Development of the META model in relation to compassion in nursing

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A thesis submitted in partial fulfilment of the requirements of the University of Bolton for the degree of Doctor of Philosophy

September 2019

Abstract

Introduction

Compassion is an important part of nursing practice and the way in which care is delivered to patients. A number of high profile reports have highlighted the consequences of the failure to demonstrate compassionate care, with others calling for the introduction of compassion into nurse training.

Background

The recent reports into compassion recommend a need to create education programmes for nursing students so that they can continue to show compassionate care in practice. However, while the general literature explains the background to compassion and various ways in which this virtue can be demonstrated, it is not clear what type of training has been developed for nursing students or how effective such programmes are at teaching compassion.

Aims and objectives

The aim of the study was to develop a model of learning that would help nursing students understand and demonstrate the practical and emotional elements of compassion in practice. An additional aim was that the Measure Explore Try Apply (META) model would help bridge the gap between education and practice by preparing nursing students for compassion in the workplace. The main objectives were; (1) to investigate the characteristics of compassion in nursing, how compassion is taught and measured, (2) explore and validate these findings further with a series of stakeholder groups, (3) use the results of the study to create a compassion strengths model for nurses' compassion, (4) using the compassion strengths model as a foundation develop a psychometric scale and online learning intervention to measure and teach compassion strengths, and (5) validate both interventions with a cohort of nursing students, and assess them for their individual and combined effectiveness in relation to the META model.

Methods

A systematic review of the literature highlighted a dearth of empirical research to support the identification of teaching and measurement of the characteristics of a compassionate nurse. As the study aimed to develop a new psychometric questionnaire, and an online scenario based learning course to help teach nursing students about compassion, a mixed methods approach underpinned by pragmatism was used. A variety of methods were included in the design of the studies. Directed content, and thematic analysis were used to explore the qualitative data. In addition, classic scale development statistics and confirmatory factor analysis methods were used to analyse the quantitative data.

Findings

Two major findings from this study were the development of the META model and Compassion Strengths model to support nursing students in the understanding and demonstration of compassion in practice. The Compassion Strengths model suggests that compassion is a multifaceted concept comprised of eight strengths, (1) Character,

(2) Self-care, (3) Communication, (4) Connection, (5) Engagement, (6) Competence, (7) Interpersonal skills, and (8) Empathy, which are key factors in the development of a compassionate nurse. The META model proposes that nursing students can first **Measure** themselves on their own unique compassion strengths. Next, using the online course they can access and **Explore** information about each of the compassion strengths to increase their knowledge and understanding of compassion. Then, **Try** out what they have learned through a series of reflective scenarios. Last, students can take what they have learned and **Apply** it to their practice. Nursing students who engaged in the META model using the compassion strengths as a framework, developed a new understanding of how to demonstrate compassion that they were able to implement into their clinical practice with patients.

Conclusion

The META model, and Compassion Strengths model are two novel approaches to teaching compassion in nursing. While nursing curricula undoubtedly cover some of the compassion strengths included in this research, this study provides further empirical evidence for their importance and ways in which they can be implemented into nurse education and practice using the META model. The findings can be used to explore new avenues in the pursuit of producing nursing students with the strengths of compassion along their educational journey. The META model adds a unique contribution to knowledge. It is a novel approach to teaching that can be used as a learning tool to help students improve on specific compassion skills and help track progress over time.

The results of this will not only have a positive impact on their own health and wellbeing, but that of their patients too. While this study explored the impact of both models on nursing students, the research could be applied to other healthcare students and professionals.

Acknowledgments

I would first like to thank my second supervisor, Professor Russell Gurbutt for his continuous support and guidance, plus the many debates and discussions that have helped shape my thinking and understanding of nursing and what it means to be a nurse.

An extra special thanks goes to Dr Jane Howarth for her support throughout, and most of all for giving me the opportunity to do this doctoral research.

I am extremely grateful to all the staff, nurses, students and service users who shared their valuable knowledge and experience with me. An extra special thanks goes to Lee, Sian, Hayley, Maya, Sadia, Andrew, Ruth, Helen, Michelle, Julie G, Julie, Vicky, Jane, Nyree, Hannaka, Sam, Martin and Bren, who took part in the scenarios that went into this important research. A big thanks to Barry Jewel for his consistent support and advice during the photo shoots, video recordings and editing of the scenarios.

To my good friends Anthony, Phil, Andy, Neil, Jake, Stella, and Steph, for the many hikes and adventures that we have had over the years, which gave me the breaks that I needed. I am indebted to the advice of my friend Paul Booth, who long ago challenged me to pursue my dreams of studying psychology. I don't think either of us imagined it would lead to this. I am also thankful to you, Sham, Joshua, Jayden, Nathan and Raees, for being a great source of family and friendship throughout my undergraduate, masters, doctoral studies, and indeed my life.

