic analysis to be done.

Yet, before the data is examined it is worth noting that according to (King & Horrocks, 2010) 'there is surprisingly little discussion in the methodological literature of what is meant by the concept [of thematic analysis]'. (p.149) They argue that often a 'theme' is 'something' of interest in relation to the research topic. However, (Braun & Clarke, 2006) reason that any analysis should at the very least have two stages of examination, with the first stage being descriptive coding and the second stage interpretative coding. (King & Horrocks, 2010) add a third level of examination to this which they refer to as 'overarching themes'.

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[15] All recordings are available online Groen, Bernard M, 2015, "Replication/Validation Data for: Interview Recordings", http://dx.doi.org/10.7910/DVN/7IAJZM, Harvard Dataverse, V1

[16] This study was conducted as a part-time doctorate in business administration, which requires the researcher to balance a nascent research experience and a demanding full time job, hence, the rationale for part-transcription

[17] All the data including partial transcripts collected, related and quoted in this dissertation is available online via the Harvard Dataverse data depository https://dataverse.harvard.edu/dataverse/bmgroen

This dissertation follows the guidelines set out by (King & Horrocks, 2010) and especially those set out by (Elliott et al., 1999) who specify seven individual recommendations, which are relevant to identify here;

1. *Owning one's perspective*
    - Chapter three of this dissertation sets out both the ontological and epistemological background of the researcher.
2. *Situating the sample*
    - Chapter four describes the research participants and their background (age, gender, sector of employment, educational attainments)
3. *Grounding in examples*
    - The dissertation offers two or three specific examples of each identified theme in the relevant sections of chapter six and seven as these are the only two times qualitative data is added to the specific studies of these chapters.

4. *Providing credibility checks*
    - The credibility checks used to report and create themes are a) we used multiple qualitative analysts (i.e. supervisor, clinical lead, social care colleagues) and b) the triangulation with the collected quantitative data and external factors. All of these are reported in the relevant sections of the appropriate chapters. In addition all data (quant and qual) is available for verification and replication online[18].
5. *Coherence*
    - In each relevant chapter (six and seven) we present an integrated summary of our analysis, using both quantitative and qualitative data to inform the discussion sections of these chapters.
6. *Accomplishing general vs. specific research tasks*
    - In each of the qualitative data sections of chapters six and seven we will report specific comments using quotes from participants to indicate their contribution to deriving a specific theme. However, we emphasize caution in terms of the generalizability of this data, as the participants of this particular study only report their particular experience. Yet, the themes created do represent a certain commonality between participant responses.
7. *Resonating with the readers*
    - When reporting the qualitative data, our aim is to provide a real insight into the experiences that participants went through when completing the relevant tasks. The seven categories were taken from (Elliott et al. 1999, p. 220-224) and put into the context of this study to evidence adherence to these guidelines.

6.4.2.1 Emergent Theme – Social Cognitive Dissonance

The overarching identified theme coming out of the qualitative data is that of what we will refer to as ‘social cognitive dissonance’. We will define ‘social cognitive dissonance’ here as; ‘the cognitive discomfort experienced by participants when presented with their own contradictory behaviour immediately

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[18] https://dataverse.harvard.edu/dataverse/harvard?q=Groen+Bernard

following an action in which they indicated a certain level of social benevolence.' This is still a working concept, however, intellectually and existentially, this concept may have some potential in terms of theoretical contribution. This concept may be closely aligned to the 'belief discomfort paradigm' as specified by (Festinger, Riecken, & Schachter, 1956).

This feeling of 'cognitive dissonance' comes through well in the following **extract 6.1**[19];

> *"I feel that my first choice is to rank everybody first ... as everybody is equal."* [after completing the exercise] *"That was not as hard as I thought, perhaps at least for this exercise not all of these are equal."* Indeed, this individual went on to state that *"well butchers do not add anything to society, not to me at least as I am a vegetarian ... perhaps I am more prejudiced than I care to admit ... but I still think that everyone is equal [laughs] it is complicated [pauses, then sighs]"*

Indeed, another participant[20] continues along the same line **extract 6.2**;

> *"Ahh [sense of relief after completing the status attribution exercise]. . . I am done [...] Right, I think I probably gave the most weight to what I would consider 'intense pressure' of the job. I gave the highest score to soldiers, I have got a lot of friends who are soldiers in the army, and I have seen the effect that the pressure has on them an the physical changes they go through when the come back from conflict. I also gave a higher score to doctors, again because of the immediate pressures that I know they are under, for the middle ranks again pressure was the high thing but also the sort of circumstances that they find themselves working in was a bigger factor for me. . . I think towards the lower end [pause] I think I put lawyers quite low, which is. . . . I know a lot of lawyers and they are quite nice people but erm, I have an issue with certain things that professions do . . . erm lawyers is what, erm well I am all for fairness and I am all for justice but erm some of the lawyers I have met have a rather warped sense of what that is. So, I got high for the pressure jobs, and low probably because of my personal interactions with those particular professions."*

Extract 6.2 shows that even though the participant indicates a balanced approach both in terms of their IAT D-score and their levels of empathic concern, he still attributes status in a way which he needs to justify socially. There is a lot of hesitation in his response to the open-ended question which we

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[19] HC sector, a 31 year old female on agenda for change band 7 (~£32k salary) her IAT D score was 1.00 which indicates an automatic preference for HC over SC – empathy levels indicated average for the sample

[20] HC sector, a 32 year old male on agenda for change band 8b (~£47k salary) his IAT D score was -0.012 which indicate no automatic preference for either HC or SC – empathy levels indicated higher than average for the sample

suggests stems from a form of social cognitive dissonance, especially given his previous responses to the empathy scales.

In **extract 6.3**[21], below, a further indication of social cognitive dissonance appears to emerge;

> *"Yes, because there is a tension between the importance of the job and the financial gain that you get from doing the job. So, while a council worker may be very low on the social scale, often the role that they are fulfilling is very important to the person that they are caring for. So in the grand scheme of things, doctors and lawyers and others in that kind of category would almost go straight to the top of the list but when you think it is actually the nurses and the care assistance or the social work equivalent of that who actually provide most of the hands on care, so erm, to the person receiving the care they might actually be a lot more important. So it is kind of [...] its the social [...] a doctor might be quite important in the grand scheme of things, but actually, the decisions made are often quite removed from the person receiving the care, so he might not be the most important person, so others that care may be more important, to an individual. Whereas, doctors tend to be socially ranked higher than carers, I do not agree with it, because they should be more equal. So I am struggling with that a little bit."*

Indeed, this theme runs also through the responses from social care participants in the sample, as **extract 6.4**[22] indicates;

> *"INT*[23]*: Good, ok just thinking about the last question, how did you rank the items. . .*
> *P: So, it depends on how you want to rate it, in terms of, it is supposed to be about status, but is it status that they perceive to be their status, or what really is their status? If you see what I mean, I think that ...*
> *INT: The questions asked you to reflect on their status ...*
> *P: Ah, ok, but how do you rate them, do you do this according to how society sees their status? And me being part of that society, so, by definition, you see doctors as being top of the tree, so to speak. And some see lawyers as being, sort of, in the same ballpark. Because they are professional people with professional qualifications, and all the rest of it, but it is really more about what kind of value they add to society, really, in terms of impact on people. Both in terms of, erm, expertise, but also in terms of, erm, impact if you like. So, erm, butchers don't really have much impact on society, so to speak. It is a really strange one to throw in there, Butchers! Can I go back to the list?*
> *INT: No, unfortunately not.*
> *P: Oh well, it is just remembering the different items, anyway, so really it is about the impact that the individuals have on society and how they have an impact on me, rather than the status that they are generally*

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[21] HC sector, a 38 year old female on agenda for change band 7 (~£37k salary) her IAT D score was 0.142 which indicate a marginal automatic preference for HC over SC – empathy levels indicated higher than average for the sample

[22] SC sector, a 23 year old female (~£13k salary) her IAT D score was 0.329 which indicate a strong automatic preference for HC over SC – empathy levels indicated lower than average for the sample

[23] Actual transcript, INT=interviewer, P=participant

> *perceived to have within society. Although this could be the same, erm, [pensive pause] it probably should be the same [pause] all should be equal, but I guess society puts people into different boxes, and therefore I guess the status of the 'box' is different. [pause] It should still relate on how much you contribute to society, and it probably does. Does this make any sense to you? This is a difficult question."*

The addition of the open-ended question really does add value, as the above extracts show. All indicate a certain level of what we refer to as social cognitive dissonance. This particular study is more tentative in nature, nonetheless, the majority of participants often felt that the open-ended question, which was designed in order for participants to justify their ranking immediately prior to being asked that question, was hard to answer. The data reported here suggests that there is a level of social cognitive dissonance as most participants reported a feeling of significant unease which we attribute to this concept.

6.5 Discussion

The status attribution study started with the aim of creating insight into how status is 'attributed' to job roles by participants. The conclusions from the analysis section, are intriguing, especially when combining the quantitative and qualitative data elements. The data suggests that status is allocated differently in several ways.

Firstly, the quantitative data indicates that there appears to be a significant difference in the way HC participants and SC participants view each other's status within the context of this study. Generally, there is seems to be consensus that HC related job roles are of higher social standing than those associated with SC, moreover, SC participants' quantitative responses seem to indicate and confirm this finding.

Secondly, the qualitative data seem to corroborate the findings of the quantitative returns, insomuch that participants responded to the open-ended question in a way which often justified the higher ranking of HC related jobs-roles compared to those related to SC. Indeed, this also seems to support findings of out-group favouritism reported in chapter seven, and a lower level of cultural elitism as reported in chapter five.

This links well to the other studies that are within the study design of this dissertation, and seems to at least partly confirm Brown's (2010) assertion that; "[…] many inter-group attitudes, whilst superficially positive in character, serve to perpetuate an out-group's subordinate status position, since they accord value to the out-group only on specific and, typically, less 'important' attributes." (p.6)

In addition, it seems to confirm bias difference between the two sectors; negative bias on the part of the HC bias, and positive bias on the part of SC participants. This means that SC participants seem to indicate to conform to the status quo by signalling a slight out-group favouritism, with HC job roles generally enjoying a higher social standing when compared directly to SC job roles. In addition to this finding, the second significant finding that is derived from this study is that participants with a higher educational background show in-group favouritism to those job roles that require similar higher education qualifications.

As (Ridgeway et al., 1998) argue in the context of 'doubly dissimilar encounters'; "level and a distinguishing characteristic, *the interactional* context fosters status beliefs about [such a] characteristic." (p.347) We argue that status beliefs could be cultivated even in the absence of such interactional context. Using the abstraction of job-roles (which represent social categories) we demonstrated that status beliefs emerge in both HC and SC participants and these tend to indicate and confirm strongly held explicit and implicit beliefs about social status, and corroborate findings of chapters five, seven and eight.

7

Study Four – Intergroup Dynamics Study

7.1 Introduction

The study outlined in this chapter, which is woven into this dissertation to further elicit in-group and out-group bias between self-grouped and self-categorised participants, is an adaptation of Tajfel's (et al) 1979 study on ‘social comparison and group interest in in-group favouritism’. Therefore, their article, and others related to it, will be extensively quoted and used in this chapter as they form the basis of this study. The Tajfel study examined the effects of reward magnitude and comparability of the out-group on minimal inter-group discrimination where self-interest was related to in-group profit.

Favouritism towards own group is hypothesised to arise from inter-group comparison to enhance self-esteem as well as instrumental rivalry for group and self-interest. In this adaptation of their study, sixty-three participants, which were employed in the health sector (n=31) and in the social care sector (n=32) in the North East of England were requested (as part of their survey completion) to distribute rewards (fictitious funding/monetary) via amended choice matrices, to the in-group and the relevant comparison out-group.

Self-interest was explicitly and directly linked to the allocation of absolute profit to the in-group. This section contributes to the overall dissertation by eliciting explicit behaviour therefore, the data gathered through this study will contribute significantly to the overall explicit findings of this dissertation.

7.2 Relevant Literature

There are many kinds of prejudice, however, what exactly is meant by the word 'prejudice'? A useful starting point when reviewing literature on this subject is a definition found in the dictionary; 'preconceived opinion that is not based on reason or actual experience' (Oxford English Dictionary, 2014).

Many scholars emphasize elements such as 'inaccuracy' or 'incorrectness' when attempting to define prejudice. (Allport, 1954, p.10) wrote; '[e]thnic prejudice is an antipathy based upon a faulty and inflexible generalisation. It may be felt or expressed. It may be directed towards a group as a whole or an individual because he is a member of that group.' More recently (Samson, 1999) expanded Allport's assertion; 'prejudice involves an unjustified, usually negative attitude towards others because of their social category or group membership.'

In furthering our understanding of the social psychological understanding of prejudice, (Brown, 2010) wrote a useful summary; "Such social psychological definitions [as those by Allport and Samson above] have much to recommend them over formal lexical accounts. In particular, they accurately convey one essential aspect of the phenomenon of prejudice – that it is a social orientation either towards whole groups of people or towards individuals because of their membership of a particular group." (2010, p. 4).

The other common factor between these definitions is that they stress the negative flavour of group prejudice. Of course, commonsensically, "prejudice can take both positive and negative forms". (again Brown, 2010, p4.) This last addition to Brown's introductory definition proves very helpful indeed. For it is within this study that both positive and negative prejudice will be explored as a possible blockage to achieve positive integration and collaboration between different organizations.

However, the above definitions ought not to imply that prejudice always involves false, irrational beliefs or generalizations towards other groups in society, neither should the definition of prejudice be limited to be strictly negative in nature as aforementioned. Indeed, recent analyses and definitions of prejudice have been adapted to include positive attitudes, judgments or feelings towards others.

(Brown, 2010) explains; "[…] in a nutshell, the argument runs like this: many inter-group attitudes, whilst superficially positive in character, serve to perpetuate an out-group's subordinate status position, since they accord value to the out-group only on specific and, typically, less 'important' attributes." (p.6)

This has significant relevance to this study as one of the hypothesis relates directly to status attribution and retaining the 'status-quo' what Brown seems to suggest here is that negative (and positive) prejudice serve to retain the higher status of those who already occupy that social ranking, and that 'movement' towards association with other groups will only be possible is higher status individuals deem it to perpetuate the status quo, or increase their social status/ranking.

Particularly those viewed as 'subservient' to their own group, will be limited by the perceived loss in social standing, leading to implicit obstruction of collaboration efforts between the two different groups (in this study individuals employed in the healthcare and social care sectors).

Indeed, Brown continues with a helpful further clarification; '[…] thus, however positive and genuine the feeling underlying such attitudes may be, their net effect is to reinforce rather than to undermine any pre-existing inter-group inequalities.' (Brown, p.6) It is hypothesized that however 'benevolent' the sentiments held by healthcare professionals seem, their ultimate effect will be to define social care professionals as dependent on, and hence subordinate to, healthcare professionals (i.e. their ingroup).

Following on from the previous section on the creation of prejudice in social psychology, (Allport, 1954) adds a useful suggestion that social categorization is almost a prerequisite to the creation of prejudice in society which emphasizes the ordinary and indeed the common place nature of it.

As aforementioned the psychological process of categorization is 'an inescapable feature of human existence.' According to (Bruner, 1957) This is because "… the world is too complex a place for us to be able to survive without some means of simplifying or ordering it first."

By assigning objects and constructs to categories, the process of understanding the world is simplified. One direct outcome of categorisation is a cognitive accentuation of differences between categories and a attenuation of the differences within categories.

These processes of differentiation and assimilation have been shown to affect inter-group behaviours such as for example discrimination and prejudice whether it be positive or negative in nature.

The supposition that a significant amount of these processes may operate outside our awareness forms a major part of the studies which comprise this dissertation. The distinction between conscious and unconscious thought, also referred to as explicit and implicit thought, and prejudices are outlined in the relevant chapters of this dissertation and highlighted where appropriate.

The adaptation of a particular category in a given context depends on the ease of its cognitive accessibility. The most common factors that influence the ease of access to a particular category are aligned to an " … individual's needs, goals, and habitual dispositions, or features of the stimuli such as visibility, proximity and interdependence." (Brown, 2010)

Indeed, following on from Brown's rather helpful introduction above, (Dovidio, Hewstone, Glick, & Esses, 2010) provide further insight when they offer a useful guide to the following three interrelated concepts;

"the three forms of social bias towards a group and its members: (a) prejudice, an attitude reflecting overall evaluation of a group; (b) stereotypes, associations, and attributions of specific characteristics to a group; and (c) discrimination, biased behaviour toward, and treatment of, a group or its members." (p. 5)

Furthermore, they describe prejudice as being "typically conceptualised as an attitude that, like other attitudes, has a cognitive component (e.g., beliefs about a target group), an affective component (e.g., dislike/like), and a conative component (e.g., a behavioural predisposition to behave negatively toward the target group)". (p. 6). They formalise the above definition further on in their work as; "prejudice is an individual-level attitude (whether subjectively positive or negative) toward groups and their members that creates or maintains hierarchical status relations between groups." (p. 7)

In addition they provide an example of (Eagly & Diekman, 2005) who view prejudice as; "a mechanism that maintains status and the role differences between groups … indeed individuals who deviate from their group's traditional role arouse negative reactions; others who exhibit behaviours that reinforce the status quo elicit positive responses." (p. 21)

Within the context of this dissertation, it is extremely helpful to note that; "because prejudice represents an individual-level psychological bias, members of traditionally disadvantaged groups can also hold prejudice towards advantaged groups and their members […] 'although some research indicates that minority-group members sometimes accept cultural ideologies that justify differences in group position based on positive qualities of the advantaged group' see (Jost, Banaji, & Nosek, 2005), there is significant evidence that minority-group members sometimes also harbour prejudice (negative/positive) towards majority group members." (Dovidio et al. 2010 p. 6).

Indeed, wider implications of theories that use concepts of prejudice, such as 'system justification' theory provide a helpful reference; "social justification can be defined as the process by which existing social norms are legitimised, even at the expense of personal and group interest." (Jost et al. 2005 p.883).

Within the wider context of intergroup dynamics and social psychological experiments Henri Tajfel's, now infamous, minimal group paradigm studies conducted in the 1970s and 1980s, are considered seminal works by most within the field of social psychology.

(Wilder, 1986) confirmed Tajfel's finding when he wrote; "[People] often assume similarities within groups and differences between groups to a greater degree and across a broader range of characteristics than is warranted by objective evidence." This means that once individuals become part of a group they tend to exaggerate differences between groups and similarities within groups. This process is similar to, yet not the same as, the in chapter four mentioned cognitive process of social categorisation.

Indeed, categorical thinking, and thinking in groups as a subsection of these, not only alters the way one thinks about the members of such groups, but it may also lead to seeing one group as more preferable whilst others seem less preferable. This makes it more challenging to create groups that are perceived as separate but equal, in the context of this dissertation the health and social care groups of participants. Such equality (or parity of esteem) we would anticipate to aid integration efforts in a positive way. Conversely, inequality (or discrepancy of esteem) we would anticipate to hinder/impede on integration efforts.

The above gives rise to what Tajfel refers to as 'in-group bias' which is the tendency to favour the group that an individual belongs or see such a group as superior to an out-group. (Tajfel, 1970) demonstrated this by showing that individuals give more money to other in-group members, therefore, preferring their own group members over individuals that are not perceived to be belonging to the same (i.e. their) group.

This same finding came to the fore during a Canadian study which requested individuals to look through a photo book and to pick five strangers who look like they are supporters of each major Canadian political party, liberals and conservatives both guess that relatively attractive people are supporters of their party (i.e. are 'in-group' members). (see Johnson, 1981 for the full study).

This study, and many other studies like it, seems to uncover how little effort it takes to trigger in-group bias. Tajfel's minimal group procedure reveals that even when groups have no history of conflict and don't even know each other, in-group favouritism still is exhibited.

This finding is well formulated by (Brewer, 1999); “Many forms of discrimination and bias may develop not because out-groups are hated, but because positive emotions such as admiration, sympathy, and trust are reserved for the in-group and withheld from out-groups.” However, it is important to note that the results of the minimal group studies do not mean that prejudice and discrimination are merely a matter of superficial group dynamics.

Clearly, prejudice is also a function of culture, politics, history, and economics. Moreover, the is fact that in-group bias is not unavoidable or inevitable as there are various effective techniques available to reduce prejudice, stereotyping and discrimination within a social context.

Inter-group bias seems to still very much prevail in the twenty-first century. One of the reasons is that these inter-group biases are 'attached' to slow moving institutions and systems, for example, economics, culture or law making. Positive inter-group contact is required to curb some of the persisting biases.

However, inter-group biases are more complex in nature than the literature explored thus far in this chapter. Simply because inter-group biases do not always appear cognitively as biases, which may be because these biases operate outside of our awareness or there is no apparent harm to individuals which significantly slows the pace at which such biases can be changed. Simply because we hold a belief does not mean that there is any apparent immediate harm to those of which we hold such belief. To consider this in more detail the following three theories are frequently used within social psychology; 1), out-group homogeneity bias, 2) positive stereotypes and 'benevolent' forms of prejudice, and 3) in-group favouritism and affinity.

Out-group homogeneity bias is a tendency to see out-group members as more alike than in-group members. This is relevant to this study, and in the overall context of this dissertation, because if individuals reduce members of an out-group to a single identity they are just one step away from stereotyping (positively/negatively) those out-group members. So, perhaps perceiving an out-group as homogeneous may not feel like prejudice but it can, and often does, easily lead to stereotyping which, in turn, can lead to discrimination.

Though, some studies indicate that when these conditions are reversed, by enabling individuals to think more about differences among out-group members, prejudice and discrimination could be reduced. Such a finding was reported by (Brauer and Er-rafiy, 2011) however, out-groups are not always seen as homogeneous as several meta-analyses have shown. Indeed, the effect is strongest when the in-group is relatively large and when the in-group and out-group are enduring, i.e. real life groups such as healthcare professionals and social care professionals, for example.

In addition (Ruben and Badea, 2007) also state that “if the in-group is relatively small and the attributes in question are important to its identity or stereotypically associated with the group, the out-group homogeneity effect may disappear or even reverse.”

Indeed, and perhaps more relevant to the study in this chapter; (Hewstone et al., 2011) found that female nurses (who are the majority gender within the profession) tend to see male nurses as more homogeneous than female nurses, but male nurses show an in-group homogeneity effect, which means that the male nurses see members of their own group as more homogeneous.

Typically, another way that discrimination and prejudice occur without it seemingly being erroneous is through positive stereotypes and 'benevolent' forms of prejudice. Positive stereotypes in this case may be when doctors are referred to as 'highly skilled' which is a statement that carries a kernel of truth in which the stereotype accurately describes some members of the group in question, however, this is an over-generalisation which reduces a diverse collection of individuals into a single type, which is the 'positive' stereotype. Even though it may be the case that *generally* most doctors are higher skilled compared to other groups of professions, however, this does not necessarily mean that all doctors are capable of being a ‘good doctor’ which is implied by the positive stereotype. Such generalisations are used as cognitive short cuts, and, as aforementioned, these ‘cognitive shortcuts’ can give rise to prejudice and inter-group bias.

Eliciting in-group favouritism and bias has been studied for well over half a century. Indeed (Turner et al., 1979) quote; “In-group favouritism and bias have been central foci of experimentation on inter-group behaviour ever since the pioneering work of (Sherif, 1966) in 1966.”

The design of this study builds upon (Vaughan et al., 1981) amongst others, by using concepts such as minimal inter-group situation (M.I.S.) and has the following concepts:

1) group membership is relatively anonymous as participants are interviewed separately, therefore no explicit group membership is allocated, apart from the self-categorisation at the start of the study;

2) no social interaction, within the groups of participants, nor between groups of participants ever takes place during the study;

3) there is limited (clear) evidence of negative inter-group relationships;

4) where the ‘rewards’ are to be allocated, there is an instrumental link between an individual’s gain and a strategy of in-group favouritism.

For the purposes of this study, the concept of in-group favouritism will be identical to Turner's concept; “in-group favouritism is a descriptive concept referring to any tendency to favour the in-group over the out-group, in behaviour, attitudes, preferences, or perception.” (Turner et al., 1979) Similarly the concept of in-group bias may be defined more tentatively as; “those instances of favouritism which are unfair or unjustifiable in the sense that they go beyond the objective requirements or evidence of the situation.” (Turner et al., 1979)

This means that the concept of in-group bias has to involve a value judgement hence it is more dependent on some consensual definition of ‘objective requirements or evidence’.

In the context of the original experiment; “[in-group bias] … tends to refer to differential or discriminatory inter-group behaviour which is not directly beneficial to in-group members or instrumental to some desired outcome or objective and to differential inter-group perceptions and evaluations which have no veridical basis.” (Adapted from Turner et al., 1979) Until the late 1970s in-group bias was still regularly assumed to be synonymous with inter-group antipathy, see (Insko and Schopler, 1972) for a discussion on the origin of out-group rejection or see (Rabbie and Horwitz, 1969) who argue the case that in-group bias is directly related to inter-group antipathy. For or a more recent discussion on these concepts, albeit applied in different contexts see for example (Abrams et al., 2008) and (Harvey and Bourhis, 2013)

(Turner et al., 1979) deal with two major challenges to the traditional, and early, conceptualisation of inter-group bias. They state; “in-group biases in evaluative trait rating may be obtained where in-group and out-group ratings are positively correlated - there is no necessary derogation of the out-group”, meaning that participants may still be positively biased towards in-group members, but not necessarily at the expense of members of other groups.

Indeed, they go on to state; “even where there is derogation, this does not necessarily indicate actual dislike for or hostility towards members of the out-group.” Therefore, this study has adopted the stance that differences between in-group and out-group ratings on evaluative dimensions and more affective, socio-metric measures that tend to be orthogonal (i.e. statistically independent from each other). In addition to this, various studies have shown that conflicting group interests or negative inter-group attitudes may partially explain the appearance of behavioural and evaluative biases, but they are not necessarily a requirement. For example (Tajfel et al., 1971) show that bias occurs in the most minimal of social conditions. Several studies have found that under certain circumstances, the “mere perception of belonging to one of two distinct groups is sufficient for in-group bias in the distribution of monetary rewards.” (Turner et al., 1979 p. 188)

This being the case, the study in this chapter was designed and amended to test to what extent such bias occurs between participant groups using an adaption of what have become known as ‘the Tajfel matrices’.

To summarise and contextualise the above, in-group biases are not limited to situations where interests are conflicted, either directly or indirectly.

Neither do these, necessarily derive from disdain towards the out-group, as aforementioned. Nor do they have to originate from ‘out-group derogation’ to quote a concept often used by Tajfel and Turner.

Indeed, some studies explain in-group bias by means of social categorisations according to the salience of such categories in any given situation. “The social norms or the cognitive accentuation of between-category differences are thought to play a significant role.” (Turner et al., 1979, p. 190)

The stance taken in this chapter’s study is that in-group bias represents a striving for positively valued distinctiveness for the group to which one feels more aligned, personally and perceptively. The assumption being that individuals are motivated to achieve a positive self-image and that self-esteem can be enhanced by a positive evaluation of the group to which an individual belongs (or feels they belong to).

In line with the theoretical concept of social categorisation, such group belonging is created by the need to evaluate such a group in comparison to (an)other group(s). Tajfel’s assumption here is that “positive discrepant comparisons between in-group and some relevant out-group.” In this study individuals which have self-categorised as belonging or aligning themselves more to either the healthcare or the social care category.

There is a perceived need to evaluate in-group characteristics more favourably in comparison to the out-group which leads to a more positive group identity which enhances self-esteem. Within the context of social identity theory which underpins the study in this chapter theoretically, Tajfel writes; “[…] an individual’s social identity is [formed] on those aspects of his self-concept contributed by the social groups to which he perceives himself to belong […] very generally, then, individuals are motivated to establish positively valued differences (positively discrepant comparisons) between the in-group and the relevant out-group to achieve a positive social identity. Subsequently, the search for positively valued distinctiveness can lead to biases in behaviour, evaluations and perception.” (Adopted from Tajfel, 1972)

In addition according to Tajfel’s social identity theory there are four major conditions which are required for in-group bias to occur:

“(a) individuals must be subjectively identified with their in-group, they must use it to define their self-concept;

(b) the dimension or attribute involved in inter-group comparison must be important, relevant, or salient in a given situation;

(c) the salient out-group must be perceived as a relevant comparison group; there must be some comparability (in Festinger's 1954 sense) between in-group and out-group;

(d) the actual positions of in-group and out-group on the comparative dimension - whether defined consensually or by non-social criteria - must be subject to some ambiguity." (Vaughan, Tajfel, & Williams, 1981)

In the amended study presented in this chapter the above concepts are introduced in the following way;

(a) individual Participants have self-categorised in the earlier part of the study, therefore, automatically indicated their in-group preference;

(b) the scenario which Participants are asked to complete clearly states that they are required to attribute a monetary value to either 'category';

(c) the two groupings are related as healthcare and social care are often referred to as 'care providing' in the broadest sense, therefore, the distinction drawn in this study is deemed to be conforming to the 'relevant comparison group' requirement;

(d) the comparative dimension is measured in the previous study, in which participants rank social status, this will enable this specific requirement to be met in this study, albeit, in an amended form.

7.3 Study Design

The fundamental procedure did not differ amongst participants (Ps). The experimenter (E) introduced the study as an investigation into resource allocation. Ps were informed that, nationally, the government had limited funds at their disposal (writing 2014) in general, and for health and social care in particular, nevertheless, choices in terms of resource allocation need to be made.

Ps were asked to examine six sequential types of choice-matrix derived from Tajfel's minimal group paradigm (Tajfel et al., 1971) an example amended for this study is shown below in the table below;

Funds to Healthcare	7	8	9	10	11	12	13	14	15	16	17	18	19
Funds to Social Care	1	3	5	7	9	11	13	15	17	19	21	23	25
	○	○	○	○	○	○	⊙	○	○	○	○	○	○

Table 7.1: Example Minimal Group Matrix

Because of the availability of new technology and its use within the study, the above matrix was converted into a format which was easier to distribute and display on an iPad mini. A representation of the actual final matrix which was used in the study is displayed below. Note that in both examples provided the 'fairness' strategy is indicated as being selected (i.e. 13-13).

	7-1	8-3	9-5	10-7	11-9	12-11	13-13	14-15	15-17	16-19	17-21	18-23	19-25
Healthcare Social care	○	○	○	○	○	○	⊙	○	○	○	○	○	○

Table 7.2: Example Minimal Group Matrix – 'Fairness Strategy Indicated'

Each of the choice matrices allows for measurement of particular strategies chosen by Ps in their monetary choices. Definition of these strategies is provided below in table 7-3.

Strategy	Abbreviation	Definition
Maximum ingroup profit or absolute ingroup favouritism	M. I. P.	That choice in a matrix which awards the highest number of points to the ingroup.
Maximum difference or relative ingroup favouritism	M. D.	That choice which maximises the difference in points awarded to ingroup and outgroup, the difference being in favour of the ingroup.
Fairness	F.	That choice which awards equal numbers of points to ingroup and outgroup.
Maximum joint profit	M. J. P.	That choice which maximises the total, combined number of points awarded to ingroup and outgroup.

Table 7.3: Overview of Allocation Strategies used in Tajfel Matrices

To expand on each of the five basic allocation strategies this section will provide a brief overview of each, readers ought to note that (Bourhis et al. 1994) has influenced this chapter significantly, indeed, exchanges with the author (Richard Bourhis) have also greatly shaped this section. I have made references when quotes are made directly from the text, where there are no quotations, the writing most certainly will, nonetheless, be shaped by reading the relevant text and guided by conversations with the author.

1. Fairness, or as (Bourhis, Sachdev, & Gagnon, 1994) refer to it, parity (P) strategy, consists of a choice that awards an equal number of points to both in-groups and out-groups. "Note that the term parity is more precise than the term fairness, because parity refers clearly to the numerically equal distribution of points to the in-group and the out-group." Therefore, the term fairness is; "less adequate, because participants may distribute points unequally between the in-group and the out-group." (Bourhis et al. 1994 p. 210) Rationale behind such a strategy selection may be that one group maybe superior over the other without explicitly stating this.
2. Maximum join profit (MJP) represents the total maximum allocation that can be awarded to both the in-group and out-group. MJP is more rational economically as it maximises the amount of funding allocated for all participants (in this study both health and social care categories would receive more funding if participants elected this strategy).
3. Maximum in-group profit (MIP) whilst employing this strategy participants award the highest absolute amount of funding available to the in-group category, they do so regardless of the awarded funding which is attributed to the out-group as part of their choice.
4. Maximum differentiation (MD) this is referred to as "a discrimination strategy that refers to a choice that maximises the difference in funding awarded to the two categories, the difference being in favour of the in-group member but at the cost of sacrificing maximum in-group profit. The maximum differentiation strategy is not economically rational (unlike the MJP strategy) although it offers the greatest possible differentiation outcome between in-group and out-group fate, this differential being in favour of the in-group." amended from (Bourhis et al. 1994 p.211) to fit the context of this study. Generally, the term *in-group favouritism* (FAV) is used to describe a

combination of choice to employ either the maximum in-group profit or the maximum differentiation strategy. Therefore, giving the following description FAV=MIP+MD strategies, which will prove useful when interpreting and presenting the findings of this study in the subsequent section.

5. Contrary to in-group favouritism, as described above, the matrices also make provision for *out-group favouritism* which is employed by participants when they allocated more funding to the out-group category than to their own 'in-group' category. Commonly this is reflected as a negative score on the maximum difference strategy (denoted as –MD) and will be denoted as –FAV. Interestingly, according to (Bourhis et al., 1994) "the out-group favouritism strategy is least economically rational from the point of view of the in-group members, but such responses are nevertheless obtained in studies in which low status groups acknowledge their inferiority vis-à-vis high status outgroups." (p. 214)

Even though the aforementioned 'Tajfel matrices' are the dependent measures first used within minimal group studies, to evaluate inter-group behaviour, these matrices proved the useful basis for this study. Indeed, these matrices have been amended for the monitoring of discriminatory and parity behaviour of individual participants within the context of this study. The Tajfel matrices were designed to measure the relative pull or strength of a variety of allocation strategies used by participants in the study within this inter-group study.

Essentially, there are three matrices which form the basis of the 'concept' of what has been referred to earlier as the 'Tajfel matrices'. Again the source drawn from is (Bourhis et al., 1994) page 211 where they provide a helpful overview;

1. *Matrix Type A* compares in-group favouritism (FAV or MIP + MD) with maximum joint profit (MJP).
2. *Matrix Type B* compares maximum difference in favour of in-group (MD) with a combination of absolute in-group profit (MIP) and maximum joint profit (MJP)
3. *Matrix Type C* compares parity (P) with in-group favouritism (FAV).

The table on the next page provides a full overview of how the matrices were developed and eventually employed during this study, please do note that for all of the matrices the (P) options has been selected for indication purposes only, there is no significance attached to this selection at this stage.

During the study participants are required to choose only one option from the spectrum provided by the matrix. Each of these options is represented by two numbers (i.e. 4-28). The principle idea behind the study is that participants are 'forced' to make a choice to only allocate funds between the in-group category or the out-group category, using the scale.

It is important to note that none of the participants allocate funds directly to themselves, rather they are allocating funding to either 'social care' or 'healthcare' in other words; the 'in-group' or the 'out-group' depending on how participants 'self-categorised' earlier in the study.

Matrix Type A: FAV (MIP+MD) vs. MJP, strategies together (T) from the point of view of a healthcare participant:

Funds to Healthcare	25	23	21	19	17	15	13	11	9	7	5	3	1
Funds to Social Care	7	8	9	10	11	12	13	14	15	16	17	18	19
	○	○	○	○	○	○	●	○	○	○	○	○	○

Matrix Type B: MD vs. MIP + MJP, strategies opposed (O) from the point of view of a healthcare participant:

Funds to Healthcare	19	18	17	16	15	14	13	12	11	10	9	8	7
Funds to Social Care	25	23	21	19	17	15	13	11	9	7	5	3	1
	○	○	○	○	○	○	●	○	○	○	○	○	○

Matrix Type B: MD vs. MIP + MJP, strategies together (T) from the point of view of a healthcare participant:

Funds to Healthcare	1	3	5	7	9	11	13	15	17	19	21	23	25
Funds to Social Care	7	8	9	10	11	12	13	14	15	16	17	18	19
	○	○	○	○	○	○	●	○	○	○	○	○	○

Matrix Type C: P vs. FAV (MIP + MD), strategies opposed (O) from the point of view of a healthcare participant:

Funds to Healthcare	16	17	18	19	20	21	22	23	24	25	26	27	28
Funds to Social Care	16	15	14	13	12	11	10	9	8	7	6	5	4
	○	○	○	○	○	○	●	○	○	○	○	○	○

Matrix Type C: P vs. FAV (MIP + MD), strategies together (T) from the point of view of a healthcare participant:

Funds to Healthcare	4	5	6	7	8	9	10	11	12	13	14	15	16
Funds to Social Care	28	27	26	25	24	23	22	21	20	19	18	17	16
	○	○	○	○	○	○	●	○	○	○	○	○	○

Table 7.4: Example of the Tajfel Allocation Matrices – Parity option selected

For example, if a healthcare participant is presented with a form of matrix A (as presented in the table above), the top row of numbers represent allocations that are made to the in-group category (healthcare), by contrast, the bottom row of numbers represent allocations that are made to the out-group category (social care).

Where a healthcare participant chooses to give 10 funds to their own group, on matrix A in table 7-5, they will have to consider giving 19 funding to social care. As part of the introduction to this exercise, both in writing and verbally before participants start the exercise, they are specifically instructed to pay attention to awards made to both the in-group and the out-group as they are only able to make one choice. Standard instructions for all participants were created and are available for reference in the appendix chapter seven.

By comparing each participant's response to each of the matrix options used in the study, study-specific 'pull scores' which represent the relative strengths of different resource allocation strategies were derived.

Following in the tradition of both (Bourhis et al., 1994; H Tajfel, Flament, Billig, & Bundy, 1971) this chapter will draw extensively on their design of the 'pull scores' particularly Bourhis (2014)[24] has been formative for the creation of this chapter.

"Consider matrix type A (strategies opposed), which measures the degree to which Participants are tempted to maximise in-group profit favouritism whereas at the same time this strategy is contrasted with the temptation to use maximum joint profit. In matrix type A, where allocations to the in-group are in the top row, a predominance of responses by, self-categorised, healthcare participants towards the left extreme suggests that Participants are discriminating in favour of their own group by employing the FAV strategy. Contrastingly, choices towards the right extreme of the same matrix are indicative of the influence of a maximum joint profit (MJP) strategy. Of interest to note, using the same matrix that option 7/25 represents the best maximum profit joint gain on this matrix because 32 (7+25) of funds can be gained by both categories of groups in this study. The opposing strategy would be the FAV strategy, which maximises in-

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[24] Through researchgate.net Richard Bourhis has been extremely supportive of this study and has been generous with the review of this particular chapter.

group profit (19/1) however, this comes at the cost of sacrificing 12 funds which would have been gained if the maximum joint profit strategy (MJP) had been employed (i.e. MJP(7+25)-FAV(19+1)=12). Using the together (T) version of matrix type A, the optimum points for FAV and MJP coincide at the extreme left column of the matrix for 'healthcare' participants. Therefore, choices towards the left extreme of matrix A strategies together indicate the joint influence of in-group favouritism (FAV) and maximum joint profit (MJP).

Likewise, matrix type B (strategies opposed) consists of MD vs. MIP + MJP and offers a healthcare participant the choice between maximum differentiation (MD) and a combination of maximum in-group profit (MIP) and maximum joint profit (MJP). 'In this case, the strongest option for maximum differentiation (MD) is the 7/1 choice in which a positive differential of 6 is achieved between the score awarded to the in-group and the out-group." (Bourhis et al. 1994 p.213)

However, note that such an MD choice is achieved at the cost of the MIP+MJP option, which in this case is 12 funds lost if this strategy is employed. They go on to state; "… it is clear that the MD strategy represents a differentiation strategy that in economic terms is not rational. Pitted as it is against a more rational combination of MIP and MJP, maximum differentiation (MD) is a discrimination strategy par excellence that offers a strong test of the need for inter-group differentiation postulated within social identity theory (Tajfel & Turner, 1986)." (Bourhis et al. 1994 p.219).

During the study the same numbers were used in the two versions of each matrix type (A, B, C) except that compared to strategies opposed (O), the strategies together (T) are simply reversed because the group categories are exchanged.

An example of completion is useful for clarification of the process. Suppose a participant has 'self-categorised' in chapter four of this dissertation as belonging to 'healthcare', their task is to distribute and allocate to their own group (healthcare) or to the out-group (social care). Note that as a 'self-categorised' member of the healthcare group, the participant only notionally allocates resources to themselves.

In the study, the participants are presented with numbers on the matrices with the top numbers being associated with their in-group and the bottom numbers being associated with their out-group in the first set of 3 matrices, after which their in-group category is switched to he bottom numbers to measure strategies together (T).

If we use the hypothetical responses represented in table 7.5, in the first of those responses the participant chose 15/9 meaning; the participant chose to award their 'in-group' with 15 and the 'out-group' with 9.

Again, participants are specifically instructed to take in to account both the 'healthcare' and 'social care' allocations when making a choice. Each point of the matrix has a value associated with it, in this case 'funding allocation' (which is specified in the standard instruction for this study, which, as aforementioned, is available in appendix for chapter seven).

Whilst comparing each participants' response to the series of matrices presented to them, pull scores, which represent relative strengths of a particular response, can be calculated.

Again, this design is wholly underpinned by, and therefore mirrors, the work Tajfel and Bourhis stipulated in their work (Tajfel, 1986) and (Bourhis, 1994).

A good example of calculating a 'pull score' is provided by (Bourhis, 1994); "Consider matrix type A (strategies opposed), which measures the degree to which Participants are tempted to maximise in-group favouritism when this strategy is pitted against the temptation to use maximum joint profit.

In matrix type A, where allocations to the in-group are in the top row, a predominance of responses by self-categorised members of the healthcare group toward the extreme left of the matrix suggests that participants are discriminating in favour of their own group by employing the FAV strategy.' Adopted and amended from page 213 in Bourhis (1994). Conversely, if participants select a choice towards the extreme right of the matrix, it suggests that these participants are in favour of a maximum joint profit (MJP) strategy. It is also useful to point out that on this specific example the matrix choice 7/25 represents the best maximum joint profit as this would allocate a total of 32 between the two groups, and would be considered to be the most economically rational.

In terms of administration, each of the matrices in table 9-4 were provided in the study, however, they are on a single display on an iPad[25], and participants

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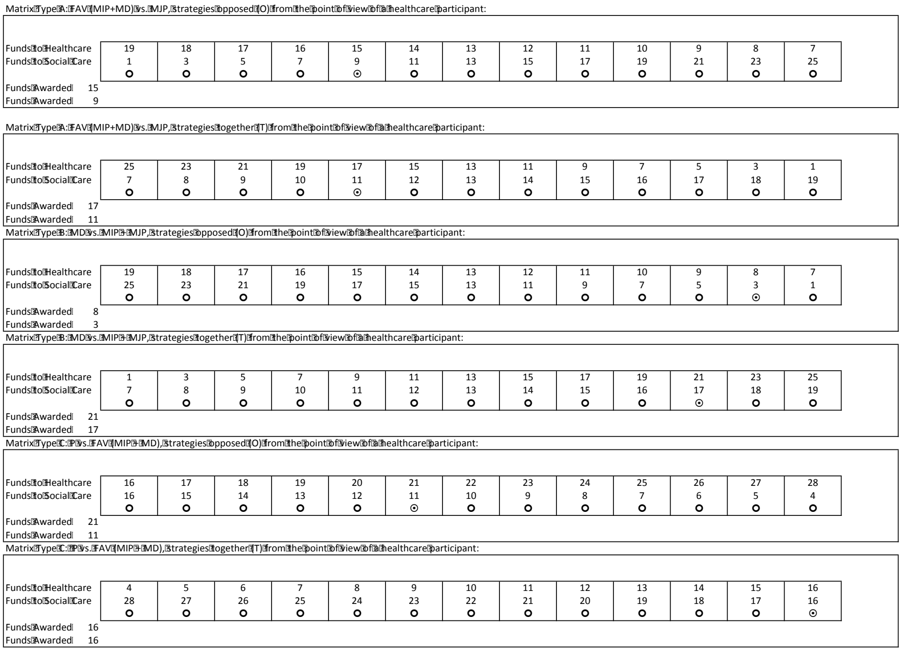
[25] iPad mini, first generation, 32GB, running iOS 7.01 using Question Pro online survey function for iPad. Further information on this software can be found at http://www.questionpro.com/mobile/survey-app-for-ipad.html

were asked to make a choice by selecting the relevant column and pressing 'continue' on the screen before they are presented with the next matrix.

For each page the same introduction is used at the top of the screen, and participants were requested to complete all of these matrices individually.

Depending on their response to the initial matrices, the researcher sometimes provides the same clarification during the latter part of this study, when the participants seemed confused about seemingly similar matrices.

The additional clarification, when requested, assured the participants to carry on competing the matrices with the ultimate aim to progress the study. It is important to note that the researcher could see the participants' selections in 'real-time' and tracks this on his MacBook Pro[26]. Therefore, enabling the researcher to better understand and contextualise the participants' answer to the question posed in study four B, the qualitative study, which follows this section of the study. For each matrix type, two pulls are calculated as per the standard protocol for this specific type of study. For example, in matrix type A, the pull of FAV on MJP and the pull of MJP on FAV are calculated using the strategies opposed (O) and the strategies together (T) version of the matrix. Taken together, the two version of the matrix types A, B, and C, allow of the measurement of six matrix distribution strategy pulls (amended from Bourhis et. al. 1994 p. 215).