My mother and Malc deserve a special thanks for always being there for me with encouragement, love, food, and supportive words. Also, my amazing son Callum, daughter in law Megan, and Florence. Thank you for being there, being you and making me a very proud father. I love you all very much! To all my family in Canada, especially Moe, Terry, Jess, Jeff and Uncle George for your kindness and support from a distance that spurred me on to the finish line.

Last and by no means least, words cannot really express the amount of gratitude I have for my director of studies, Professor Jerome Carson. From the outset, you believed in me and my ability to get a PhD long before the opportunity presented itself. Throughout the many years we have known each other, you have consistently praised me, encouraged me, understood me, and given me much needed guidance and counsel with your words of wisdom. Without you, I very much doubt that I would have flourished as I have done, both as a person and a doctoral student. Thank you from the bottom of my heart for always believing in me. Not many people get a second chance and very few realise just how powerful the simple belief in another's ability can be. This PhD stands as a testament to that.

Dedication

This thesis is dedicated to my family, Mum, Callum, Megan, Malc, Florence, and the love of my life who all know more than anyone just how much this achievement means to me. For the same reasons, I also dedicate this thesis to Professor Jerome Carson.

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Chapter 1. Introduction to the thesis

"*There should be an increased focus on a culture of compassion and caring in nurse recruitment, training and education. Nursing training should ensure that a consistent standard is achieved by all trainees throughout the country*" – Lord Francis QC

1.1 Introduction

Compassion is an important part of nursing practice and the way in which care is delivered to patients. A number of high profile reports have highlighted the consequences of the failure to demonstrate compassionate care, with others calling for the introduction of compassion training into nurse education. This chapter introduces the thesis, outlining the problem statement and how through a series of studies it will attempt to help develop a practical approach to teaching nursing students how to understand and demonstrate compassion in practice.

1.2 Why chose compassion in nursing as a topic for my PhD?

While reflexivity is usually associated with qualitative research, it can also be effective when used in mixed methods studies (Walker et al., 2013). Therefore, as this study included a qualitative element, reflexivity was incorporated into it from the outset. Koch and Harrington (1997), consider reflexivity as the researcher being self-critical, self-appraising, and aware of personal aspects that can influence the interpretation, and collection of data that enhances the rigour of the research with reflective journaling to monitor "what is going on" throughout the research process. In this section, I discuss my own personal beliefs and values in relation to the study.

My own interest in compassion started when I was an undergraduate counselling and psychology student. During that time, I noticed that there were very few studies

investigating how carers care for themselves. I was interested in understanding how providing compassionate care could impact on practitioners and what they could do to protect themselves from occupational stress. A question I asked was “who cares for the carers?” As part of my final year project I devised a study that explored empathy, depersonalisation, compassion fatigue and burnout in healthcare practitioners. Following on from this, and because of the investigation at that time into failings at Mid-Staffordshire NHS Trust, for my master’s project I investigated the relationship between self-compassion, compassion fatigue, burnout, compassion satisfaction, and compassion for others. Some of the research was inspired by psychological models and frameworks for compassion developed for service users to manage symptoms of mental health. The findings have since been published in several academic journals. These studies revealed that a high number of healthcare students experience compassion fatigue and burnout. In addition, the results also highlighted the potential that self-kindness and compassion have to reduce burnout and compassion fatigue. This research was considered useful in the present study, especially when exploring the personal and environmental factors that could affect how compassion is demonstrated in practice.

It was also while conducting these investigations that I discovered compassion in nursing did not seem to be easily understood or well defined, nor was there a universal model of compassion that nursing students could learn from to facilitate their understanding and demonstration of compassionate care. Furthermore, I found little evidence for a psychometric tool for measuring compassion in UK nurses.

I was also influenced at this time by the Thich-Nhat-Hanh quote “Compassion is a verb”. This emphasises the action and doing element of compassion, which sits with my own pragmatic view of exploring ways of getting things done. I believe very strongly

that compassion is important for nursing just as it is for all of mankind, but like all virtues, no one is born with compassion. Rather each person has within them the capacity to be compassionate. It just needs to be nurtured.

In addition, having spent six years of my career working in mental health I was introduced to the psychological, emotional and societal suffering and needs of people with a wide range of mental health issues, seeing the many benefits that compassion can have on them. Having struggled academically until recently throughout my life, and witnessing the kind and compassionate nature of others who listened, supported and helped me feel valued on my journey, I value the strength compassion has on individuals and remain devoted to a philosophy of compassionate care in health, and a more compassionate society.