Matrix Type A: FAV (MIP+MD) vs. MJP, strategies opposed (O) from the point of view of a healthcare participant:

Funds to Healthcare	19	18	17	16	15	14	13	12	11	10	9	8	7
Funds to Social Care	1	3	5	7	9	11	13	15	17	19	21	23	25
	○	○	○	○	●	○	○	○	○	○	○	○	○

Funds Awarded 15
Funds Awarded 9

Matrix Type A: FAV (MIP+MD) vs. MJP, strategies together (T) from the point of view of a healthcare participant:

Funds to Healthcare	25	23	21	19	17	15	13	11	9	7	5	3	1
Funds to Social Care	7	8	9	10	11	12	13	14	15	16	17	18	19
	○	○	○	○	●	○	○	○	○	○	○	○	○

Funds Awarded 17
Funds Awarded 11

Matrix Type B: MD vs. MIP + MJP, strategies opposed (O) from the point of view of a healthcare participant:

Funds to Healthcare	19	18	17	16	15	14	13	12	11	10	9	8	7
Funds to Social Care	25	23	21	19	17	15	13	11	9	7	5	3	1
	○	○	○	○	○	○	○	○	○	○	○	●	○

Funds Awarded 8
Funds Awarded 3

Matrix Type B: MD vs. MIP + MJP, strategies together (T) from the point of view of a healthcare participant:

Funds to Healthcare	1	3	5	7	9	11	13	15	17	19	21	23	25
Funds to Social Care	7	8	9	10	11	12	13	14	15	16	17	18	19
	○	○	○	○	○	○	○	○	○	○	●	○	○

Funds Awarded 21
Funds Awarded 17

Matrix Type C: P vs. FAV (MIP + MD), strategies opposed (O) from the point of view of a healthcare participant:

Funds to Healthcare	16	17	18	19	20	21	22	23	24	25	26	27	28
Funds to Social Care	16	15	14	13	12	11	10	9	8	7	6	5	4
	○	○	○	○	○	●	○	○	○	○	○	○	○

Funds Awarded 21
Funds Awarded 11

Matrix Type C: P vs. FAV (MIP + MD), strategies together (T) from the point of view of a healthcare participant:

Funds to Healthcare	4	5	6	7	8	9	10	11	12	13	14	15	16
Funds to Social Care	28	27	26	25	24	23	22	21	20	19	18	17	16
	○	○	○	○	○	○	○	○	○	○	○	○	●

Funds Awarded 16
Funds Awarded 16

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[26] Apple MacBook Pro running OS X 10.10.2, Macintosh SSD encrypted drive. The mirroring software used was provided by Squirrels LLC, further information is available at http://www.reflectorapp.com

Table 7-5 Example of Matrices presented in Random Order - Hypothetical

The rationale and justification of using the 'pull score' methodology to examine responses is that such scores are considered to enable the assessment of the unconfounded influence of a variety of distribution strategies, which are set out in the previous section. With each matrix consisting of 13 columns, each associated pull has a theoretical range from -12 to +12, with negative scores considered to be important in this study as it is anticipated that participants who self-categorised themselves as belonging to the 'social care' group will employ this strategy because of an implied out-group favouritism, denoted as OF (which would be represented with a –FAV and –MD score).

The example of matrix type A in table 7.5 the participant elected 15/9, this means that, if the zero score is set at MJP (in this case 7/25), and one calculates the columns from this point, the rank score associated with this selection is 8 (i.e. 8 columns away from point zero).

If the temptation of FAV on MJP (in this example) had been non-existent to the participants, it is predicted that they would have opted to elect 7/25 (i.e. the Maximum Joint Profit). The process of calculating the other matrices (as outlined in table 9-5) will be exactly the same in principle, to calculate the distance (in columns) between point zero (i.e. the point where the allocation FAV strategy and the pitted against strategy coincide) and the actual selection

Condition: X Subject Reference: A1

Matrix Type	*Strategies Together (T)*	*Strategies Opposed (O)*	*Pull Scores*
Type A: FAV (MIP+MD) vs. MJP	Pull of FAV on MJP Group HC: 24 .. 1 Group SC: 7 .. 19 * Zero point at 25/7 Matrix chosen: 17/11 Rank score (T) = 4	Pull of FAV on MJP Group HC: 19 .. 7 Group SC: 1 .. 25 * Zero point at 7/25 Matrix chosen: 15/9 Rank score (O) = 8	Pull of FAV on MJP: 4 O T = 8 4 = 4 Pull of MJP on FAV: 0 (12 O) (T) = (12 8) (4) = 0
Type B: MD vs. MIP + MJP	Pull of MD on MIP + MJP Group HC: 1 .. 25 Group SC: 7 .. 19 * Zero point at 25/19 Matrix chosen: 21/17 Rank score (T) = 2	Pull of MD on MIP + MJP Group HC: 19 .. 7 Group SC: 25 .. 1 * Zero point at 19/25 Matrix chosen: 8/3 Rank score (O) = 11	Pull of FAV on MJP: 4 O T = 11 2 = 9 Pull of MIP + MJP on MD: 1 (12 O) (T) = (12 11) (2) = 1
Type C: P vs. FAV (MIP + MD)	Pull of P on FAV Group HC: 4 .. 16 Group SC: 28 .. 16 * Zero point at 16/16 Matrix chosen: 16/16 Rank score (T) = 0	Pull of P on FAV Group HC: 16 .. 28 Group SC: 16 .. 4 * Zero point at 28/4 Matrix chosen: 21/11 Rank score (O) = 7	Pull of P on FAV: 7 O T = 7 0 = 7 Pull of FAV on P: 5 (12 O) (T) = (12 7) (0) = 0

made by the participants.

Figure 7.6: Scoring Sheet for Calculating Pull Scores from the Tajfel Matrices: Example Provided (Amended from Bourhis, 1994)

According to Bourhis (1994) “two sets of statistical analyses are usually conducted to examine the group pull scores on the Tajfel matrices:

(a) matrix strategy analyses within each treatment condition (in this case how the participants’ self-categorised vs. the allocation strategy employed) and

(b) matrix strategy analyses between treatment conditions (Sachdev & Bourhis, 1991).

(A) the within treatment condition analysis of the pull scores is of more immediate concern because this analysis is the one required to determine if pull scores obtained from participants within each treatment condition are significantly different from zero use on the +12 to -12 matrix pull scales. It is clear that one must first determine if participants actually used any of the six strategy pulls (P on FAV, MD on MIP +MJP, FAV on MJP etc.) before determining whether differential use of the strategies were made by groups of participants during the whole study. The usual analysis is to apply a Wilcoxon Matched Pairs Test on the difference in scores between opposed (O) and together (T) rank scores of each matrix type, according to Turner (1983).

In the example of table 7.6 the significance of group pull scores of FAV on MJP is also examined by conducting a ANOVA on the difference in score between opposed and together rank scores of matrix type A (O-T). Conversely, the significance of group pull scores of the obverse pull, MJP on FAV, is determined by conducting a ANOVA on the difference in scores between the (12 – opposed) and together rank scores of matrix type A: (12 – O) – T.

Similar ANOVAs are conducted to test the significance of the pull scores obtained from the remaining four strategies (MD on MIP+MJP; MIP + MJP on MD; P on FAV, and FAV on P) (adopted from Sachdev & Bourhis (1991) with the difference of statistical technique, in the original a Wilcoxon Matched-Pairs Test was conducted, whereas, in this study we opted for a ANOVA analysis).

(B) The between treatment condition analyses of the six pull matrix scores in this study involves parametric analysis (MANOVA) that is specific to this study design. In this study it is assumed that, like in Turner (1980), pull scores are distributed normally in this analysis.

The previous section clearly outlined the use of well established model designs, combined with modern technology, it is deemed a comprehensive research study which will enable conclusions being drawn using relevant statistical analysis. It is anticipated that this study will provide useful insight into the extent to which inter-group discrimination and in-group (or out-group) favouritism is displayed by the participants.

This study follows on naturally from the previous chapter and adds value to the overall dissertation by employing an unusual addition to the classic study (in the form of new technology).

Whilst the Tajfel study within this dissertation aims provides insights into what resource allocation strategy the participants chose, the additional qualitative question will aim to provide further understanding as to 'why' participants allocated resources in the way they did.

Broadly, this addition follows on immediately after the previous section on the iPad, and participants are presented with a blank page with in the middle of the screen a question which reads 'can you talk the researcher through the rationale you employed whilst completing the previous section?' The researcher then also verbally confirms the question, and participants are requested to 'justify' or 'reason' through their previous responses.

These responses are recorded on the researcher's laptop, and coded using a coding mechanism/tree similar to that employed in the previous section. The recording is transcribed and analysed using Dedoose[27], which is a mixed methods research tool.

7.4 Study Outcome

The findings of this study will be reported in two main sections, covering both quantitative (7.4) and qualitative (7.5) sections of the data.

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[27] Further information on Dedoose is available at www.dedoose.com

7.4.1 Quantitative Data Interpretation

Table 7.6 provides a good overview of all relevant pull scores as they are to be calculated according to methodological convention. The difference between the raw pulls scores and converted pull scores is mainly down to the allocation strategies. With the raw score indicating overall allocation, whilst the converted scores provide an overview of relative application of resource allocation strategy (for example the relative pull of FAV on MJP).

Pull Score Overview					
Raw Score Analysis					
Test Type	Strategy	HC	SC	Est. Mean	t-Test*
A	Score 1 (O)	4.452	7.156	5.825	< 0.001
	Score 2 (T)	8.097	4.031	6.032	< 0.001
B	Score 3 (O)	7.323	4.125	5.698	< 0.001
	Score 4 (T)	4.290	7.438	5.889	< 0.001
C	Score 5 (O)	3.097	8.469	5.825	< 0.001
	Score 6 (T)	8.613	2.625	5.571	< 0.001
Converted Pull Score Analysis					
Test Type	Strategy	HC	SC	Est. Mean	t-Test*
A	Pull of FAV (MIP + MD) on MJP	-3.645	3.125	-0.206	< 0.001
	Pull of MJP on FAV (MIP + MD)	-0.548	0.812	0.143	< 0.001
B	Pull of MD on MIP + MJP	-3.032	3.312	0.190	< 0.001
	Pull of MIP + MJP on MD	0.387	0.438	0.413	0.868
C	Pull of P on FAV (MIP + MD)	-5.516	5.844	0.254	< 0.001
	Pull of FAV (MIP + MD) on P	0.290	0.906	0.603	0.045

*= at 95% CI (after Bourhis, Sachdev, Gagnon, 1994 p. 215 used with permission)

Table 7.6: Pull Score Overview

The t-Tests performed on the raw mean allocation strategies between health and social care participants indicate that at mostly participants do not respond in the same way, as most of the tests indicate a statistically significant difference in allocation strategies across test types apart from pull of MIP+MJP on MD. Taking these results line by line would be most beneficial so that readers get a better understanding of these results.

7.4.1.1 Matrix Type A – Data Interpretation

Matrix type A compares ingroup favouritism FAV (MIP + MD) with maximum joint profit. In the two versions of matrix type A HC participants registered a converted pull score of -3.645 on FAV (ingroup favouritism) on MJP (maximum joint profit), remember negative scores on this scale indicate an out-group favouritism. In addition to this on the second version this out-group favouritism is maintained, with a score of -0.548, albeit diminished, nonetheless, this still indicates an out-group favouritism strategy. This means that HC participants indicate a significant out-group favouritism (OF) (i.e. they show compassion in terms of resource allocation to the SC group).

When compared to SC participants, this result is rather striking. SC participants indicate clear ingroup favouritism strategy on the (pull of FAV on MJP) first version of this matrix. Indeed, on the second version of this matrix the pull of MJP on FAV is diminished, yet still indicates a clear ingroup favouritism strategy. To compare mean pull scores a t-Test was performed, which indicated that (across the sample) the sector to which people belonged (i.e. HC or SC) was the most significant variable (t = <0.001).

Conclusion from this matrix type is that HC participants indicate a significant level of out-group favouritism (OF) which is higher than anticipated, whereas SC participants indicate a level of in-group favouritism (FAV) which is more in line with expectations following on from the original (Turner, Brown, & Tajfel, 1979) and subsequent (Bourhis et al., 1994; Vaughan et al., 1981) experiments.

We attribute this to the preceding studies which ‘heightened’ political awareness in HC participants. In turn we postulate that because of the context of the previous (immediately preceding) studies HC participants feel the need to show ‘paternalistic benevolence’ to the SC category to justify earlier responses, this behaviour also presented during the qualitative section of this study which will be further explored in section 7.5.

7.4.1.2 Matrix Type B – Data Interpretation

Matrix type B compares maximum difference in favour of the ingroup (MD) with a combination of absolute ingroup profit (MIP) and maximum joint profit (MJP). The pull scores indicate that, when presented with this matrix HC participants also selected to show a significant level of out-group favouritism (-3.032) by opting to allocate a higher amount of funding to SC than SC participants when given the same choice. When compared to SC pull scores (3.312), this not only indicates a statistically significant (p = < 0.001) difference in allocation, it also confirms the findings from the previous matrix.

In addition to this, when measuring the relative pull of maximum ingroup group profit + maximum joint profit on the strategy of maximum difference, the scores indicate a slight in-group favouritism in both groups equally (HC; 0.387, SC; 0.438, p = 0.868 i.e. no significance difference in the way this strategy was employed). This also suggests that when presented with this range of opportunities, both sets of participants indicated a significantly reduced level of out-group favouritism.

This is could be due to the fact that on this matrix type the MD strategy is pitted against MIP+MJP, which is a particularly hard strategy. With the MD strategy being the most discriminatory and 'harsh', and a high score is generally accepted to be "an important strategy that typifies discrimination against the out-group. This is the case because participants are sacrificing maximum ingroup and joint profit for the sake of maximising in their favour the difference of funds between their own and the out-group." (Bourhis et al. 1994 p.226).

As such we interpret these findings as clearly indicating a) significant out-group favouritism (OF) by HC participants, b) corroborating the findings of matrix type A, and c) significant ingroup favouritism (FAV strategy) by SC participants.

7.4.1.3 Matrix Type C – Data Interpretation

Matrix type C compares parity (P) with ingroup favouritism (FAV). "The parity strategy in matrix type C represents an occasion to choose parity when it is pitted against the option of choosing ingroup favouritism (FAV = MIP+MJP)." (Bourhis et al. 1994 p. 214). As with the other matrices, HC participants strongly indicate the desire to employ a out-group favouritism strategy with a score of -5.516. In contrast SC participants chose to opt for a more ingroup favouritism strategy with a pull score of 5.844.

7.4.1.4 Summary of Quantitative Data

In summary, combining the three different matrix results, the conclusions and inferences which can be drawn from this part of the study are as follows.

Firstly, pull scores are consistent across all three different matrix types for both HC and SC participants. These results indicate a benevolent strategy on behalf of HC participants, which was not expected, and a stance of in-group favouritism from SC participants. This result is surprising, as most SC participants and anecdotal evidence from interactions with those employed in SC, would suggest a more moderate (if any) out-group favouritism.

Secondly in all, but one (the maximum differentiation strategy in matrix B –strategies together-), the responses are consistent when strategies are opposed, HC and SC participants indicate a stronger preference for the relevant pull of strategy than when theories are together.

A summary of conclusions by matrix will be useful. It can be concluded from matrix type A choices by HC participants were determined, in a very highly significant manner, by giving more consideration in terms of sharing profit with the out-group and the joint profit motive had no significant effect on these choices. However, the same matrix (A) was completed very differently by SC participants. Indeed, they indicate a significant ingroup favouritism when compared with their HC counterparts.

The result from matrix type B, where MD is compared with MJP and MIP combined, the maximum difference (MD) strategy alone exerts not as much of a pull as in the original experiment by (Henri Tajfel et al. 1971 p.169) for HC participants, however, for SC participants the choice of MD is much more significant. This is relevant because it indicates that SC participants are less likely to share resources or to collaborate once they have access to additional resources than HC participants' choices indicate.

The addition of matrix type C, which was added in later experiments carried out by (Turner, 1978); (Turner, Brown, Tajfel, 1979); and were refined in (Brown, et. al., 1980), (Turner, 1983) and (Bourhis and Sachdev, 1986), the temptation to select the parity option was pitted against the temptation to select an option more favourable to one's own ingroup. As with the other two matrices, the same trend is observed, with HC participants indicating a higher level of out-group favouritism by selecting generally for options closer to that of P on the actual matrix. In the same vain, like on the other matrices SC participants tend to select options which indicate ingroup favouritism.

Generally then, the main finding, which is confirmed on all the three matrices, is clear; in a situation where participants do not interact direct during the study with members of their out-group, there is significantly different way participants elect to respond to these matrices. As this study is not strictly a minimal group paradigm study (as participants were subjected to self-categorisation early during the interview), yet the results are striking and unambiguous. Broadly, HC participants elect a strong out-group favouritism strategy over the traditionally expected ingroup favouritism bias. There may be very many contributing factors which would have impacted, however, we posit that the 'politically correct' way to answer has been quickly assessed by HC participants. Whereas, SC participants' results conformed more with the traditionally expected ingroup favouritism strategy albeit that this was only a slight ingroup favouritism.

Finally, from the quantitative analysis carried out above, we can point out that parity is an influential strategy for SC participants (pull of P on FAV = 5.8) but not for HC participants (pull of P on FAV = -5.5). In addition, these results show that SC participants consistently discriminated against members of the out-group (HC). They did so using two in-group favouritism strategies (FAV on P = 0.906 considered slight, FAV on MJP = 3.312 considered significant), however, they did also marginally utilise the maximum differentiation strategy (MD on MIP + MJP = 0.413). In contrast to this, HC participants were not only a lot less interested in the parity strategy (P on FAV = 0.290) but they indicated a consistent pattern for out-group favouritism as is evident from the negative pull scores of (FAV on MJP = -3.03 considered significant) and (FAV on P = 0.290 considered slight).

From this analysis, we can conclude that whereas SC participants indicate a slight discrimination towards out-group members, HC participants consistently opted for strategies which indicate out-group favouritism and maximum differentiation in favour of the out-group (in this case SC). "The usefulness of presenting participants with the full range of Tajfel matrices is evident when one considers that although HC and SC responses did not differ greatly on the parity strategy, they did differ a great deal on the ingroup favouritism and maximum differentiation strategies." Amended and adopted from (Bourhis et al. 1994, p. 221) with permission.

7.4.2 Qualitative Data Interpretation

Similar to the analysis done in chapter 6, this section will provide an overview of the emergent themes which are derived from analysing the interview data collected immediately following the Tajfel matrix study. In order to provide an overview of the emergent themes from the qualitative data two or three quotes will be provided from participants which represent the emergent theme well.

7.4.2.1 Theme: All Are Equal But Some Need More Equality Than Others

The first theme identified from the interviews is that HC participant generally indicate a 'paternalistic benevolence' towards the out-group, in this case the SC sector (or group). This behaviour seems to come through really well in the first extract (7.1) below.

Extract 7.1 – Equality is required but not bestowed in this sample;

"INT: Thanks, so again this is another clarifying question; Can you just talk me through how you just gone about divvying the funding up between the two sectors?
P[28]: Certainly, erm, I see the two areas as quite closely linked, erm, fundamentally, I believe one has a close effect on the other. Erm, if you fall short in one area the other side picks up the 'slack' and vice versa. Erm, I see the healthcare as slightly more primary than social care, I think that is an area that, if I was looking at a person that would be the area I would fix first, before looking at the social care aspect. Get the health right, and then sort everything else out in the world, not that one is vastly more important than the other one, it is still a very close thing, as I see it, but again, a slight, [pause] again ***I think it was pretty equal with my divisions, but slight favour of healthcare over social care, so that is it primary one."***

The above is a very typical response for HC participants. Generally, HC participants indicate a willingness to allocate greater proportion of the funding to SC than anticipated, as confirmed in the previous section. Yet, they do (slightly or marginally) favour HC over social care as the above extract (7.1) indicates. This seems to contrast somewhat with the way that HC participants responded to the Tajfel matrices in the previous part of this study.

The next extract (7.2, overleaf) provides another example of this behaviour. Where the Tajfel matrix return for this participant indicates a slight out-group favouritism, the qualitative follow up question provides further insight into some of the rationale employed by HC participants.

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[28] HC sector, a 32 year old male on agenda for change band 8 (~£47k salary) his IAT D score was -0.01 which indicate no automatic preference for either HC or SC – empathy levels indicated average for the sample

Extract 7.2:

> *P[29]: I am not sure about the numbers on here. . . I am not sure what it is asking me. . .*
> *INT: Ok, so if, you look at the first set of numbers; In this first set on the left hand side, you would allocate nineteen to healthcare and one to social care. . .*
> *P: So it kind of goes from being. . . the numbers just don't add up. . .*
> *INT: No that's right, there is a reason for that. . .*
> *P: Alright, ok, [pause] I am getting really torn again.. . . [pause, completes the first matrix]*
> *INT: Ok, just talk me through your thoughts. . .*
> *P: Because [pause] while a lot of the care is done in the social care sector rather than the NHS a lot of the interventions that are needed in the NHS may be more expensive in the NHS, than they would be to provide in a social care setting? If you need a care worker to go into someone's house three or four times a day to provide personal care that is likely to cost a lot less than, the procedures that they may need to have in the hospital. but on the other hand, that would then need to be done on a more regular on going basis so therefore the funding will still need to be there. . .*
> *P: [when faced with the next Tajfel matrix asks]; So is this giving me another option?*
> *INT: So, yes it is a the same kind of question, different set of numbers. . .*
> *P: Ok, thanks. . .*
> *[P completes the final Tajfel matrix]*
> *INT: Ok, so this question [on the screen now] asks you to reflect on the last series of questions. . .*
> *P: Well, in essence it is the same argument. . . the interventions may be more expensive in the NHS, I am finding this quite a challenge actually, to answer that. . . I suppose because I don't know what budgets are in place for either healthcare or social care in the first place, but that is a different challenge [pause] as I said the interventions in the social sector may not be as expensive but are very important to ensure that people don't go into hospital inappropriately. Errm, but those interventions tend to go on for a lot longer than hospital interventions, people should not stay in hospital long. Does that make sense**? So, I have kind of gone down the middle almost, and I am kind of biased towards the NHS** as interventions are more expensive in the NHS than in the community setting.*

This participant confirms her desire to prefer HC over SC, however, the strategy mostly supported as indicated by the Tajfel matrix scores for this individual is parity (P) with a secondary preference for maximum joint profit (MJP) in favour of the out-group.

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[29] HC sector, a 38 year old female on agenda for change band 7 (~£37k salary) her IAT D score was 0.04 which indicate no automatic preference for either HC or SC – empathy levels indicated higher than average for the sample

These extracts exemplify the behaviour indicated by HC participants, which can be summarised as; paternalistic benevolence, which confirms findings in both chapters five and six of this dissertation. Part of the rationale for attributing this behaviour is that the HC sector currently receives the majority of publicly available funds (i.e. general taxation etc.). Therefore, HC participants approach this exercise from a position of relative 'strength' over the SC participants.

Further to the HC analysis, **extract 7.3** provides a good representation of SC participants' behaviour:

> *"INT: So, having just completed that exercise, I would like you to talk me through your rationale for completing the matrices in the way you did, is that okay?*
> *P[30]: Sure, my thought process was, if you have a larger resource in social care, and you front end social care, you can prevent a lot of admissions in HC. So, give a larger proportion of funding to SC so you can do a lot more, of the preventative activity, and that should, hopefully, ease the pressure on the HC system. But you should still ensure that the HC system is adequately funded.*
> *INT: Thank you for answering that question, that is great, as I said there is no right or wrong answer to this question, do you have anything else you would like to share?*
> *P: What I was trying to do with the figures, was the ratio, errm, I was trying to keep the ratio the same, but that was not always possible. So I tried to keep a balance, but when this was not possible,* ***I tried to give a little more to SC rather than HC****, as they already have quite a lot of funding, comparatively."*

The quote highlighted in extract 7.3 indicates a clear behavioural strategy, which seems that of slight ingroup favouritism. Again, the converse rationale may have been applied to the approach to the Tajfel matrices when comparing results to HC participants' responses. Whereas HC participants approached this exercise from a relative position of strength, SC participants, in turn, approach from a relative position of weakness. This may account for part of their strategy selection being comparatively discriminatory in nature.

This links to wider anecdotal evidence[31] which seems to suggest that individuals employed in the SC sector generally see integration with HC as an

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[30] SC sector, a 45 year old female (~£17k.5 salary) her IAT D score was 0.130 which just below the 'breakpoint' for a slight automatic preference for either HC or SC – empathy levels indicated lower than average for the sample.

[31] Anecdotal evidence is considered dubious support of a generalized claim; it is, however, generally deemed within the scope of scientific method for claims regarding particular instances which are applicable in the specific context of this study.

opportunity, whereas those employed in HC generally seem less interested at best, and resistant at worst.

A final example of the ‘some need to be more equal than others’ is provided by **extract 7.4**;

> *“INT: So, could you please talk me through how you made the decision to allocate resource between HC and SC groups?*
> *P: [slight pause] I think I chose to provide more funding to SC compared to HC just because there are just some things that they (HC sector) just do not need to do. Including things that, errm, people just get on the NHS, because it is free. Like, plastic surgery when you really do not need it, something like that, just like, they could put more money into SC rather than give it to people that don’t necessarily need it.”*

There is a perception that HC receives funding and can allocate this to what is perceived by this participant as ‘trivial’ causes. SC spends money on vital areas and only provides care when it is really needed and required, and provides better value for money than HC does. There is an underlying assumption here that, if funding allocations where to be more equal, that would be deemed as more fair by SC participants.

7.5 Discussion

During this study HC participants indicated strong out-group favouritism preference, which is confirmed in both quantitative-, and corroborated by the qualitative data. At the same time SC participants have indicated a strong ingroup favouritism preference when responding to the same tasks. The HC finding was not expected to be as strong as data seems to indicate. The fact that this is not a traditional minimal group paradigm study (because of the self-categorisation), and perhaps the separate previous studies which immediately preceded this one, may have impacted the result of the study, by priming HC participants to be indicate more ‘political awareness’ in their reponses.

Nonetheless, it is important to note that in the context of this dissertation, which has health and social care integration as its central focal point, HC participants are explicitly indicating a willingness to collaborate with SC participants. This central finding is in line with the previous findings.

So far in this dissertation, HC participants have indicated a higher level of empathic concern, a lower level of cultural elitism and a higher level of perspective taking when compared to the responses by SC participants in study 2 (chapter 5). In addition to this, HC participants have also attributed a higher level of social status to HC related job roles, an attitude that SC participants also shared in study 3 (chapter 6).

However, in spite of all of these findings, the question still remains, why does it seem that integration between these two sectors so hard to achieve successfully? With HC receiving the majority of (public) funding, enjoying the higher social status, indicating a higher likelihood of reaching out to those individuals from different sectors, and indicating a willingness to allocate more funding in the Tajfel matrix study (this chapter) to SC comparatively than SC participants are willing to share with HC, why is integration simply not happening?

At this point in the dissertation, this question seems more relevant than at any preceding stage. With those 'in power' indicating a 'willingness' to make integration work, why is it not widely observable at scale. All HC participants are indicating the right signals, and behaviour. Yet, it is not readily (and widely) observable and certainly not happening at scale, as is required in order to make NHS England's five year forward view a successful reality.

In line with the 'goal directed' nature which permeates this dissertation, a final study is needed to provide additional insight. Indeed, it is the gap between saying and doing that needs to be assessed. So far, all the HC participants 'say the right things' explicitly. What participants' explicit beliefs having been reported thus far in the previous studies.

A note on the methodological implications, a few participants wanted to 'go back' to see their responses. We recommend building a summary function into subsequent studies to report back to participants at the end of a study, which uses the Tajfel matrices in a similar way as we have done in this chapter, when they completed the matrices. Perhaps with additional programming, the pull scores could be calculated automatically, with a more 'generic/summarised' outcome communicated to the participants immediately following the exercise. Such a methodological improvement could enhance the reflective states of participants, and validate their preferences by contrasting these with the results from the Tajfel matrices.

As aforementioned, this dissertation is mainly 'goal directed' in nature, and the design of the research methods to further understand the phenomena that were examined, leads to the distinction between ‘saying and doing’ which resonated with us and within the social psychological literature in the ‘explicit and implicit’ behaviour and preferences.

In the next chapter we will examine participants’ implicitly held beliefs, to derive further indications as to the possible barriers which prevent making complex organisational integration between health and social care a success at scale.

8

Study Five – Implicit Association Study

8.1 Introduction

Implicit attitude associations simply put are the opposite of explicit attitude associations. Within the realm of cognitive social psychology, these two concepts are inextricably linked in theory. This chapter reviews the relevant literature on the implicit cognition and, in addition, reviews the relevant methods that were used to derive the theory which underpins the implicit association test.

8.2 Relevant Literature

Generally, explicit attitudes come to the fore of our thoughts only when we are confronted with an object or issue, this is when one becomes aware of those attitudes. However, sometimes it is not just this attitude that is brought to mind, indeed other associated attitudes play a (at times significant) role, this insight is what social psychologists have found during several studies. (Greenwald and Hamilton Krieger, 2006) provide a useful guide; 'A belief is explicit if it is consciously endorsed. An intention to act is conscious if the actor is aware of taking an action for a particular reason […] In contrast, the science of implicit cognition suggests that actors do not always have conscious, intentional control over the process of social perception, impression formation, and judgement that motivate their actions.' Most significantly this phenomena is referred to as 'implicit cognition'. Creating this implicit-explicit distinction in the way human memory operates (see Roediger, (1990), Schacter et al., (1989) for a discussion) Greenwald and Banaji proposed a more general distinction for implicit cognition.

Defining an implicit construct as; "the introspectively unidentified (or inaccurately identified) trace of past experience that mediates R" (see also Nosek et al., 2007) where they refer to R as the ‘category of responses that are assumed to be influenced by the construct in question.’ (Greenwald and Banaji, 1995) In addition, Greenwald et al argued that this general definition could be applied to some of social psychology's most central tenets; attitudes, stereotypes, and self-esteem. Furthermore, they noted that implicit cognition could reveal associative information that individuals were either unwilling or unable to report. Therefore, they suggest that implicit cognition could reveal traces of past experience that individuals may explicitly reject because it conflicts with values and or beliefs, or may avoid revealing because the expression could have negative social consequences. Moreover, implicit cognition can reveal information that is not available to introspective access even if individuals were motivated to retrieve and express it (Wilson et al., 2000). Information which is stored in such a way, is often considered simply unreachable in the same way that memories are sometimes unreachable, not just in amnesic patients, indeed, this is applicable to all individuals, regardless of race, social status, and health.

For many concepts and constructs such as memory, attitudes, stereotypes, self-concept, self-esteem, personality, and knowledge, the implicit-explicit taxonomy has not just helped to organise existing theory and empirical evidence, but has also broadened the construct beyond introspective limits. For example, while few definitions of attitude mentioned introspective access as a necessary feature, until the 1980s attitude measurement largely proceeded as if the very definition of attitude relied on an assumption that attitudes were consciously available (Greenwald and Banaji, 1995).

Traditionally most approaches to elicit participants' attitude and behaviour use explicit methods, such as surveys or interviews, but are these are all predicated on the assumption that participants are actually able to understand these attitudes and behaviours, and whether they are willing to share these, given the potential social implications and expectations that are placed on participants in the context of the study. This implicit method has been added to the overall study with the objective of creating understanding and the ability to compare the traditional methods used in the earlier part of the study, which are essentially explicit in nature, with the implicit results of this part of the study.

'Implicit measures based on response latencies infer attitudes from the impact that a group-related stimulus has on the speed with which a participant can made judgements. To date, the two most frequently used measures (or methods) using this approach are the priming measures and the Implicit Association Test (IAT).' (Dovidio, 2013. p. 49)

Evaluative Priming (EP) is based on a paradigm in which two stimuli, a prime followed by a target, are presented on a computer screen in rapid succession. Participants are requested to classify the target stimuli as fast as possible based on how they have evaluated the construct. With the magnitude of the measured priming effect serving as an indication of the participants' underlying evaluation of the out-group, therefore, providing insight into the extent to which participants are 'prejudiced' towards other groups. However, (Teige-Mocigemba & Klauer, 2008) noted that responses to EP can be invalidated by strategic responses to the test by participants, providing the socially more acceptable answer rather than the anticipated 'untainted' implicitly held beliefs.

The resulting ambiguity around the EP method, which is reflected in a relatively low statistically reliability of scores (Banse, 2001; Cameron et al, 2000), combined with the afore mentioned 'short falls' outlined in other studies, together with less of a 'fit' methodologically with the research objective of this study, made the choice for the Implicit Association Test a more obvious one, albeit, the IAT is not without failures either, and will be reviewed in the next section.

Ever since Greenwald, McGhee, and Schwartz (1998) published the original theoretical framework which laid the foundation for the IAT, this method has become the most widely used to measure (or elicit) implicit attitudes from participants in social psychological studies. Essentially, the administration of the measure involves a computer based response-conflict paradigm (Dovidio, 213) 'in which two alternative categorisation stimuli are pitted against one another. Participants classify two sets of target groups (i.e. healthcare and social care) and a second target group is made up of positive and negative constructs (i.e. good, bad).

Further procedure as employed during this study will be extensively described in the subsequent chapters. However, it is important to state that the IAT is not immune to strategic responses, however, studies that have shown that strategic responses can influence the outcome of IAT scores, have instructed the participants to deliberately do so (see Fiedler & Bluemke, 2005; Steffens, 2004 for examples). Importantly, participants in this study were neither primed, nor instructed on how to respond to the IAT with which they were confronted during the study. Therefore, the strategic responses (if any) are not expected to impact on the statistical veracity of the findings.

Problems with the IAT, Arkes and Tetlock (2004) and Levitin (2013). Confounding factors; target familiarity, task difficulty, complementarity assumption (negative vs. 'less favourable'; positive vs. 'more favourable'), associations vs. attitudes. Construct validity: predict external criterion, relevant group differences. Significant correlations show validity and non-significant correlations show dissociation. Correlations using IAT are usually significant, increase with importance, decrease with 'social sensitivity'.

Greenwald and Banaji's claim as to the validity of the IAT would need to be evaluated with caution; as James (1890) described; 'every event has a psychological explanation, and the psychologist's explanation for this event occurring is the only right one.' Indeed, James' useful critique was not directed at the IAT specifically (the concept was not even arrived at, at that time) nevertheless, it is an important challenge was kept in mind whilst creating the overall research design of this doctoral research project. For further detail about the research design used in this project, please see chapter 7.

Therefore, it is important to note that there is no perfect tool to perform the task at hand; to get an insight into implicit cognition. In addition, implicit bias, is a new relatively new field within psychology, this is the reason that the IAT was not used as the only research method in this project; rather it is part of the whole research design, which consists of three sub-studies, and the IAT is added into this process to create insight into implicit thoughts and behaviours of participants, with the specific objective to compliment the two earlier studies, which serve to elicit explicitly held behaviours and attitudes towards the same concept. The critique of the IAT is somewhat mitigated addition of the two complimentary studies which together comprise the research outlined in this dissertation.

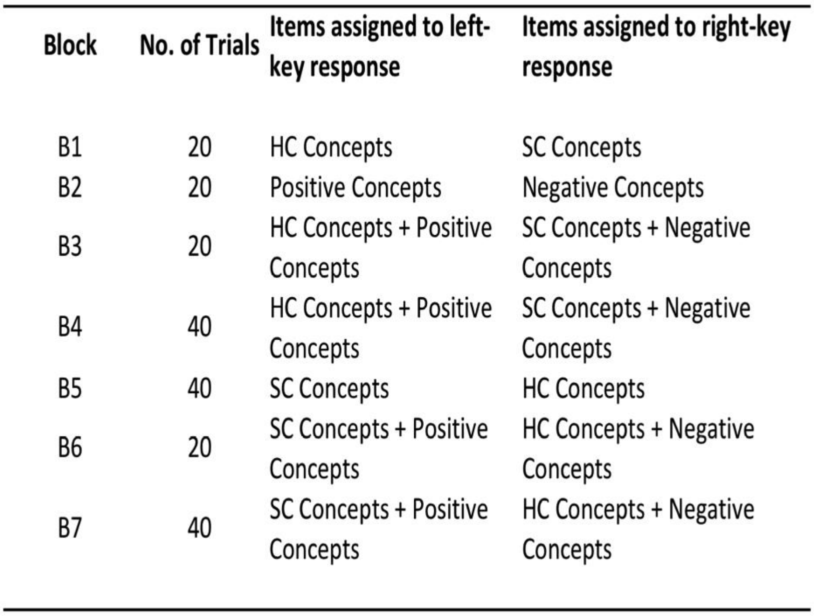
8.3 Study Design

The second part of this chapter will outline how implicit associations that participant hold and this will be contrasted to the findings that were gathered in the preceding studies. Even though there appears to be no direct or obvious 'link' between the explicit concepts in the earlier studies, this chapter will outline how the concepts were derived, and how they link back to the previous studies.

The focus of this section is the Implicit Association Test (IAT) (Greenwald et al., 1998). Since its initial publication by Greenwald in 1998, the IAT has been applied in various academic disciplines such as social psychology, cognitive psychology (Fazio and Olson, 2003), clinical psychology, developmental psychology (Baron and Banaji, 2006), neuro-sciences (Phelps et al., 2000), and health psychology (Teachman et al., 2003).

As a general introduction, the IAT is a method for indirectly measuring the strength of associations among concepts. The IAT task requires sorting of stimulus exemplars from four concepts using just two response options. Each of these response options is assigned to two of the concepts. The logic that underpins the IAT is that this sorting task should be easier when the two concepts that share a response are strongly associated than when they are weakly associated.

Table 8.1 shows a sequence of blocks in the Implicit Association Test Measuring HC/SC bias evaluations.



Block	No. of Trials	Items assigned to left-key response	Items assigned to right-key response
B1	20	HC Concepts	SC Concepts
B2	20	Positive Concepts	Negative Concepts
B3	20	HC Concepts + Positive Concepts	SC Concepts + Negative Concepts
B4	40	HC Concepts + Positive Concepts	SC Concepts + Negative Concepts
B5	40	SC Concepts	HC Concepts
B6	20	SC Concepts + Positive Concepts	HC Concepts + Negative Concepts
B7	40	SC Concepts + Positive Concepts	HC Concepts + Negative Concepts

Table 8.1: Assessment Block Sequence of IAT

The above table shows a schematic representation of the IAT which was used in the this part of the study. This design is in line with a typical IAT for the assessment of strengths between categories of Healthcare (HC above) and Social Care (SC above) and attributes of positive and negative constructs. The IAT consists of seven phases, some of which are practice tasks to ensure participant are fully acquainted with the stimuli and the process of sorting that is required from them.

The critical phases of the IAT involve simultaneous sorting of stimuli that represent four concepts (HC, SC, positive, negative) with two response options. In one critical phase (B3 and B4 in the above table) items representing healthcare and positive (e.g. health care and concepts such as; good, outstanding, brilliant) receive one response, and items representing the concepts social care and negative (e.g. social care and words such as bad, poor, dreadful) receive the alternate response.

In the second critical phase, (B6 and B7 in this case), items representing the concepts social care and positive are sorted with one response and items representing healthcare and negative are sorted with the alternative response. For participants who possess stronger associations of positive evaluation with social care compared to healthcare the second sorting task is anticipated to be much more straightforward than the first one.

In addition, and by extension of this logic, participants who possess stronger associations of positive evaluations with healthcare compared to social care the first sorting task is anticipated to be more straightforward. Ease of sorting will then be indexed by both speed of response (with faster responses indicating stronger associations) and the frequency of errors (fewer errors indicating stronger associations).

Internal validity needs to be evaluated to ensure the responses to the IAT are interpreted correctly. The critical materials of the IAT are four categories defined by labels (e.g. HC, SC, positive, negative) and stimuli that serve as exemplars for those categories. In most IATs four categories represent two contrasted pairs, sometimes distinguishing as target concepts (HC, SC) and attribute (positive, negative) dimensions.

The two dimensions define the two nominal features that are of direct interest and create the contrasting identification tasks - "which sector?" for category items, and "what is the evaluation?" for attribute items adopted from

(Greenwald et al., 2005). The IAT effect is a comparative measure of the combined association strengths of two other associative pairs (HC with positive, SC with negative) contrasted with strengths of two other associative pairs (HC with negative, SC with positive). In this study, the resulting score has a relatively simple interpretation as an implicit measure of relative preference for HC compared to SC.

The design of the IAT requires careful selection of category labels that define the concepts of interest and stimuli, which represent those concepts. There are important factors that were considered in the selection of these IAT components.

The primary task for the participant is to identify the category membership of stimuli as fast as possible. Each stimulus must be identifiable as representing just one of the four categories, e.g. HC or SC, and positive or negative for evaluation.

If the category membership of a stimuli is difficult to identify or confounded with multiple categories, then participants may be unable to categorise accurately, or may attempt to complete the task with sorting rules different from those that were intended in the design of the this part of the study. Indeed, this study will be compared to preceding studies, and the explicit responses received during those studies. Nonetheless, this part is vital to the success of the overall research study and, therefore, a list of distinctive stimuli had to be checked with several individuals to ensure validity. However, because of the overlap between healthcare and social care services (both take care of the elderly, regardless of whether social care tends to be more strongly related to this stimuli or construct).

It is fair to state that this is a crucial task that will determine how valid the IAT will be, and one that the researcher spent significant time in developing to ensure that stimuli and constructs are closely associated with only one of the categories.

According to Nosek et al. (2007) ‘task confusion can be reduced by providing multiple cues for identifying the relevant nominal feature of any given stimuli, so that items clearly represent one and only one of the four categories. They note, for example, confounds between dimensions should be avoided and quote (Steffens and Plewe, 2001) as an example where the study was unsuccessful because the category distinctiveness was not salient enough for participants to distinguish one over the other.

For the study at hand, using ‘industry’ (i.e. related to either healthcare or social care sectors) positive and negative items such as ‘brilliant or 'poor' could reduce confusion about whether to categorise the items on the basis of sector or evaluation. Therefore, a simple list of constructs directly associated with either HC or SC was carefully consulted upon with relevant individuals, therefore, limiting ‘sorting confusion’. Indeed, during the eventual study none of the participants reported any confusion about the task which they faced, albeit, some did state that the task was ‘hard’.

Indeed, using distinct colours or fonts such as industry-related words in green and evaluation-related words in yellow enhances the distinctiveness of nominal dimensions. In addition to the above, strictly alternating response trials between nominal dimensions create a predictable pattern for the switching between the relevant feature judgements.

As an added benefit, Klauer and Mierke, (2005) state, alternating trials maximises task switches, which appear to be important contributions to IAT effects, meaning that when trials are mixed (i.e. HC bias tested first by participant X and SC test first by participant Y) the IAT tend to grow in reliability, therefore, trial alternation was implemented in this study.

A final important aspect of stimuli selection was to ensure that stimuli are categorised on the basis of the intended nominal feature rather than an irrelevant stimulus feature. In other words, it should be difficult to distinguish the two categories of a single nominal feature (e.g. HC or SC) using any characteristic except the nominal feature (sector) adopted from (Nosek et al., 2007).

The procedural design for this study will be entirely in line with Greenwald et al formulation of a standard IAT. This is to ensure internal validity and increased ability to replicate this study. As such this section is closely related to Nosek et al. (2007) conceptually and methodologically in relation to the IAT design and construction.

(Greenwald, Nosek, and Banaji, 2003) summarised a standard IAT procedure that requires rapid sorting of exemplars representing two concept categories (in this study HC and SC) and two attribute categories (in this study positive and negative) into their nominal categories with a set of seven blocks (see table 10-1 above):

Block 1: 20 trials sorting two target concepts with the same two keys - e.g. "HC" with the "e" key and "SC" with the "i" key;

Block 2: 20 trials sorting positive and negative words using the response keys - e.g. "Positive" words with the "e" key and "negative" words with the "i" key.

Block 3: 20 trials sorting items from all four categories with the same two keys alternating by trial between concepts and attribute items - e.g. HC and positive with "e" and SC and negative with "i".

Block 4: 40 trials with the same sorting rule as B3.

Block 5: 20 trials of sorting the concept categories with the reverse key mapping from B1 - i.e. "HC" with 'i" key and "SC" with "e" key.

Block 6: 20 trials sorting items from all four categories with the opposite key pairings from B3 and B4 - i.e. "SC" and positive with "e" key and "HC" and negative with the "i" key.

Block 7: 40 trials with the same sorting rule as B6. Blocks B3, B4, and B7 produce the critical data of this task.

In this study half of the participants completed the task in the aforementioned order, the other half completed the task with B1, B3, B4, switched with B5, B6, B7. (Nosek et al., 2005) proposed changing B5 to 40 trials as a standard corrective for a persistent extraneous influence of task order.

A comparison of average latency between the first combined sorting condition (in this study B3, B4 as is standard practice) and second (B6, B7) is taken to reveal the relative associative strengths between concepts and attributes. Phrased another way; participants who find it easier to sort HC with positive (and conversely SC with negative) compared to SC with positive (and HC with negative) are said to implicitly prefer HC over SC.

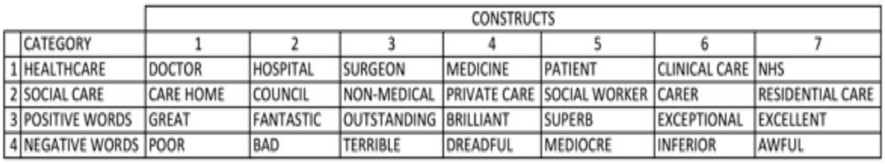
For this study additional procedural factors need to be clarified. For each block, category labels appear in the top right hand and top left hand corners of the computer screen to remind participants of the response key mapping rules. When stimuli are incorrectly categorised, an error indication appears (a red "X" immediately appears in the middle of the screen, where normally the stimulus item appears) and the participant is requested to fix the error by hitting the correct response key before continuing to the next trial.

The interval between presentation of trials response and presentation of the following stimulus - inter trial interval (ITI) - is typically short, normally no less than 150ms, which is in line with the recommendations of (Greenwald et al., 1998) who also reported that use of longer ITIs (up to 750ms) had no significant effect on IAT measures and associated outcomes. Therefore, this study is designed with a relatively short (250ms) ITI, which is in line with most IAT procedures. In other words, the ITI is the time in-between constructs 'flashing up' on the screen after the participant has made a correct categorisation.

Finally, the virtues of the adopted procedure, as described above, are that this procedure has been widely used, and has achieved satisfactory reliability and can be administered in approximately 10 minutes.

8.3.1 Construct creation

In the implicit test, participants will see items that represent HEALTHCARE, SOCIAL CARE, positive words, and negative words as aforementioned mentioned. As each item appears, participants will be asked to make responses on the left or right side of the screen as quickly as possible.



		CONSTRUCTS						
	CATEGORY	1	2	3	4	5	6	7
1	HEALTHCARE	DOCTOR	HOSPITAL	SURGEON	MEDICINE	PATIENT	CLINICAL CARE	NHS
2	SOCIAL CARE	CARE HOME	COUNCIL	NON-MEDICAL	PRIVATE CARE	SOCIAL WORKER	CARER	RESIDENTIAL CARE
3	POSITIVE WORDS	GREAT	FANTASTIC	OUTSTANDING	BRILLIANT	SUPERB	EXCEPTIONAL	EXCELLENT
4	NEGATIVE WORDS	POOR	BAD	TERRIBLE	DREADFUL	MEDIOCRE	INFERIOR	AWFUL

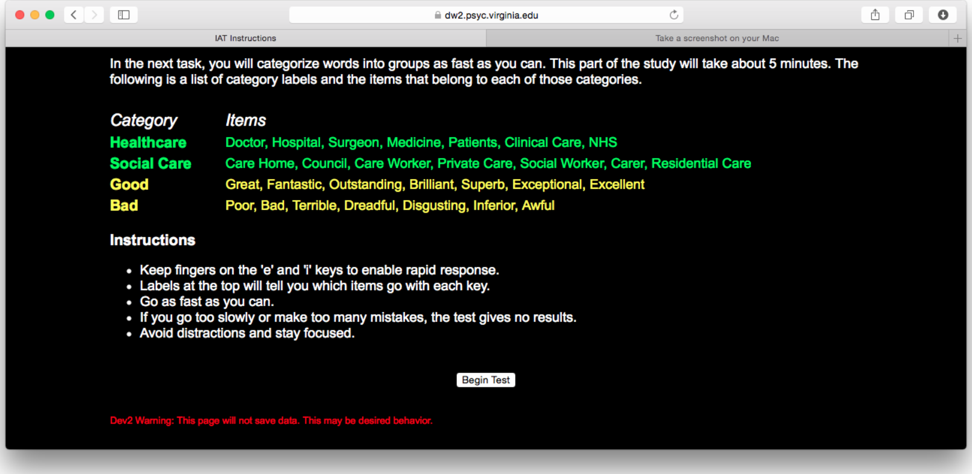
Table 8.2: Constructs/Stimuli used in IAT

The above constructs were created to reflect the relevant category in a specific way. Firstly, the researcher created the category of 'healthcare' and 'social care'. In order to create valid constructs which participants would be able to categorise quickly in a single category, input was required from a wide group of relevant individuals.