My personal experiences were shared in a TEDx talk entitled “agents of compassion”, in which I presented five key things (awareness, wiser judgements, communication, courage, patience) that others had shown me that I believed to be compassionate and worthy of sharing, as a reminder of what can be achieved when we open up to the possibilities of compassion. I was therefore able to draw on elements of my professional knowledge and personal experiences to inform the research.

1.3 Statement of the problem

According to the World Economic Forum (Taylor, 2015), the United Kingdom’s National Health Service (NHS) is the largest healthcare organisation, and the fifth biggest employer in the world with 1.7 million employees. Compassion is at the heart of care within the NHS, and it is what patients need most when being cared for at the most vulnerable moments in their lives (Darzi, 2008). The NHS Constitution (2015) consists of a set of values that underpin the work that the NHS does with each of the

individual organisations able to tailor these values to their own needs. Compassion is one of these values and is stated as being "*central to the care we provide and respond with humanity and kindness to each person's pain, distress, anxiety, or need".* And demonstrated as the *"search for the things we can do, however small, to give comfort, and relieve suffering. We find time for patients, their families and carers, as well as those we work alongside. We do not wait to be asked, because we care*" (NHS Constitution, 2015, p.5). Still, a common problem reported by nurses is that they do not have time to spare for patients because they are too busy due to staff shortages.

The NHS Constitution was put in place after several prominent reports highlighted failings to reach an acceptable standard of care within the NHS. In what was seen as a watershed for the National Health Service, three reports were published during 2013 in February, July and August respectively, with each highlighting major concerns and recommendations regarding the state of the NHS (Hewison &Strawbridge, 2016).

1.4 The Francis Reports

Following a public enquiry into the serious failings at the Mid-Staffordshire NHS Trust, Lord Francis QC (2013) published a report based on the findings from the investigation. The report revealed that many of the hospital shortcomings were systemic and could have been avoided if recommendations from a previous report had been implemented (Francis, 2013).

In 2010, Lord Francis QC reported on an independent investigation that was set up to allow for patients to voice their experiences of poor care at Mid-Staffordshire Hospital Trust. The report discovered that:

- Patients were left in soiled bed sheets for several days.
- Assistance was not given to patients who could not eat without it.

- Water was left out of patients' reach.
- Patients were not provided with assistance with the toilet, despite numerous requests.
- Toilets, and wards had not been cleaned.
- Patients were not given their dignity or privacy even in death.
- Untrained staff were working in triage.
- Staff treated patients and their loved ones with callous indifference.

(Francis, 2010).

Despite several positive accounts from patients and their relatives, the report concluded that many patients had been left to suffer unnecessarily from a lack of compassion, but that these stories of neglect were due mainly to staff shortages, and the organisation losing sight of its objective to provide safe standards of care (Francis, 2010, a&b). Putting this into perspective, it is estimated that somewhere between 400 and 1200 patients died unnecessarily at Mid-Staffordshire NHS Trust as a result of insufficient care (Newdick & Danbury, 2015).

The Francis Report (2013) contains 1782 pages over three volumes, took over three years to complete and includes 290 recommendations. The true extent of the report is beyond the scope of this chapter, and indeed the overall thesis. Rather, a summary of the recommendations for nurse education are provided as follows:

- The Nursing and Midwifery Council (NMC) should work with universities to develop an aptitude test so aspiring nurses could be assessed for caring and compassionate attitudes.
- That nurse training should focus on professional development, and a practical approach to compassionate care.

- The report also stressed the need for a national standard for compassion and care that could be achieved throughout nurses' training.
- Nurses should be required to provide in their annual reports a portfolio of evidence that demonstrates their compassion and care with patients and families.

1.5 The Keogh Report

Similarly, a report into the quality of care provided by trusts with high mortality rates was commissioned by the Secretary of State for Health and was undertaken by the National Medical Director for the NHS in England, Professor Sir Bruce Keogh. The 62-page Keogh Report contained eight ambitions for the NHS with the emphasis on improving patient care (Keogh, 2013). Ambition 3 stated that "*patients, carers and members of the public will increasingly feel like they are being treated as vital and equal partners in the design and assessment of their local NHS. They should also be confident that their feedback is being listened to and see how this is impacting on their own care and the care of others*".

The Keogh Report (2013) found that staff in some trusts did not keep to the latest best practice, and nurses were short staffed, overworked and left with little support to do their job. This prompted the recommendation that trusts should work together with organisations within and outside of the NHS to develop cultures of academic and professional "ambition".