The way these constructs were derived was relatively straightforward by producing lists of relevant constructs and asking relevant individuals (i.e. individuals employed in either the healthcare or social care sector) to categorise each of the concepts into one of two boxes. In addition, these individuals were asked to complete the list of constructs with additional constructs (i.e. blanks in the test) that they associate with either category. This exercise generated the final list of constructs seen above in table 8.2.

At this stage of the research participants will have completed both an interactive survey utilising new technology, they also have been answering qualitative questions which have been recorded transcribed and analysed, when they reach the IAT study.

At this point in the study the researcher turns the laptop to the participant after opening up the IAT study in ‘safari’[32]. Participants are requested to read the instructions carefully in addition to this all were reminded verbally by the researcher that ‘speed and accuracy are of the essence’ when completing the test. A screenshot of the instructions is included below which will prove useful for readers to get a better understanding of the process;



In the next task, you will categorize words into groups as fast as you can. This part of the study will take about 5 minutes. The following is a list of category labels and the items that belong to each of those categories.

Category	*Items*
Healthcare	Doctor, Hospital, Surgeon, Medicine, Patients, Clinical Care, NHS
Social Care	Care Home, Council, Care Worker, Private Care, Social Worker, Carer, Residential Care
Good	Great, Fantastic, Outstanding, Brilliant, Superb, Exceptional, Excellent
Bad	Poor, Bad, Terrible, Dreadful, Disgusting, Inferior, Awful

Instructions

- Keep fingers on the 'e' and 'i' keys to enable rapid response.
- Labels at the top will tell you which items go with each key.
- Go as fast as you can.
- If you go too slowly or make too many mistakes, the test gives no results.
- Avoid distractions and stay focused.

Dev2 Warning: This page will not save data. This may be desired behavior.

Screen shots of the actual test are included here for reference with further iterations available online.

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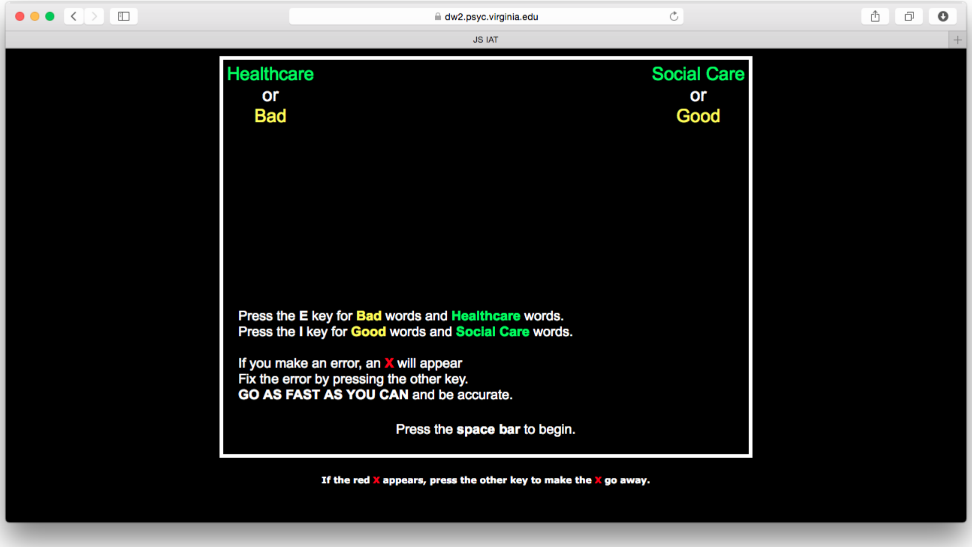
[32] The study was hosted on https://implicit.harvard.edu/implicit/Launch?study=/user/clients/groen/care14.expt.xml (no longer accessible) the screenshots show a mirror image hosted on the University of Virginia’s web server.



Healthcare
or
Bad

Social Care
or
Good

Press the **E** key for **Bad** words and **Healthcare** words.
Press the **I** key for **Good** words and **Social Care** words.

If you make an error, an **X** will appear
Fix the error by pressing the other key.
GO AS FAST AS YOU CAN and be accurate.

Press the **space bar** to begin.

If the red X appears, press the other key to make the X go away.

In addition the researcher took some photographs of the location and interview setup, these are also available in the online database[33] created for this study and will provide further insight into some of the research environments which were encountered during the study.

At the end of the IAT procedure an option was built in which provided the participant to find out the outcome of their ‘test’ the majority (n=48) of participants clicked it before the researcher brought it to their attention, with a small number (n=2) not interested in finding out their results. The remainder (n=13) needed to be prompted as to the availability of the option but all where interested to find out the ‘results’

Personal or procedural factors have been shown to have little or no impact on IAT measures. Factor such as whether a category is assigned to the left or right response key (Greenwald et al., 1998) whether response stimulus interval (ITI) was 150ms or 750ms (Greenwald et al., 1998) whether there is a wide variation in the familiarity of stimuli comprising the attitude object categories (Dasgupta et al., 2003), (Dasgupta et al., 2000), (Ottaway et al., 2001), and (Rudman et al., 1999) negated the hypothesis that the participant's dexterity had any significant influence (quoted in Greenwald and Nosek, 2001).

Other potential influences could be cognitive fluency, age of the participants, the order of the combined tasks, whether the participants have undertaken an IAT before, and perhaps the order in which measures are

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[33] https://dataverse.harvard.edu/dataverse/harvard?q=Groen+Bernard

displayed. Taken together these factors will be dealt with if appropriate in the relevant results section of this dissertation. A possible influence may be the participants' first language, should this not be English, participants will spend time translating the constructs into their native language with the result being 'no preference' as translating one construct over another will take approximately the same time. However, as all participants in this study where native English speakers, it not a factor in this study.

8.4 Study Outcome

As outlined in the study design section, the IAT measures reaction times in milliseconds (also referred to as cognitive latency), with shorter response times indicating a potential implicit bias towards the category tested.

8.4.1 IAT – Block by Block Response Time Analysis

Table 8.4.1 provides an overview of the results of the IAT as conducted during the study, with response times indicated and split by HC and SC participants. The results indicate that HC participants responded faster in both settings of the test, however, this does not indicate that these participants do not show bias.

Actually, when comparing HC responses there is a significant automatic implicit bias for HC over SC, which is in line with expectations. Conversely, SC participants' responses indicate a slight automatic preference for HC over SC, which was not an anticipated outcome of this test, and intriguingly, this initial finding seems to corroborate the findings from study four which also indicated a slight 'out-group' favouritism. In order to keep this section to from becoming unwieldy, which very easily can happen with the amount of data collected, the decision was made to create distinctive blocks of analysis. These will be summarised at the end of each block.

Below in table 8.4.1 is an analysis of blocks 3 & 6 of compatible trails, as the statistical test shows, there is a significant difference in the way SC and HC participants reacted to these tests.

In essence, during the IAT participants' association time between healthcare and good constructs and the association time between social care and bad constructs was measured. As the table shows, HC participants recorded a significantly shorter reaction time when compared with SC participants. This indicates that HC participants show a significantly more positive bias towards their own category (i.e. ingroup favouritism), which is unexpected considering the results from the previous studies.

What is even more surprising is that, when compared to the results in table 8.4.2 (overleaf) the reaction time of SC participants is slower than that recorded during the compatible test, which indicates that SC participants show a slight positive bias towards the HC category (i.e. out-group favouritism) which, like the previous result, is not somewhat unexpected, as it seems to oppose the relevant results in the previous studies.

The mean reaction time for compatible trials (Health care/ Good words, Social care / Bad Words) in Blocks 3 & 6 - By Sector

	HC	SC	Mann-Whitney*
Minimum	601.85	717.65	< 0.001
Lower quartile	830.4	1080.7	
Median	1005.2	1523.325	
Upper quartile	1171.4	2052.95	
Maximum	1852.8	2209	

* 95 CI *p* Value

Table 8.4.1

The mean reaction time for incompatible trials (Social care/ Good words, Health care / Bad Words) in Blocks 3 & 6 - By Sector

	HC	SC	Mann-Whitney*
Minimum	744.4	879.15	0.105
Lower quartile	1066.45	1088.45	
Median	1241.8541	1662.85	
Upper quartile	1438.85	1869.4	
Maximum	2519.35	3171.25	

* 95 CI *p* Value

Table 8.4.2

Moreover, the results from table 8.4.1 and table 8.4.3 test the same constructs in the opposite way, as outlined in the study design section, it certainly is not coincidental that both these tables report the same trend, i.e. HC participants recording shorter reaction times, and SC participants recording a similar reaction time over the same trials. This further seems to corroborate the initial finding that HC participants indicate clear in-group favouritism, with SC participants indicating out-group favouritism.

The mean reaction time for compatible trials (Health care/ Good words, Social care / Bad Words) in Blocks 4 & 7 - By Sector

	HC	SC	Mann-Whitney*
Minimum	602.15	661.525	0.002
Lower quartile	784.25	930.575	
Median	845.3	994.3805	
Upper quartile	942.11	1247.875	
Maximum	1194.95	1830.55	

* 95 CI *p* Value

Table 8.4.3

The results of the incompatible trials (tables 8.4.2 and 8.4.4, overleaf) show a significantly different result to the compatible trials. Indeed, both sets of participants recorded a slower response time whilst completing the incompatible trials. This indicates that both sets of participants generally have a more positive association with the HC constructs that they are presented whilst completing the IAT.

The mean reaction time for incompatible trials (Social care/ Good words, Health care / Bad Words) in Blocks 4 & 7 - By Sector

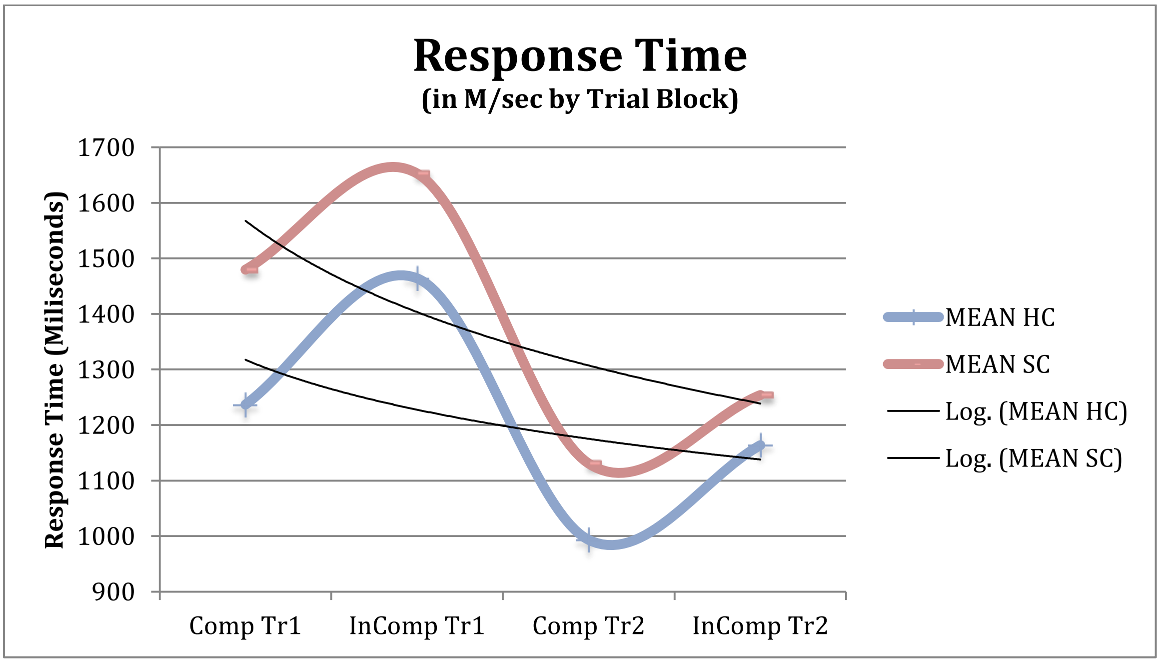
	HC	SC	Mann-Whitney*
Minimum	746.25	781.7	0.379
Lower quartile	976.95	964.575	
Median	1035.575	1096.547	
Upper quartile	1165.775	1396.925	
Maximum	1683.25	1964.575	

* 95 CI *p* Value

Table 8.4.4

Graph 8.1 below provides a pertinent and useful overview of the data collected during the IAT exercise. Essentially, the same data as in the previous tables, however, the graph provides visual confirmation of the findings in a more telling way. Indeed, what is clear is that both sets of participants record slower response times in the first two trial when compared to the second two trials. The main reasons for this simply clarified by the fact that as participants complete the IAT exercise, during the first recorded (compatible) trial, they are still ‘learning’ and getting used to completing the exercise. During the second recorded (incompatible) trial they are getting used to the exercise with the subsequent two trials being recorded with a much greater accuracy than the first two. Which one of the main motivations for (A G Greenwald, Nosek, & Banaji, 2003) to recommend an improved scoring mechanism which will be outlined in subsequent sections.

For now, the response time latency differential between HC and SC participants is significant, and clearly observed in graph 8.1 (below).



Graph 8.1: IAT Response Latency in M/sec by Sector

8.4.2 IAT – Block Analysis By Sector and Education

This section will analyse the collected IAT data in M/sec split by sector and educational attainment. Tables 8.4.2.1 through to 8.4.2.4 provide a detailed overview of IAT results.

The mean reaction time for compatible trials (Health care/ Good words, Social care / Bad Words) in Blocks 3 & 6 - By Sector and Education

	HC (SHS)	HC (SUG)	HC(SPG)	SC (SHS)	SC (SPG)	SC (SUG)	SC (NF)	ANOVA (two way)*
Minimum	746.3	631.15	601.85	717.65	1154.6	1520.55	717.65	
Lower quartile	836	665.1	1002.9	1012.75	1154.6	1520.55	760	
Median	899.65	1005.2	1085	1620.85	2108.2	1715.6	1080.7	0.035
Upper quartile	1045.7	1308.8	1171.4	1800.35	2209	2052.95	1520.55	
Maximum	1308.8	1852.8	1626.85	2209	2209	2052.95	2052.95	

* 95 CI *p* value

SHS= some high school, SUG=some undergraduate, SPG= some post graduate, NF= no formal

Table 8.4.2.1: IAT Score – Compatible Trials (3&6) by sector and educational attainment

The most significant inference to be drawn from table 8.4.2.1 (above) is that there is no significant interaction when a two-way ANOVA is performed in fact this applies to all of the tables in this section. Nonetheless, the table does reveal further insight in the way various respondents scored on this particular block. The fastest responses were recorded by HC participants with some undergraduate education (SUG) ($\tilde{x}$ = 1005.2 M/sec) whilst the slowest responses were recorded by SC participants with some postgraduate education (SPG) ($\tilde{x}$ = 2108.2 M/sec). In other words, HC participants with SUG indicated the strongest association between healthcare and positive constructs presented on the screen. Whereas, SC participants with SPG showed the least association with the same positive constructs and HC.

The mean response time for all participants was ($\tilde{x}$ = 1277.683 M/sec ±119.046) which compares to a HC response time for this trial of ($\tilde{x}$ = 1047.656 M/sec ±116.103) and a SC response time of ($\tilde{x}$ = 1502.459 M/sec ±178.068). This gives a statistically significant difference in response time between sectors with a p-Value of < 0.001 following the performance of a t-Test.

The mean reaction time for incompatible trials (Social care/ Good words, Health care / Bad Words) in Blocks 3 & 6 - By Sector and Education

	HC (SHS)	HC (SUG)	HC(SPG)	SC (SHS)	SC (SPG)	SC (SUG)	SC (NF)	ANOVA (two way)*
Minimum	886.75	744.4	1009.15	879.15	925.85	995	879.15	0.118
Lower quartile	1066.45	1066.45	1305.75	1088.45	925.85	995	1016.45	
Median	1193.5	1106.65	1558.55	1762.5	1726	1599.7	1188.45	
Upper quartile	1279.2	1376.75	1967.7	1869.4	3171.25	2519.35	1799.85	
Maximum	1305.75	1808.6	2519.35	3171.25	3171.25	2519.35	2519.35	

* 95 CI *p* value

SHS= some high school, SUG=some undergraduate, SPG= some post graduate, NF= no formal

Table 8.4.2.2: IAT Score – Incompatible Trials (3&6) by sector and educational attainment

Comparing the results of table 8.4.2.1 with those presented in table 8.4.2.2 (above), it is clear that the fastest respondents were HC participants with SUG ($\tilde{x}$ = 1106.65, or +10.09%). However this is significantly slower compared to the results in the previous table which confirms a slight automatic preference for HC over SC for this group of participants. Whereas, the slowest respondents in this (incompatible) trial were SC participants with SHS ($\tilde{x}$ = 1762.5), which confirms a positive out-group bias or preference, as their score for the corresponding compatible trial was ($\tilde{x}$ = 1620.85) which was significantly faster (+8.73%).

The mean response time for all respondents to this trial was ($\tilde{x}$ = 1488.948 M/sec ±143.193). SC participants completed this trial with a score of ($\tilde{x}$ = 1651.152 M/sec ±116.240.534) this compares to a HC score of ($\tilde{x}$ = 1321.152 M/sec ±142.485). The difference in response times between sector participants provides a p-Value of p = 0.020 when performing a t-Test. In addition a Kolmogorov-Smirnov, gives a p-Value of p = 0.006.

The mean reaction time for compatible trials (Health care/ Good words, Social care / Bad Words) in Blocks 4 & 7 - By Sector and Education

	HC (SHS)	HC (SUG)	HC(SPG)	SC (SHS)	SC (SPG)	SC (SUG)	SC (NF)	ANOVA (two way)*
Minimum	650.325	602.15	672.75	783.35	942.7	952.2154	661.525	
Lower quartile	835.875	780.35	817.075	930.575	942.7	952.2154	741.1	
Median	845.3	831.625	845.3	994.3805	1294.95	1100.15	846.6577	0.076
Upper quartile	921.075	933.25	1088.925	1188.425	1783.35	1247.875	1305.44	
Maximum	1012.15	1194.95	1165.514	1783.35	1783.35	1247.875	1830.55	

* 95 CI *p* value

SHS= some high school, SUG=some undergraduate, SPG= some post graduate, NF= no formal

Table 8.4.2.3: IAT Score – Compatible Trials (4&7) by sector and educational attainment

The next two tables compare test blocks 4 and 7, as opposed to the previous section which reviewed blocks 3 and 6. For the compatible trials shown in table 8.4.2.3 the fastest responding group of participants were those employed in HC with some undergraduate education (SUG) ($\tilde{x}$ = 831.625 M/sec), giving these participants the strongest automatic positive association with healthcare when compared to other participant groups. The slowest respondents were employed in SC with SPG ($\tilde{x}$ = 1294.95 M/sec) which suggests that these participants struggled the most with associating positive constructs presented during the IAT with the healthcare category.

The mean response time between for all participants was ($\tilde{x}$ = 976.661 M/sec ± 63.931). SC participants completed this trial with a score of ($\tilde{x}$ = 1074.392 M/sec ±106.557) this compares to a HC score of ($\tilde{x}$ = 875.777 M/sec ± 54.664). The difference in response times between sector participants provides a p-Value of p = 0.001 when performing a t-Test. In addition a Kolmogorov-Smirnov, gives a p-Value of p = 0.001. This means that, on average, HC participants associated positive constructs with healthcare much faster (and statistically significantly faster) than those employed in the SC sector. This indicates a strong automatic preference for HC over SC for HC participants, whilst it indicates a slight automatic preference for HC over SC for SC participants.

The mean reaction time for incompatible trials (Social care/ Good words, Health care / Bad Words) in Blocks 4 & 7 - By Sector and Education

	HC (SHS)	HC (SUG)	HC(SPG)	SC (SHS)	SC (SPG)	SC (SUG)	SC (NF)	ANOVA (two way)*
Minimum	781.75	746.25	968.22	781.7	844.4	983.825	887.775	
Lower quartile	974.45	977.525	1035.575	964.575	844.4	983.825	911.55	
Median	1031.45	991.825	1163.575	1172.1655	1096.547	1300.65	950.65	0.616
Upper quartile	1043.925	1148.25641	1245.025	1396.925	1964.575	1683.25	1646.7	
Maximum	1300.65	1305.075	1683.25	1646.7	1964.575	1683.25	1683.25	

* 95 CI *p* value

SHS= some high school, SUG=some undergraduate, SPG= some post graduate, NF= no formal

Table 8.4.2.4: IAT Score – Incompatible Trials (4&7) by sector and educational attainment

For the incompatible trials shown in table 8.4.2.4 the fastest responding group of participants were those employed in SC with no formal education (NF) ($\tilde{x}$ = 950.65 M/sec), giving these participants the strongest automatic positive association with social care when compared to other participant groups. The slowest respondents were employed in SC with SUG ($\tilde{x}$ = 1300.65 M/sec) which suggests that these participants struggled the most with associating positive constructs presented during the IAT with the social care category. This is an interesting finding, as so far all 'slowest' responses have been by participants of the 'opposite' category, which is to be expected, yet this finding contradicts this expectation.

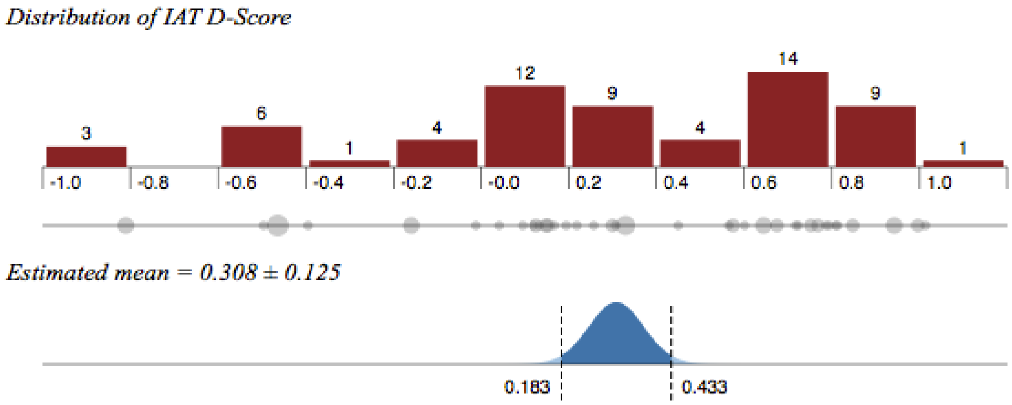
The mean response time between for all participants was ($\tilde{x}$ = 1140.772 M/sec ± 66.152). SC participants completed this trial with a score of ($\tilde{x}$ = 1194.853 M/sec ±113.249) this compares to a HC score of ($\tilde{x}$ = 1084.846 M/sec ± 67.918). The difference in response times between sector participants provides a p-Value of p = 0.097 when performing a t-Test. In addition a Kolmogorov-Smirnov, gives a p-Value of p = 0.013. This means that, on average, HC participants associated positive constructs with social care marginally faster (yet statistically less significant) than those employed in the SC sector.

8.4.3 IAT – Overall Analysis

In line with the recommendations of (A G Greenwald, McGhee, & Schwartz, 1998) the first two trials were excluded from the overall analysis as these tend to generate response times which are generally longer, as participants are 'learning how to use the IAT'. In addition, trials which had a longer latency than 3000 M/sec and those shorter than 300 M/sec were also excluded to control for "inattention and anticipation." (A G Greenwald et al., 1998) All analyses reported in this section involve all 63 participants. "A comparison of a) the reaction times in the task in which one category was paired with positive words with b) those obtained in the task in which the other category was paired with positive words provide a measure of implicit preferences for the two categories (HC/SC in this study).

That is, faster responses to a category when it was paired with a pleasant word than when it was paired with an unpleasant word indicate a stronger preference for that category than for the alternative." adopted from (Maison et al. 2004, p. 408).

Averaged over all participants there was no significant difference in reaction times (RT) when healthcare was paired with good words and social care with bad words (compatible trials HC+/SC-) and when social care was paired with good words and healthcare paired with bad words (incompatible trials HC-/SC+); HC+/SC-; 1210 M/sec vs. HC-/SC+; 1383 M/sec respectively Kolmogorov-Smirnov[34], *p* = 0.699, Mann-Whitney, *p* = 1.000.



Graph 8.1: IAT D-Score Effect - All Participants

The results of analysing this data using a D-score[35] to measure the IAT effect for all participants is shown in graph 8.1. This shows an estimated mean score of 0.308 which suggests that all participants indicate a slight to moderate automatic preference of HC over SC.

However, splitting the analysis by HC participants and SC participants indicates that there is a significant difference (t-test, p < 0.001, Mann-Whitney, p = 0.004) in the IAT results for the two sets of participants, as is clearly shown in graph 8.2 below.

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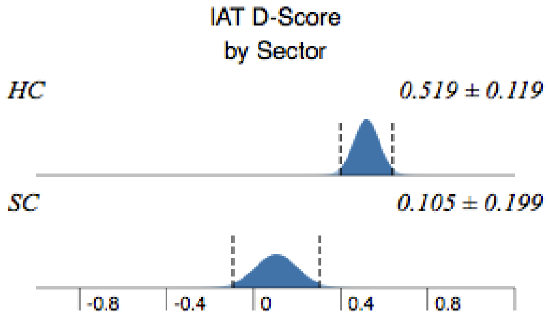
[34] Both of these tests, and all others in this dissertation are performed at 95% confidence level interval

[35] The IAT effect (a D score) has a possible range of -2 to +2. Break points for 'slight' (.15), 'moderate' (.35) and 'strong' (.65) were selected conservatively according to psychological conventions for effect size.



Graph 8.2: IAT D-Score by Sector

A result for HC participants of 0.519 indicates a moderate to strong automatic preference for HC over SC. At the same time, SC participants recorded a 0.105 which indicates a slight automatic preference for HC over SC.

8.5 Discussion

The collaboration with colleagues from Harvard University and those involved with Project Implicit has greatly influenced the robustness of this study. We have learnt a lot from this collaboration, such as the real measureable difference between implicit and explicit preferences.

So far in this dissertation, we have found that HC participants indicate a higher level of empathy, a lower level of cultural elitism, are more likely to 'reach out' to others, and were more generous in resource allocation when compared to SC participants. Yet, the inclusion of the implicit measures does reveal something very significantly. It indicates that there seems to be a clear 'disconnect' between the explicitly communicated behaviour and implicitly held beliefs.

With a moderate to strong automatic preference for HC over SC, HC participants indicated a level of 'bias' which may play a significant role in understanding as to why successful integration between HC and SC does not seem to happen at scale and across the country. Indeed, this discovery, we argue, is the most important finding in this dissertation the implications of which will be discussed in detail in the next chapter.

Correspondingly, SC participants do indicate a slight automatic preference for HC over SC. This compares to SC participants indicating a lower level of empathy, a higher level of social elitism, less willingness to share resources during the previous studies in this dissertation.

9

Discussion and Recommendations

Previous studies have shown that explicit-implicit correlations can be very high when impression management is not of great concern for example; (A G Greenwald et al., 1998) (Rudman, Greenwald, Mellott, & Schwartz, 1999). Yet the explicit-implicit findings in this dissertation are significantly inversely correlated (or contrasted) as impression management seems to be of significant influence on the study.

This chapter is split into two distinct sections, a detailed discussion section which outlines the academic impact of the findings in this dissertation. The second section highlights the main recommendations to improve practice which we anticipate may have a significant impact on the successfulness of health and social care integration efforts across England.

9.1 Discussion

"It is easy for people to accept that some mental processes governing proprioception (i.e., balance), perception, and language comprehension operate non-consciously. Somewhat harder to accept is the notion that memory processes have non-conscious components. And, for some people, it seems silly to think of concepts like attitudes, goals, identity, and stereotypes as operating non-consciously." (Nosek, 2007) Yet, "modern social psychology proposes that these constructs have active existence distinct from conscious, deliberate, and intentional experience" (Greenwald & Banaji, 1995).

As explicit responses are controllable, intentional and made with active awareness which require deliberate cognitive resources, the studies in this dissertation have highlighted the potential extent to which 'political awareness' and 'strategic responding' can impact on results of traditional survey and interview questions. The data derived from the implicit measures have reduced controllability, a diminished lack of intention, indicate a very different outcome to the explicit data. With both sets of participants' responding to both implicit measures and explicit measures in a statistically significant different way.

Healthcare participants showed a higher level of active empathy (study two), which we used as a measure to indicate a 'willingness to collaborate'. In addition they showed an increased willingness to share funds with the out-group (study four), and had marginally lower levels of social elitism.

All of these explicit measures indicate a willingness to collaborate with social care colleagues, yet the implicit measures indicate a moderate to strong preference for healthcare over social care. In other words, healthcare participants have a stronger automatic implicit bias towards their own group when compared to social care participants. This is a significant finding in several ways.

Firstly, the academic impact of this study centres around the traditional survey method used in social science. The evidence of this study suggests that the survey method on its own is questionable and requires the method to gain in sophistication. We argue that implicit behaviour ought to be considered when analysing survey data. Indeed, the national health service in England spends millions of pounds on the national staff survey of which the outcomes are ambiguous at best, yet results are very publicly discussed in national newspapers and media.

Secondly, other studies carried out concomitantly to the one reported in this studies corroborate our findings. Indeed, (Agius, 2015) found a similar result when comparing implicit attitudes with explicit attitudes towards socially acceptable behaviour towards new technology.

Thirdly, the research methods design employed in this dissertation are novel in the sense that it departs from traditional methods in three distinct ways a) by using new interactive technology and, b) by collecting both qualitative and quantitative data concurrently, and c) by collecting both explicit and implicit data.

The very creation of implicit measures in social psychology finds its origin in the concern by scholars in the field about the ease of regulating responses on self-reported measures, such as surveys and interviews. By introducing implicit measures to this dissertation it reduced the opportunity for deliberate judgement and the likelihood for participants to provide socially desired responses. "Thus, implicit measures might assess evaluations that respondents do not want to express because such evaluations violate their self-image (being open to collaboration and integration with social care is the socially acceptable indicator) or because expressing such evaluations may have adverse social consequences (being seen as part of the problem may divert funds to those more willing to champion integration).” (Nosek, 2007) Self-presentation does appear to moderate implicit-explicit correlations according to (Nosek, 2007); “those domains for which people report concern about expressing negativity towards a group because of possible social sanction, or because they do not want to have those attitudes, tend to reveal weaker implicit-explicit correlations than do domains which people are unconcerned about expressing any negative attitudes.” (p. 67) Such interpersonal factors come through in this dissertation quite strongly. It is increasingly socially unacceptable to reject health and social care integration explicitly, yet the results from the implicit measure in this dissertation clearly indicate that such beliefs are still influential in the attitudes and beliefs held by participants in the study.

In addition to interpersonal factors, intrapersonal factors are also at play in this analysis. These are factors which influence the “consideration of internal factors such as the amount of personal experience with a particular domain (e.g. working across health and social care already) or having a clear basis for comparison, such as an opposite (e.g. not changing the status-quo), to clarify the degree of favourability (dimensionality). Consistently, attitudes that are important or well elaborated tend to elicit stronger implicit explicit correlations than those that are unimportant or infrequently thought about.” (adopted from Nosek 2007) The assertion with regards to the well established and thoughtful consideration of health and social care integration seems to confirm Nosek’s assertion within the context of the study in this dissertation.

(Nosek, 2007) Goes on to state a valuable question; “Sometimes an implicit attitude is contrary to an individual’s intended, endorsed explicit attitude. If the implicit response is actively and honestly rejected, how do researchers make sense of its existence?” As to be expected there are several perspectives; one suggests that implicit measures are influenced by the cultural context in which responses are provided (i.e. extra personal experience). In addition to this, (Banaji, Nosek, & Greenwald, 2004) argue that; “implicit evaluation reflects accumulated experience that may not be available to introspection and may not be wanted or endorsed but is still attitudinal because of its potential to influence individual perception, judgment, or action.”

Indeed, the disconnect between the implicit and explicit findings in this dissertation may have occurred because participants were *unwilling* to report their personally held beliefs because of the social implications that this may have. Yet they are able to communicate these beliefs if they wished to do so.

In contrast to this, perhaps the disconnect between the implicit and explicit findings transpired because participants were *unable* to report some of their personally held implicit beliefs simply because they are not aware of them. Indeed, the latter reason seems more applicable to social care participants with the former reason more applicable to healthcare participants in this study.

As “attitudes serve a fundamental function by subjectively organising people’s environment and orienting them to objects and people in it … to operate efficiently, attitudes would seem to need to convey a single, clear evaluation – positive or negative.” according to (Dovidio, Kawakami, & Beach, 2001). Indeed, “attitudes do not have to be consciously accessible to produce evaluative reactions” (p. 175). With implicit cognition operating with a lack of awareness and which are often unintentionally activated. This also applies to the process of attitude creation and the cognitive process of employing stereotypes. With implicit reported to be automatically activated by the mere presence (actual or symbolic) of the other group.

The implication for this study is that, even though healthcare participants indicated a higher willingness to help others (explicit) they may not be aware that they show an increased level of bias/preference to members of their group. The specific implication being that, in order for health and social care integration to become more successful policy makers need to be aware that implicit behaviour change is required.

Implication 1: Policy makers at all levels need to be aware that implicit behavioural preferences suggest that healthcare related issues are seen as more important and higher profile than those in social care. In order for health and social care integration to become more successful people will need to be aware of this attitude, and potential impact on their own implicit preference.

Further implications of the studies that formed part of this dissertation is the integration and fusion of new technology combined with mixed research methods. The value of mixed research methods seems clear to us. Yet, we recognise that this is a highly debated subject within academia. We have tried to design the research methods in this dissertation to make optimal use of new technology, both in terms of data collection and data interpretation. Nonetheless, with new technology coming to the market at an unprecedented pace we anticipate that (aspiring) academic researchers will need to take our second implication to heart;

Implication 2: With technology enabling academic researchers to conduct research in previously unthinkable ways they need to be recommended to conduct a research technology review, in much the same way as they are recommended to conduct a literature review.

For example, as part of the data gathering exercise we were able to capture footage of actual screen interaction. Though, because of time limitations and the part time nature of the doctoral programme this data was excluded from data analysis. Indeed, we anticipate to analyse further data, collected as part of this dissertation study, which will be used in future academic publications. Again, because of the aforementioned constraints, we were not able to fully report on all the data gathered. The point to note here is that technology allows for greater data capture concurrently. For example, in the studies reported in this dissertation, we collected audio recording, screen footage recording, survey data, and IAT data, all at the same time. Indeed, the Tajfel matrix study has also successfully, though not fully, been translated onto new technology. Compare this to the original study, which were conducted in the late 1970s and throughout the 1980s/90s, paper printed booklets were used. Results had to manually entered into a computer, and calculated using bespoke software packages, using rather outmoded statistical techniques. We show that new technology can reliably capture data and could report statistical outcomes of studies near instantaneously.

Implication 3: Using new technology enables researchers to report on empirical studies at a much faster pace as traditionally associated with academic research. This may open up new opportunities for academia and academic/empirical research.

Managerial challenges are recognised and experienced using explicit cognitive functions, these are deliberate and well considered ways of meeting such challenges. However, these same challenges also operate at the implicit cognitive level. Both explicit and implicit processes combine to shape an individual's perception of reality, as depicted in figure 9.1 below.

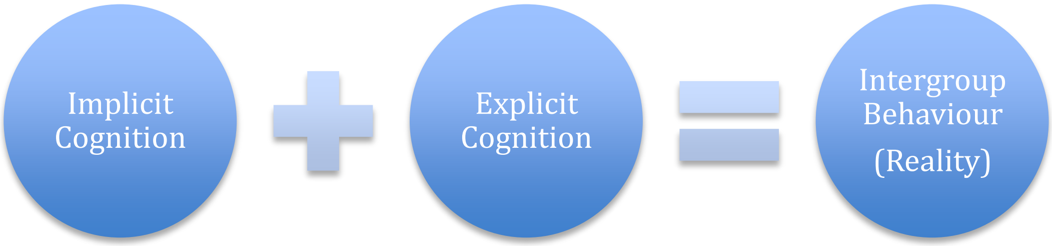


Figure 9.1: Overview of status attribution'

If implicit association to health and social care integration is negative, even without an individual's conscious endorsement, they may still display the desired behaviour, because of social consequences. Nevertheless, negative implicit attitudes and associations do impact on individuals' non-conscious behaviour.

In addition, the evidence of implicit attitudes presented in this dissertation has been generally in line with other findings to response latency studies. The convergent evidence obtained clearly indicates faster response times (comparatively) by healthcare participants which is assumed to reflect a stronger association to the ingroup over the out-group. This finding has helped our understanding of the underlying issues which contribute to the challenge of health and social care integration.

9.2 Recommendations

Most managerial actions operate at a singular 'explicit' level, without much regard for the implicit consequences and associated behaviours. There seems to be general support for integration efforts within England between health and social care, as outlined extensively in this dissertation. Yet, implicit beliefs are covert, and deeply held, and often influence behaviour without explicit endorsement by the individuals concerned.

To some extent social care in England has a lower social standing in terms of social status. There are several reasons for this including a) pay inequality when compared to healthcare, b) comparative educational attainment, c) perceived lack of comparative expertise. Such implicit views reflect a certain amount of reality we argue that this can be dealt with in two main ways; 1) take into account the causal origin of the implicit cognitive 'barriers' which prohibit successful health and social care integration and take preparatory action before implementing health and social care integration at scale, or should this not be an option because of associated time pressures 2) individuals tasked with integration efforts across England should take the implications of the findings in this dissertation into account when leading these efforts and take action accordingly.

The above two actions are an accumulation of the findings outlined in this dissertation. The next two sections will deal with these in turn with specific detail.

9.2.1 Longer Term Recommendations

Understanding the 'causal' origin of implicitly held beliefs is a topic which social psychologists at present are keen to debate. Indeed, (A.G. Greenwald & Banaji, 2013) in their book 'Blind Spot' outline that; the mind does a great deal of its work automatically, unconsciously and unintentionally." (p. 6). They go on to state that it was Sigmund Freud's portrayal of "an omniscient unconscious with complex motives that shape important aspects human mind and behaviour" which laid the foundation to the modern day concept. However, it was "a nineteenth-century German physicist and psychologist von Helmholtz who coined the term '*unbewußter Slußß,* or *unconscious inference* upon which the current theoretical process of implicit association is based." (amended, emphasis are original, from page 6). An important and relatively well established development within this sub-field of social psychology is the concept of *retroactive inference* which (Loftus & Palmer, 1974) refer to as '*the misinformation effect'* which suggests that even a small change in experience (verbal, non-verbal, observational, or interactional) can produce a consequential change implicitly held beliefs. In an extension of this concept (Kahneman, 2011) refers to an 'availability heuristic' by which he suggests that "when instances of one type of event (such as a scandal or incompetence within the social care sector) come more easily to mind than those of another type (such as these same instances in the healthcare sector) people tend to assume that the first events also occur more frequently in the real (and wider) world." (amended from Greenwald & Banaji 2013, p.11). Therefore, as the social care sector, and those associated with it, suffer from deeply held negative implicit attitudes (the data collected and presented in this dissertation seem to confirm that this is the case), significant longer term recommendations and improvements are required to evoke a shift towards a more positive social implicit association with the social care sector.

Because of this our longer term recommendations fall in three distinct yet related categories.

1. A clear educational and career framework for social care needs significant improvement;
2. Positively increasing the social image of the social care sector with improved automatic association with an increase in dependable knowledge;
3. A clear increase in the level of compensation, generally, across the social care sector.

The above recommendations will be outlined in more detail in the next three sections.

9.2.1.1 Social Care Educational and Career Framework

With those employed in healthcare generally seen as professional and well trained and educated, the same does not apply to those employed in social care. Healthcare is much more ‘regimented’ with a national pay structure which identifies clear educational achievement for progression and appointment to a specific job. For example, pay bands 1to 4 are for support staff, with a educational attainment of Foundation Degree associated with a band 4 post. In order to qualify for a higher pay band (5), an undergraduate degree is required. Higher up the band a postgraduate degree is required (7 onwards) with a research degree optional but recommended for 9 and above. This career structure provides both explicit and implicit clarity on roles and associated competencies.

In addition to this clear structure in healthcare, the sector is also dominated by Royal Colleges (14 specific ones, and 1 over-aching Association of Medical Royal Colleges), which add status and integrity to the sector. Compared to this rigid structure in healthcare, the social care sector needs to improve its social standing. True, there is a College of Social Work, yet it does not hold the same ‘gravitas’ and social status as a royal college would have. This has led us to recommendation 1:

Recommendation 1: We call for the creation of a Royal College for Social Care to provide overall leadership for the sector.

This recommendation is relatively simple to implement (notwithstanding the time factor) and would anticipate that the social status attributed to social care significantly improves. The Royal College would work in collaboration with the health and care professions council (regulatory body) to ensure high standards are set and adhered to.

The creation of a Royal College for Social Care would also enable the creation of a unifying career framework and associated educational framework to be implemented across the country, setting high standards with increased visibility for the sector. The second recommendation therefore is:

Recommendation 2: We call for the creation of a unified career framework with clear educational attainments within it to ensure high standards and clear leadership for the sector.

Following the establishment of a Royal College for Social care, their immediate priority should be to create a unified career framework for their sector with clear educational attainments for job and roles within the social care sector.

This will ensure higher 'uniform' standards and we anticipate it will increase social credibility and status of the sector. A requirement would be to have clear career grades we provide the following suggestion;

- Social Care Assistants/Associates (up to Foundation Degree/Advanced Apprenticeship level)
- Social Care Practitioners/Managers (undergraduate degree level)
- Social Care Advanced Practitioners/Managers (postgraduate level)
- Senior Social Care Managers/Directors of Social Care (doctoral level)

9.2.1.2 Increased Positive Automatic Association with Social Care

In addition to the anticipated benefits detailed above in the previous section, a unifying career framework would also establish a clear hierarchy which people from outside the social care sector would be able to relate to. We anticipate that a robust career and training framework will enable a slow shift towards a more positive automatic association with social care.

Our rationale for this assumption is simple, the same structure prevails in most 'higher status' sectors, by mimicking this development we anticipate that the public would slowly shift their understanding and associations of social care sector to that of healthcare sector. We depict this slow shift in attitudes in figures 9.2 and 9.3 overleaf. In these figures, we have tried to visualise and conceptualise associations (block A). We anticipate that this change will take a significant amount of time to be fully realised, however, these recommendations should contribute to making such a change reality in the future.

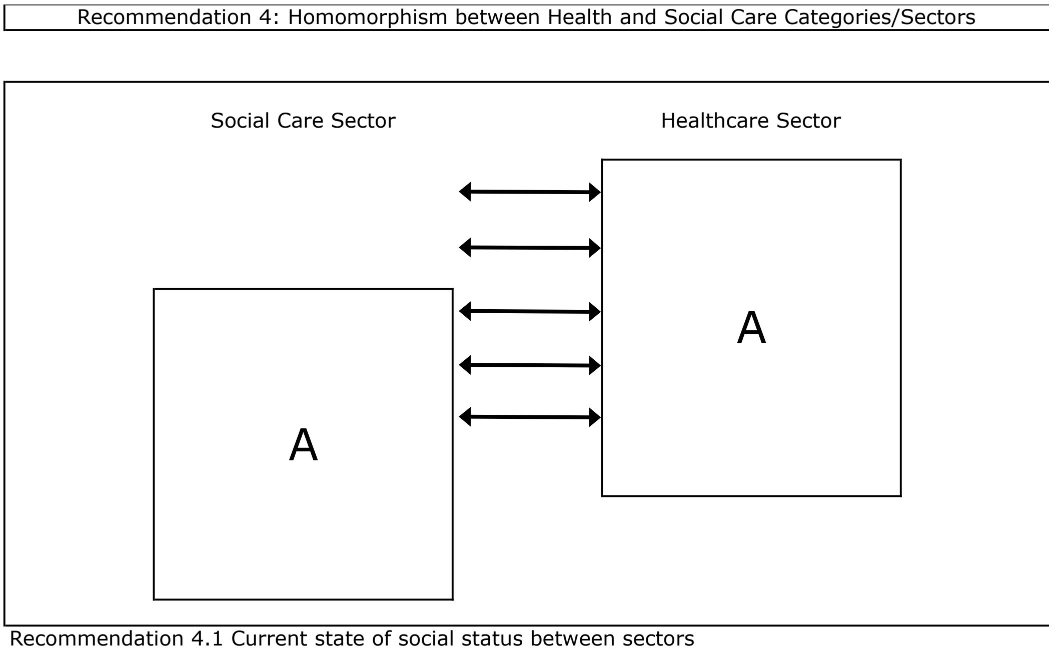


Figure 9.1: current state of social status between sectors

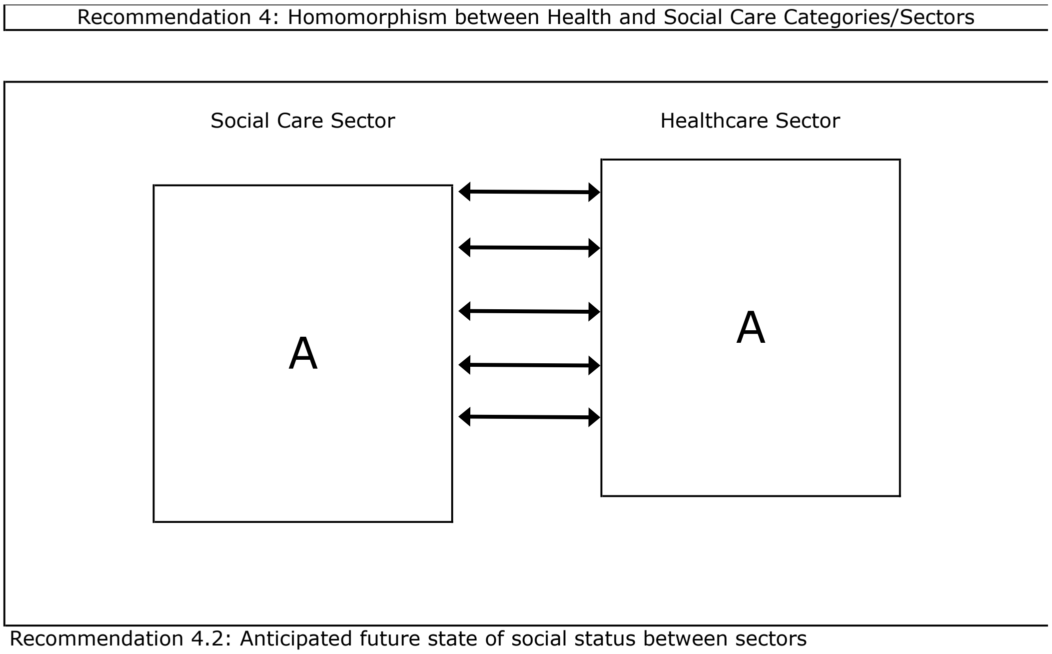


Figure 9.2: Anticipated future state of social status between sectors

Recommendation 3: We call for the Department of Health to initiate and lead on a programme of reform of the social care sector under the banner of 'Modernising Social Care'

As the department of health has shown leadership on modernising health careers in the past, recommendation three requires it do so again. Indeed, in the past the Department of Health has provided leadership on transformational programmes to health related careers such as ‘Modernising Medical Careers’, ‘Modernising Nursing Careers’, and ‘Modernising Scientific Careers’.

With the introduction of the Health and Social Care Act (2012), the task of leading on modernisation agendas like the aforementioned, perhaps no longer fall to the Department of Health. However, the Department ought to show leadership and determination. It could do so by tasking perhaps Health Education England and NHS England, together with the College of Social Workers (and a newly establish Royal College for Social Care) to lead on the actual implementation of the recommended new career framework. In addition, there is a significance attached to the selection of the Department of Health in this recommendation, as they are generally perceived to be the overall system leaders (care in general). With this government department taking the overall lead, further benefits, such as greater parity of esteem between the two sectors, could be realised.

Such work will not provide instant results, yet we anticipate that over time, the social care sector will gain in social standing and credibility which will aid positive automatic associations with the sector.

9.2.1.3 Increasing Compensation Levels with the Social Care Sector

As the social care sector, over time, increases in social standing because of a clear career framework (recommendation 2) and the establishment of a Royal College of Social Work (recommendation 1) we anticipate the level of compensation for those working in this sector to increase. Indeed, with higher levels of education, increased levels of investment (aging population demands etc.) and clear career framework requirements, we anticipate that this last over-arching recommendation will follow naturally.

Still, we note that with all of the recommendations in this section, it will take a longer time frame (i.e. 10-15 years) before the full benefits of these recommendations are fully realised. Therefore we make the following recommendation:

Recommendation 4: We call for the Department of Health to lead on the creation and establishment of a unified pay banding structure for all social care employees.

The final recommendations are focused on further empirical research. The results in this dissertation highlighted the 'dissonance' between explicitly communicated preferences and implicitly held beliefs. However, further studies are required to examine the underlying causes. Academic literature is full of suggestions for further study, especially in relation to implicit belief creation, and this dissertation does not deviate from this trend.

> *Recommendation 4: Further study is required to validate the studies that were carried out as part of this dissertation, possibly by amending research methods to enable a larger sample to take part in similar studies.*

The results reported in this dissertation highlight the status inconsistency between the healthcare and social care sectors. With the healthcare sector being comparatively much more stratified in terms of social status than the social care sector. The action associated with health and social care integration needs to take place now, as these efforts are underway and high on the political agenda at this moment in time (Summer, 2015). Larger studies, although academically important, are not warranted from a practical point of view as time does not allow for much further deliberation without action.

As Descartes stated; "And thus, the actions of life often not allowing any delay, it is a truth very certain that, when it is not in our power to determine the most true opinions we ought to follow the most probable." (Descartes, 1637)

The implications of the studies presented in this dissertation combined with the recommendations clearly indicate that awareness of implicit, preference, bias, and prejudice significantly impacts on the ability to integrate health and social care services in a more systematic and successful way. We call on all interested parties to take note of these implications and recommendations and take action accordingly.

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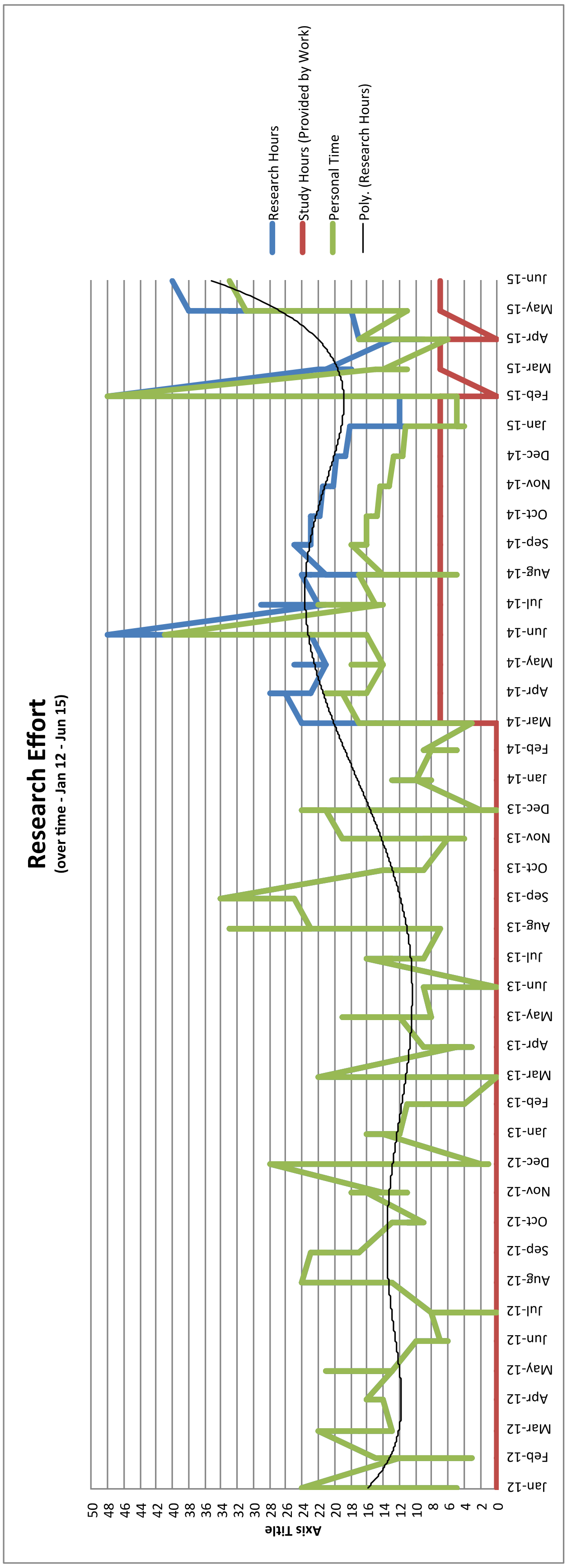
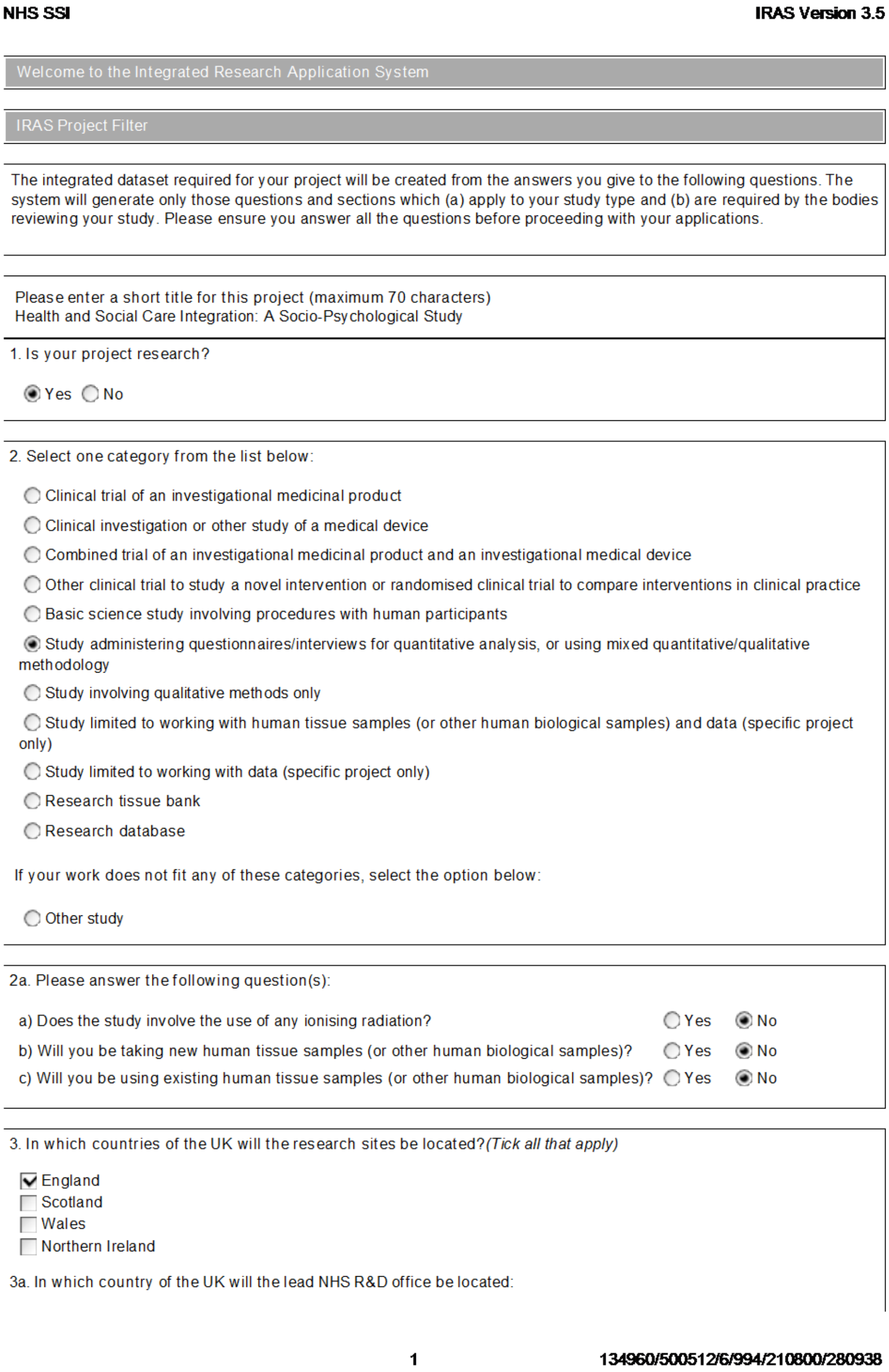
Appendix to Chapter 1



Appendix to Chapter 2



NHS SSI **IRAS Version 3.5**

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IRAS Project Filter

The integrated dataset required for your project will be created from the answers you give to the following questions. The system will generate only those questions and sections which (a) apply to your study type and (b) are required by the bodies reviewing your study. Please ensure you answer all the questions before proceeding with your applications.

Please enter a short title for this project (maximum 70 characters)
Health and Social Care Integration: A Socio-Psychological Study

1. Is your project research?

● Yes ○ No

2. Select one category from the list below:

○ Clinical trial of an investigational medicinal product
○ Clinical investigation or other study of a medical device
○ Combined trial of an investigational medicinal product and an investigational medical device
○ Other clinical trial to study a novel intervention or randomised clinical trial to compare interventions in clinical practice
○ Basic science study involving procedures with human participants
● Study administering questionnaires/interviews for quantitative analysis, or using mixed quantitative/qualitative methodology
○ Study involving qualitative methods only
○ Study limited to working with human tissue samples (or other human biological samples) and data (specific project only)
○ Study limited to working with data (specific project only)
○ Research tissue bank
○ Research database

If your work does not fit any of these categories, select the option below:

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2a. Please answer the following question(s):

a) Does the study involve the use of any ionising radiation?	○ Yes	● No
b) Will you be taking new human tissue samples (or other human biological samples)?	○ Yes	● No
c) Will you be using existing human tissue samples (or other human biological samples)?	○ Yes	● No

3. In which countries of the UK will the research sites be located?*(Tick all that apply)*

☑ England
☐ Scotland
☐ Wales
☐ Northern Ireland

3a. In which country of the UK will the lead NHS R&D office be located:

1 **134960/500512/6/994/210800/280938**

● England
○ Scotland
○ Wales
○ Northern Ireland
○ This study does not involve the NHS

4. Which review bodies are you applying to?

☑ NHS/HSC Research and Development offices
☐ Social Care Research Ethics Committee
☑ Research Ethics Committee
☐ National Information Governance Board for Health and Social Care (NIGB)
☐ National Offender Management Service (NOMS) (Prisons & Probation)

For NHS/HSC R&D offices, the CI must create Site-Specific Information Forms for each site, in addition to the study-wide forms, and transfer them to the PIs or local collaborators.

5. Will any research sites in this study be NHS organisations?

● Yes ○ No

5a. Are all the research costs and infrastructure costs for this study provided by an NIHR Biomedical Research Centre, NIHR Biomedical Research Unit, NIHR Collaboration for Leadership in Health Research and Care (CLAHRC) or NIHR Research Centre for Patient Safety & Service Quality in all study sites?

○ Yes ● No

If yes, NHS permission for your study will be processed through the NIHR Coordinated System for gaining NHS Permission (NIHR CSP).

5b. Do you wish to make an application for the study to be considered for NIHR Clinical Research Network (CRN) support and inclusion in the NIHR Clinical Research Network (CRN) Portfolio? Please see information button for further details.

○ Yes ● No

If yes, NHS permission for your study will be processed through the NIHR Coordinated System for gaining NHS Permission (NIHR CSP) and you must complete a NIHR Clinical Research Network (CRN) Portfolio Application Form immediately after completing this project filter and before completing and submitting other applications.

6. Do you plan to include any participants who are children?

○ Yes ● No

7. Do you plan at any stage of the project to undertake intrusive research involving adults lacking capacity to consent for themselves?

○ Yes ● No

Answer Yes if you plan to recruit living participants aged 16 or over who lack capacity, or to retain them in the study following loss of capacity. Intrusive research means any research with the living requiring consent in law. This includes use of identifiable tissue samples or personal information, except where application is being made to the NIGB Ethics and Confidentiality Committee to set aside the common law duty of confidentiality in England and Wales. Please consult the guidance notes for further information on the legal frameworks for research involving adults lacking capacity in the UK.

8. Do you plan to include any participants who are prisoners or young offenders in the custody of HM Prison Service or who are offenders supervised by the probation service in England or Wales?

○ Yes ● No

9. Is the study or any part of it being undertaken as an educational project?

○ Yes ● No

10. Will this research be financially supported by the United States Department of Health and Human Services or any of its divisions, agencies or programs?

○ Yes ● No

11. Will identifiable patient data be accessed outside the care team without prior consent at any stage of the project (including identification of potential participants)?

○ Yes ● No

Site-Specific Information Form (NHS sites)

Is the site hosting this research a NHS site or a non-NHS site? *NHS sites include Health and Social Care organisations in Northern Ireland. The sites hosting the research are the sites in which or through which research procedures are conducted. For NHS sites, this includes sites where NHS staff are participants.*

● NHS site
○ Non-NHS site

This question must be completed before proceeding. The filter will customise the form, disabling questions which are not relevant to this application.

One Site-Specific Information Form should be completed for each research site and submitted to the relevant R&D office with the documents in the checklist. See guidance notes.

The data in this box is populated from Part A:

Title of research:
Using concurrent methods in the form of a 20min interview in which participants are asked full out a survey, my research project aims to uncover why health and social care is not routinely observable. Part of the interviews will be taken within NHS trusts and part of the interviews will be outside of clinical setting. All participants will be informed of the study and all data gathered will be anonymous in nature (i.e. no individual will be identifyable).

Short title: Health and Social Care Integration: A Socio-Psychological Study

	Title	Forename/Initials	Surname
Chief Investigator:	Mr	Bernard Maarten	Groen

Name of NHS Research Ethics Committee to which application for ethical review is being made:

Project reference number from above REC:

1-1. Give the name of the NHS organisation responsible for this research site

The Newcastle upon Tyne Hospitals NHS Foundation Trust

1-3. In which country is the research site located?

● England
○ Wales
○ Scotland
○ Northern Ireland

1-4. Is the research site a GP practice or other Primary Care Organisation?

○ Yes ● No

2. Who is the Principal Investigator or Local Collaborator for this research at this site?

Select the appropriate title: ● Principal Investigator
○ Local Collaborator

	Title	Forename/Initials	Surname
	Dr	Chris	Eggett

Post	Cardiac Physiologist
Qualifications	PhD, Cardiac Physiologist
Organisation	The Newcastle upon Tyne Hospitals NHS Foundation Trust
Work Address	Freeman Hospital Freeman Road Newcastle upon Tyne
PostCode	NE7 7DN
Work E-mail	chris.eggett@nuth.nhs.uk
Work Telephone	01912448980
Mobile	
Fax	

a) Approximately how much time will this person allocate to conducting this research? *Please provide your response in terms of Whole Time Equivalents (WTE).*
30 mins

b) Does this person hold a current substantive employment contract, Honorary Clinical Contract or Honorary Research Contract with the NHS organisation or accepted by the NHS organisation? ● Yes ○ No

A copy of a current CV for the Principal Investigator (maximum 2 pages of A4) must be submitted with this form.

3. Please give details of all locations, departments, groups or units at which or through which research procedures will be conducted at this site and describe the activity that will take place.

Please list all locations/departments etc where research procedures will be conducted within the NHS organisation, describing the involvement in a few words. Where access to specific facilities will be required these should also be listed for each location.

Name the main location/department first. Give details of any research procedures to be carried out off site, for example in participants' homes.

	Location	Activity/facilities
1	Royal Victoria Infirmary Newcastle upon Tyne	Interviews
2	Freeman Hospital Newcastle upon Tyne	Interviews

5. Please give details of all other members of the research team at this site.

1

	Title	Forename/Initials	Surname
	Mr	Bernard	Groen
Work E-mail	bernard.groen@ne.hee.nhs.uk		

Employing organisation	NHS Health Education England
Post	Project Manager
Qualifications	MA, Business Administration BA (Hons), Economics and Politics
Role in research team:	researcher

a) Approximately how much time (approximately) will this person allocate to conducting this research? *Please provide your response in terms of Whole Time Equivalents (WTE).*
100 hours

b) Does this person hold a current substantive employment contract, Honorary Clinical Contract or Honorary Research Contract with the NHS organisation or accepted by the NHS organisation? ● Yes ○ No

A copy of a current CV for the research team member (maximum 2 pages of A4) must be submitted to the R&D office.

2

	Title Forename/Initials Surname Prof Laszlo Polos
Work E-mail	laszlo.polos@durham.ac.uk
Employing organisation	Durham University
Post	Professor of Organisational Theory
Qualifications	PhD, Advanced and Higher Level Logic MPhil, Organisational Ecology MSc, Logic
Role in research team:	researcher

a) Approximately how much time (approximately) will this person allocate to conducting this research? *Please provide your response in terms of Whole Time Equivalents (WTE).*
10 hours

b) Does this person hold a current substantive employment contract, Honorary Clinical Contract or Honorary Research Contract with the NHS organisation or accepted by the NHS organisation? ● Yes ○ No

A copy of a current CV for the research team member (maximum 2 pages of A4) must be submitted to the R&D office.

6. Does the Principal Investigator or any other member of the site research team have any direct personal involvement (e.g. financial, share-holding, personal relationship etc) in the organisation sponsoring or funding the research that may give rise to a possible conflict of interest?

○ Yes ● No

7. What is the proposed local start and end date for the research at this site?

Start date:	01/07/2013
End date:	06/12/2013
Duration (Months):	5

8-1. Give details of all non-clinical intervention(s) or procedure(s) that will be received by participants as part of the research protocol. *(These include seeking consent, interviews, non-clinical observations and use of questionnaires.)*

Columns 1-4 have been completed with information from A18 as below:

1. *Total number of interventions/procedures to be received by each participant as part of the research protocol.*
2. *If this intervention would have been routinely given to participants as part of their care, how many of the total would have been routine?*
3. *Average time taken per intervention (minutes, hours or days)*
4. *Details of who will conduct the procedure, and where it will take place*

Please complete Column 5 with details of the names of individuals or names of staff groups who will conduct the procedure at this site.

Intervention or procedure	1	2	3	4	5
Seeking consent	1	1	5min	Lead Researcher	
Interview	1	1	25min	Lead Researcher	
Dissemination of results	1	1	5min	Lead Researcher	

8-2. Will any aspects of the research at this site be conducted in a different way to that described in Part A or the protocol?

○ Yes ● No

If Yes, please note any relevant changes to the information in the above table.

Are there any changes other than those noted in the table?

10. How many research participants/samples is it expected will be recruited/obtained from this site?

20-30

11. Give details of how potential participants will be identified locally and who will be making the first approach to them to take part in the study.

This will need to be done collaboratively between researcher and the JRO.

12. Who will be responsible for obtaining informed consent at this site? What expertise and training do these persons have in obtaining consent for research purposes?

Name	Expertise/training
Bernard Groen	Doctoral Student
JRO NUTH NHS FT - Staff Member	Research Office - Routine Process

15-1. Is there an independent contact point where potential participants can seek general advice about taking part in research?

Unsure, to be identified between researcher and JRO

15-2. Is there a contact point where potential participants can seek further details about this specific research project?

Unsure, to be identified between researcher and JRO

16. Are there any changes that should be made to the generic content of the information sheet to reflect site-specific issues in the conduct of the study? *A substantial amendment may need to be discussed with the Chief Investigator and submitted to the main REC.*

Unsure, to be identified between researcher and JRO

Please provide a copy on headed paper of the participant information sheet and consent form that will be used locally. Unless indicated above, this must be the same generic version submitted to/approved by the main REC for the study while including relevant local information about the site, investigator and contact points for participants (see guidance notes).

17. What local arrangements have been made for participants who might not adequately understand verbal explanations or written information given in English, or who have special communication needs? *(e.g. translation, use of interpreters etc.)*

In the first instance, we do not anticipate participants to have additional or special communication needs.

18. What local arrangements will be made to inform the GP or other health care professionals responsible for the care of the participants?

N/A

19. What arrangements (e.g. facilities, staffing, psychosocial support, emergency procedures) will be in place at the site, where appropriate, to minimise the risks to participants and staff and deal with the consequences of any harm?

Unsure, to be identified between researcher and JRO

21. What external funding will be provided for the research at this site?

○ Funded by commercial sponsor
○ Other funding
● No external funding

How will the costs of the research be covered?
Unsure, to be identified between researcher and JRO

23. Authorisations required prior to R&D approval

The local research team are responsible for contacting the local NHS R&D office about the research project. Where the research project is proposed to be coordinated centrally and therefore there is no local research team, it is the responsibility of the central research team to instigate this contact with local R&D.

NHS R&D offices can offer advice and support on the set-up of a research project at their organisation, including information on local arrangements for support services relevant to the project. These support services may include clinical supervisors, line managers, service managers, support department managers, pharmacy, data protection officers or finance managers depending on the nature of the research.

Obtaining the necessary support service authorisations is not a pre-requisite to submission of an application for NHS research permission, but all appropriate authorisations must be in place before NHS research permission will be granted. Processes for obtaining authorisations will be subject to local arrangements, but the minimum expectation is that the local R&D office has been contacted to notify it of the proposed research project and to discuss the project's needs prior to submission of the application for NHS research permission via IRAS.

Failure to engage with local NHS R&D offices prior to submission may lead to unnecessary delays in the process of this application for NHS research permissions.

Declaration:
☑ I confirm that the relevant NHS organisation R&D office has been contacted to discuss the needs of the project and local arrangements for support services. I understand that failure to engage with the local NHS R&D office before

submission of this application may result in unnecessary delays in obtaining NHS research permission for this project.

Please give the name and contact details for the NHS R&D office staff member you have discussed this application with:
Please note that for some sites the NHS R&D office contact may not be physically based at the site. For contact details refer to the guidance for this question.

	Title	Forename/Initials	Surname
	Mr	Bernard M	Groen
Work E-mail	bernard.groen@ne.hee.nhs.uk		
Work Telephone	01912106481		

Declaration by Principal Investigator or Local Collaborator

1. The information in this form is accurate to the best of my knowledge and I take full responsibility for it.
2. I undertake to abide by the ethical principles underpinning the World Medical Association's Declaration of Helsinki and relevant good practice guidelines in the conduct of research.
3. If the research is approved by the main REC and NHS organisation, I undertake to adhere to the study protocol, the terms of the application of which the main REC has given a favourable opinion and the conditions requested by the NHS organisation, and to inform the NHS organisation within local timelines of any subsequent amendments to the protocol.
4. If the research is approved, I undertake to abide by the principles of the Research Governance Framework for Health and Social Care.
5. I am aware of my responsibility to be up to date and comply with the requirements of the law and relevant guidelines relating to the conduct of research.
6. I undertake to disclose any conflicts of interest that may arise during the course of this research, and take responsibility for ensuring that all staff involved in the research are aware of their responsibilities to disclose conflicts of interest.
7. I understand and agree that study files, documents, research records and data may be subject to inspection by the NHS organisation, the sponsor or an independent body for monitoring, audit and inspection purposes.
8. I take responsibility for ensuring that staff involved in the research at this site hold appropriate contracts for the duration of the research, are familiar with the Research Governance Framework, the NHS organisation's Data Protection Policy and all other relevant policies and guidelines, and are appropriately trained and experienced.
9. I undertake to complete any progress and/or final reports as requested by the NHS organisation and understand that continuation of permission to conduct research within the NHS organisation is dependent on satisfactory completion of such reports.
10. I undertake to maintain a project file for this research in accordance with the NHS organisation's policy.
11. I take responsibility for ensuring that all serious adverse events are handled within the NHS organisation's policy for reporting and handling of adverse events.
12. I understand that information relating to this research, including the contact details on this application, will be held by the R&D office and may be held on national research information systems, and that this will be managed according to the principles established in the Data Protection Act 1998.
13. I understand that the information contained in this application, any supporting documentation and all correspondence with the R&D office and/or the REC system relating to the application will be subject to the provisions of the Freedom of Information Acts and may be disclosed in response to requests made under the Acts except where statutory exemptions apply.

Signature of Principal Investigator or Local Collaborator:	....
Print Name:	Bernard M Groen
Date:	06/06/2013

Appendix To Chapter 3

Research Protocol

Health and Social Care Integration: A Socio-Psychological Study
(Working title)

Version 1.2, February 2014

B.M. Groen
Doctoral Candidate
Durham University

Study Team Contact Details

Principle Investigators

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Introduction

This study focuses on health and social care integration. Over recent years the UK government has become increasingly interested to achieve better integration between the health and social care sectors in England. (Insert white paper references). Recently, the Secretary of State for health announced further measures to 'ensure' integration (insert quotation and other references).

Furthermore, research has suggested that citizens want their care to be 'more joined up' (insert references). Indeed a focused study which was conducted as part of an earlier stage of that research suggest that citizens get increasingly frustrated with the lack of cohesion in the care they receive. One participant stated that two different providers asked her for blood samples four times in a twenty-four hour period, only to be asked again when admitted to hospital for routine checks a week later.

Research Aim and Objective

Both these pressures, i.e. top down from government and bottom up from patients/citizens, do indicate that change is required in both sectors. My research aims to answer the question; "why, if health and social care integration is so desirable, is it not readily and commonly observable?" Essentially, why is it not common practice? As with all phenomena, this particular one can be explained using a variety of theories and, combined with historical evidence, one may attempt to explain the rationale for this 'demand for integration' not occurring more widespread.

Study Procedure

In order to explain this phenomenon my research uses the theoretical frameworks of social psychology and more specifically social cognition theory, system justification theory, and status creation theory to attempt to explain why integration between health and social care does not tend to occur routinely. More specifically, we hypothesise that mainly because of status inequality between sectors (and individuals that make up these sectors) this integration does not tend to occur more frequently. We test is hypothesis by conducting research using two approaches. Firstly, using concurrent research methods, this first approach has emerged relatively recently within the social sciences and essentially implies conducting both qualitative and quantitative research at the same time. We do this using a survey to which participants respond (quantitative method) and asking questions to participants to justify their responses straight after they made them (qualitative method). This will provide me with a real insight into whether or not, or to what extent, social status affects integration attempts. However, as my research has evolved, it appeared to me that participants were providing ‘socially acceptable’ answers after being ‘challenged’ with a question. Therefore, we have adapted the ‘implicit association test’. Essentially, this measures implicit attitudes: "introspectively unidentified (or inaccurately identified) traces of past experience that mediate favourable or unfavourable feeling, thought, or action toward social objects." The IAT designed for this study is made up of seven stages which include two ‘trial’ stages. It is anticipated that both stages of this study will take approximately 10mins to complete.

Research Setting

This research will be carried out both in NHS trusts (i.e. acute care settings such as hospitals) and in social care settings (i.e. care settings such as care homes). Using the survey we ask participants to 'self-categorise' themselves into a social category (i.e. doctor, nurse etc.) by asking participants to 'self-categorise' this is an attempt to remove (or at the very least limit) researcher bias. Within both NHS and social care settings, interviews will be conducted in a quiet room and will be recorded at all times (during both stages of the research). The limitation of the study is that it is limited to the above mentioned settings and does not extend beyond these settings. In addition, the relatively small sample size may prove to be a limiting factor, however, the size is anticipated to be large enough to draw meaningful conclusions and make relevant recommendations.

Population and Sample Size

In order for the aforementioned hypothesis to be tested a sample size of approximately 60-80 participants is required. Rationale for a not more exact number is rather simple in nature; when data analysis confirms a strong correlation between identified variables (or, conversely when it does not) will inform the sample size. Anticipated sample size within NUTH will be between 30-35 participants. Further participants will be involved from social care and other NHS trusts (if required), which are outside the scope of this particular document, which is specifically created for the NUTH Joint Research Office.

End of Study

Conclusion of the study will be following the conclusion of the interviews and the gathered data, which would be coded and analysed accordingly. The anticipated end date will be June 2014 with formal submission to Durham University being planned for May 2015. Following submission anticipated viva date will be summer 2015 at the earliest. The end of study participation for NUTH will be once the required research sample has been reached, it is anticipated that this will be June 2014.

Measuring Efficacy

The produced thesis will have both theoretical and practical implications. The discussion chapters within the thesis will be outlining relevant recommendations following the created insight into why health and social care integration does not tend to be more readily observable.

Subject Withdrawal

Participants are encouraged to take part voluntarily, and as such are also advised that they are free to withdraw from the study at any point. Data provide up to that point will be destroyed and not used for analysis.

Data Recording

Data will be recorded in two ways. Firstly, the participants will be responding to a survey, this data is kept securely on a remote server and will be ‘live captured’ this means that all the responses are recorded and saved as the participants are responding. Secondly, the interview will be recorded; all conversation will be captured and stored securely. Digital data (both categories) are kept with the following levels of security;

Secure Sockets Layer Extended Validation (SSL EV) Encryption

SSL EV is the highest tier of encryption and validation offered on the Internet. This protects the collected data while travelling over the Internet so that only the researcher has access to the data.

JungleDisk

JungleDisk is a cloud based file storage system. Powered by Amazon and Rackspace, this system is responsible for keeping backups of all of the data and is an encrypted, distributed file system with speed and redundancy. This ensures that even in a worst-case catastrophic failure, the collected data is still safe and secure. The gathered data will be kept on these secure servers until completion of the study; this is in line with data confidentiality requirements and the Data Protection Act 1998. It is worth stating that at no point during the study participants are asked to disclose either 'person identifiable' or 'sensitive' data items.

Statistical Considerations

As this research is both qualitative and quantitative in nature, data sample size is less of a concern than compared to a pure quantitative study. Sample size is important though and the approach taken aligns with stratified sampling theory within statistics. Effectively, this means that a random sample is taken within both stratified populations, in the case of the research at hand the two populations are healthcare staff and social care staff. Working on the assumption that distribution needs to be approximately 50-50 between these groups, a total of 64 interviews are scheduled during this phase of the research. During the collection of the data, multiple regression analysis will be conducted to inform how relationships between variables develop and to ensure the continued validity of the research.

Ethical Considerations

The focus of the interview is to gather attitudes and assess behaviour towards stated phenomena in the survey. As participants are free to take part and express their own 'preferences' it will be made very clear to them that all responses are in confidence. In fact, there is no way to identify participants in the final thesis as all data will be aggregated and stratified accordingly. In addition, as participants are expressing their own view, in that sense there are no restrictions in place. Audio data will be transcribed and recordings will be destroyed following completion of the study, until then these will be kept as evidence that the interview took place. During the second phase of the study, participants may be surprised to find that their implicit attitude differs from their explicitly held beliefs. The research will have an information sheet for participants that will have more details about the IAT and the potential outcomes to offer some support to participants following the study. The researcher's contact details will be available on the same sheet should participants want to find out more about the study.

Publication Policy

Following successful completion of the thesis and associated viva, several papers will be generated for publication. It is anticipated that such works will be published in the *British Journal for Social Psychology*, *Journal of Economic Psychology*, *Organisational Research Methods*, and the *Journal of Applied Psychology*. Published work will need to be peer reviewed, and as such, it is not anticipated for this work to be published before 2016 at the earliest. Appropriate reference will be made to acknowledge research participation, where suitable and appropriate.

Contents of a Protocol Template NUTH

A protocol should include:

X a front page with full title, a protocol number and a version number & date. The protocol that is submitted to ethics should ideally be numbered version 1.0 and dated with the date of finalisation of the protocol. If any protocol amendments are made, then the protocol version number and date must be updated accordingly.

X A content page detailing all relevant section / sub-sections and page numbers.

X study team contact details of the chief / principle investigators, research nurse / fellow, trial co-ordinators and statisticians.

X the introduction to the study, justifying why it is necessary (hypothesis) and evidence of a literature search. May include a general background, any relevant pre-clinical issues, rationale for the study.

X a simply stated trial aim / objective that clearly defines the research question, with primary / secondary endpoints.

X the population to be studied along with a clear listing of the inclusion and exclusion criteria and how subjects will be identified.

X the sample size - number of subjects to be studied and evidence that this number is available. How subjects will be recruited and randomised.

X the study procedure / treatment of subjects - a detailed description of how the study will be conducted and what is performed at each study visit.

X details of device under test N/A

X a statement defining the end of the study

X assessment of efficacy – What investigations will be used to look at efficacy?

X assessment of safety – All studies using devices must have a defined pharmacovigilance procedure in place. This section should included information on the definitions of adverse events (AEs) / serious adverse events (SAEs) / suspected unexpected serious adverse drug reactions (SUSARs). How these are to be recorded during the study and then reported to the study team / ethics / sponsor / regulatory authority and within what timeframes. N/A

X How to handles issues around subject withdrawal from the study (and how this is defined – withdrawal from study medication / intervention, withdrawal from study follow-up, withdrawal of subject consent and therefore possible further subject data use.

X data recording – when and how data will be recorded and who will be responsible for this.

X statistical considerations – (1) how has the sample size been determined. The significance level and power used in the calculation should be stated. Realistic estimates of expected accrual rates and duration of patient entry into the study on estimated sample size should be provided as well as expected drop-out rates. All parameters used in the sample size calculation should be fully justified. (2) include an outline of the analysis plan for the primary and secondary end-points. (3) will there be an interim analysis? (4)

X source data / documents / confidentiality – How and where source data is to be documented and who will have access to this. Storage and handling of confidential study data and documents, according to the Data Protection Act 1998. How will subject anonymity be maintained. How long study data and documents will be archived for.

X quality control / quality assurance – how aspects of this will be implemented for the study (e.g. data monitoring committee, data monitoring and ethics committee, review of adverse events).

X a statement of the ethical considerations involved
X a statement defining the publication policy – when and where results will be published. Who will be able to publish results? The length and complexity of a scientific protocol will reflect the nature and scope of the project. A summary, synopsis or diagram of the protocol in non-technical language would also be helpful.

Social Psychological Study:

Health and Social Care Integration

Participant Information Sheet

What is this all about?

This study focuses on health and social care integration. Its main objective is to uncover social attitudes towards integration and to create insight into why health and social care integration seems so difficult to achieve. The coalition government is keen to promote health and social care integration, however, this does not tend to *routinely* happen, and this research is asking the question; *Why* integration does not tend to happen, and uses social psychological factors to answer this question.

What am I being asked to participate in?

By participating in this study you will contribute greatly to our understanding of how to 'join care up' more for our patients. Often patients feel that there is a real gap between the care they receive within a NHS setting and within a social care setting.

How long will it take, and what will I be asked to do?

Participating in this study will take 20 minutes and the process consists of two parts. The first part will consist of an interview/survey. All your answers will be kept strictly confidential and safely stored. Please note that this interview will be recorded. The second part consists of an implicit association test. There are no 'right or wrong' answers, all we are after is your preference/opinion.

What if I decide no longer to participate during the interview?

If at any point you wish to discontinue with the interview, you are free to do so at any point. If you decide to discontinue, the data you have provided will be destroyed and not used in the analysis.

Will my contribution be public?

No, your answers will be anonymous and 'aggregated' however; your contribution will be extremely helpful as without many participants not enough data is generated.

How many people will you be interviewing?

In total about 80 people, both within healthcare and social care, will participate in this study.

What will you do with the data?

The data will be used to test several hypotheses generated in an earlier part of the study. Your answers will be vital to determine whether or not these hypotheses are valid or not.

Can I have a copy of the final report?

This research is conducted as part of a doctoral thesis. If you would like to have a copy of this, please use the contact details below to ensure you receive a copy. This research is not anticipated to be finalised until December 2015 at the earliest.

I confirm that I have read the above. **I confirm that I have read the ethics information sheet (separate sheet)** **I confirm that I have had the opportunity to ask questions before the research** **I confirm that I am freely participating in this research** **I confirm that I have no concerns related to this study**	**Please initial below**

Research Fellow Contact Details:

Bernard Groen – Doctoral Candidate – University of Durham

b.m.groen@durham.ac.uk or bernard.groen@nhs.net or bernard.groen@ne.hee.nhs.uk

Durham University

NHS

Health Education North East

INTERVIEW CONSENT FORM

This consent form should be given to you by the researcher in advance of the agreed interview. Please carefully read all 9 statements below and initial in each box if you agree with the statement. Please hand this form back to the researcher before the start of the interview, at which point you can also ask for any clarification needed, in relation to this form or with regards to the wider project/interview.

Title of Project: Health and Social Care Integration

Please initial box

1. I confirm that I have read and understand the information above which is dated February 2014 for this project	
2. I have had the opportunity to consider the consent information and ask any questions	
3. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason	
4. I understand that the interview group will be audio recorded and that the recordings will be stored securely and destroyed on completion of this research	
5. I understand that my data will only be accessed by those working on the above stated project	
6. I understand that my data will be anonymised prior to publication	
7. I agree to the publication of anonymised verbatim quotes	
8. I am willing to be contacted in the future regarding this project	
9. I agree to take part in this project by being interviewed whilst completing the associated survey	

Participant’s initials Date

Research Fellow:

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and

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Appendix To Chapter 7

		Type A FAV (MIP+MD) vs. MJP				Type B (MD vs MIP+MJP)				Type C (P vs. FAV (MIP + MD))			
Participant	Category	0=19/1 MIP Score 1 (O)	0=25/7 MJP Score 2 (T)	Pull of FAV on MJP	Pull of MJP on FAV	0=25/19 Score 3 (O)	Score 4 (T)	Pull of FAV on MJP	Pull of MIP + MJP on MD	Score 5 (O)	Score 6 (T)	Pull of P on FAV	Pull of FAV on P
O1	HC	4	7	-3	1	8	5	-3	-1	2	9	-7	1
O2	HC	4	7	-3	1	8	5	-3	-1	3	10	-7	-1
O3	HC	5	8	-3	-1	9	4	-5	-1	1	10	-9	1
O4	HC	6	8	-2	-2	9	3	-6	0	1	9	-8	2
A1	HC	5	6	-1	1	8	3	-5	1	3	8	-5	1
A2	HC	6	7	-1	-1	7	4	-3	1	4	9	-5	-1
A3	HC	5	8	-3	-1	7	4	-3	1	4	9	-5	-1
A4	HC	5	9	-4	-2	8	4	-4	0	3	8	-5	1
A5	HC	4	10	-6	-2	8	5	-3	-1	4	9	-5	-1
A6	HC	3	10	-7	-1	8	5	-3	-1	3	8	-5	1
B1	HC	5	9	-4	-2	7	3	-4	2	3	8	-5	1
B5	HC	5	8	-3	-1	7	3	-4	2	3	8	-5	1
B6	HC	3	10	-7	-1	7	4	-3	1	4	9	-5	-1
B7	HC	4	9	-5	-1	11	2	-9	-1	4	9	-5	-1
B8	HC	4	9	-5	-1	9	4	-5	-1	4	9	-5	-1
C1	HC	1	10	-9	1	7	3	-4	2	4	7	-3	1
C2	HC	6	7	-1	-1	7	4	-3	1	4	7	-3	1
D1	HC	3	10	-7	-1	7	2	-5	3	4	6	-2	2
D2	HC	6	7	-1	-1	7	6	-1	-1	3	10	-7	-1
D3	HC	3	7	-4	2	6	6	0	0	3	10	-7	-1
E1	HC	4	9	-5	-1	6	6	0	0	2	9	-7	1
E2	HC	5	6	-1	1	6	6	0	0	3	9	-6	0
E3	HC	7	6	1	-1	6	6	0	0	3	8	-5	1
E3	HC	6	6	0	0	6	6	0	0	4	8	-4	0
F1	HC	7	6	1	-1	6	6	0	0	4	7	-3	1
F2	HC	1	10	-9	1	7	5	-2	0	3	11	-8	-2
F3	HC	4	9	-5	-1	7	4	-3	1	3	10	-7	-1
F4	HC	5	10	-5	-3	7	5	-2	0	2	11	-9	-1
H1	SC	7	6	1	-1	5	8	3	-1	9	1	8	2
H2	SC	9	4	5	-1	5	7	2	0	9	2	7	1
H3	SC	7	4	3	1	5	8	3	-1	9	3	6	0
H4	SC	9	4	5	-1	5	7	2	0	9	2	7	1
H5	SC	7	6	1	-1	5	9	4	-2	10	1	9	1
H6	SC	7	6	1	-1	6	7	1	-1	9	1	8	2
I1	SC	7	8	-1	-3	6	6	0	0	10	2	8	0
I2	SC	9	3	6	0	5	6	1	1	11	2	9	-1
I3	SC	9	2	7	1	5	7	2	0	8	3	5	1
I4	SC	7	4	3	1	5	7	2	0	7	3	4	2
I5	SC	7	4	3	1	2	9	7	1	8	3	5	1
I6	SC	7	6	1	-1	3	6	3	3	8	4	4	0
I7	SC	6	5	1	1	3	5	2	4	8	2	6	2
I8	SC	6	5	1	1	3	7	4	2	8	2	6	2
I9	SC	7	4	3	1	3	8	5	1	7	3	4	2
J1	SC	6	5	1	1	4	8	4	0	8	4	4	0
J2	HC	5	8	-3	-1	7	4	-3	1	3	7	-4	2
J3	HC	4	7	-3	1	7	3	-4	2	3	6	-3	3
J4	SC	7	3	4	2	4	8	4	0	7	3	4	2
J5	SC	7	3	4	2	3	7	4	2	8	2	6	2
K1	SC	7	4	3	1	4	8	4	0	8	3	5	1
K2	SC	7	4	3	1	3	8	5	1	8	2	6	2
K3	SC	7	4	3	1	2	8	6	2	8	4	4	0
K4	SC	7	3	4	2	4	7	3	1	8	5	3	-1
K5	SC	7	3	4	2	3	7	4	2	10	3	7	-1
K6	SC	6	2	4	4	4	8	4	0	9	2	7	1
K7	SC	6	4	2	2	4	8	4	0	9	2	7	1
L1	SC	7	2	5	3	5	7	2	0	8	2	6	2
L2	SC	7	3	4	2	4	9	5	-1	8	1	7	3
L3	SC	7	3	4	2	4	8	4	0	7	6	1	-1
L4	HC	3	8	-5	1	7	3	-4	2	2	9	-7	1
L5	SC	7	4	3	1	4	8	4	0	9	4	5	-1
L6	SC	7	5	2	0	4	8	4	0	8	2	6	2
L7	SC	8	3	5	1	5	7	2	0	9	3	6	0
L8	SC	8	3	5	1	5	7	2	0	9	2	7	1

Appendix To Chapter 8

SPSS – Syntax IAT Measure

```
SORT CASES BY session_id(A) VAR1 (A) block_number(A) trial_number(A).
execute.

**   this is the code that will compute 1 IAT score and save it to a new file with 1
row per session **

compute rt=trial_latency.
compute error=trial_error.

SELECT IF (block_number=2) or (block_number=3) or (block_number=5) or
(block_number=6).
SELECT IF rt<10000.
IF rt<300 fastrt=1.
IF rt>=300 fastrt=0.

IF index(block_pairing_definition,'Healthcare/Good') >0 cong=1.
IF index(block_pairing_definition,'Social Care/Good') >0 cong=2.

IF ((block_number=2) or (block_number=5))  practest=1.
IF ((block_number=3) or (block_number=6))  practest=2.

 if ((block_number=2) or (block_number=3)) and (cong=1) order=1.
 if ((block_number=5) or (block_number=6)) and (cong=2) order=1.
 if ((block_number=2) or (block_number=3)) and (cong=2) order=2.
 if ((block_number=5) or (block_number=6)) and (cong=1) order=2.

 compute lat=rt.
 compute err=error.

DO IF  practest=1.
 compute lat1=rt.
 compute err1=error.
 IF cong=1 lat11 = rt.
 IF cong=2 lat12 = rt.
END IF.

DO IF  practest=2.
 compute lat2=rt.
 compute err2=error.
 IF cong=1 lat21 = rt.
 IF cong=2 lat22 = rt.
END IF.


AGGREGATE
```

```
 /OUTFILE='"J:\My_Documents\Data\iatscores.sav'
 /BREAK=session_id
 /lat err fastrt order lat1 err1 lat11 lat12 lat2 err2 lat21 lat22    =  MEAN(lat err
fastrt order lat1 err1 lat11 lat12 lat2 err2 lat21 lat22)
 /sd1 sd2   = SD(lat1 lat2).


**  compute 2 IAT scores **

GET FILE='"J:\My_Documents\Data\iatscores.sav'.

compute D1p = (lat12 - lat11)/sd1.
compute D1t = (lat22 - lat21)/sd2.

compute D1 = (D1p + D1t) /2.

execute.

END DATA

*** rows that can be removed ***
*** if error > 0.3 that means its a very high error rate ***
*** if fastrt > 0.1 ***
```