1.6 The Berwick Report

In response to the Mid-Staffordshire inquiry the Berwick Report was published under the sentiment "*Without ever forgetting what has happened, the point now is to move on*" (Berwick, 2013, p.7). This report acknowledged that despite its problems, at its

core the NHS is a world leading example for health and healthcare as a human right (Berwick, 2013). It also suggested that "*these concerns are not unique to the NHS; they occur in all large health care systems. Recognising them is the first step toward the repair; knowing what is going wrong gives us the opportunity to set things right*" (Berwick, 2013, p. 10). As a result, it too recommended eight actions that should be taken to improve standards of care and take away the blame culture that had developed within organisations so that staff could continue to deliver care and reduce human suffering. For example, action 2 asserts "*abandon blame as a tool. Trust the goodwill and good intentions of the staff, and help them achieve what they already want to achieve: better care and the relief of human suffering. Misconduct can occur and it deserves censure. But, errors are not misconduct and do not warrant punishment"*.

1.7 Other reports and findings on compassion in nursing and healthcare

These reports are by no means isolated instances. In 2011, the UK Health Service Ombudsmen led an investigation into the mistreatment of elderly patients across NHS Trusts in England. The investigation revealed that some patients had been treated inhumanely with less than basic standards of compassionate care. The apparent lack of compassion highlighted what was regarded as a hospital culture far removed from its own constitution, and struggling to communicate its own values of compassion, care, dignity, and the treatment of patients as human beings (Health Service Ombudsmen, 2011). This problem is also not just limited to the UK. Feeling overwhelmed and short staffed is a common reason why nurses around the world struggle to provide compassionate care (Papadopoulos et al., 2016).

In support of the Francis Report, and compassion in particular, the NMC (2013) expressed its own concerns about the training of nurses. Indeed, the UK Department of Health (DH) recommends that Healthcare Education England needs to recruit nurses who have the “right” values for delivering compassionate care (DH, 2013). To help deliver and maintain a high level of compassionate care in the NHS, the Willis (2012) Report was commissioned to help identify the needs of pre-registration nursing students. Willis recommended that the education system in the UK should continue to educate nurses who are both intelligent and compassionate and not one or the other. To ensure the continued development of nursing students, Willis also suggested that they should be given the “best” education and training, highlighting the importance of involving service users in programme developments, such as simulations, to help teach nursing students about compassionate care. Although these recommendations were made a year before, it seems they were not taken into consideration at Mid-Staffordshire. It is important to note here that Willis states he found no evidence of any major shortcomings in nurse education that could be traced to poor practice (Willis, 2012). However, it is worth mentioning that even though it was intended for nurse education, the Willis Commission did not have adequate representation of nursing students and service users. Despite written evidence being provided by both these groups, it was limited to a few in comparison to directors, registered nurses, and educators. Moreover, on the commissioning panel, there was one patient contributor but not a single nursing student representative.

It must also be acknowledged that the media coverage of these reports runs the risk of falsely portraying nurses as being primarily responsible for the mistreatment for patients within the NHS (Kaufman et al., 2014). This has the potential to make them scapegoats and ruin the public image of nursing and how nurses provide care (Martin,

2013). Blaming nurses may be a misinterpretation of the facts that occurred at Mid-Staffordshire. There is evidence to suggest that the trust was operating a top-down approach with managers concerned more about saving their own reputation than the lives of their patients (Newdick & Danbury, 2015). Patients deserve to be treated in the most humane way possible when they are at their most vulnerable (Cornwell & Goodrich, 2009). Publications such as the Francis Report, can have a demoralising effect on the people who work and use the NHS, and without proper intervention can remain imbedded in the public's psyche for a long time after. In fact, Derbyshire et al., (2015) worry that this troubling pattern of behaviour shows little sign of changing and will undoubtedly continue within the NHS.

In line with this thinking, Richards and Borglin (2019) pose the argument that "shitty nursing", or poor care had become the new norm for nurses. They argue that if nursing is to be perceived as the "wonderful profession" it is, then a move away from a blame culture that has infected nursing practice, where nurses will place the blame for their lack of compassion at the foot of the government or policy makers with excuses of short staff, stress and a litany of other reasons, to one of mature responsibility is needed. The fundamental argument they highlight is that the problems that occurred at Mid-Staffordshire, show very little signs of being addressed and that more evidenced based research is needed to support the delivery of effective patient care (Richards & Borglin, 2019).

In addition, from the articles mentioned above it is clear that improving compassion within the NHS is of high importance. However, current policies and reports seem to attend more to the why and less of the how compassion can be improved. Without any clarity as to what it entails, compassion could just become another political term used to describe a simplistic view as to what is wrong within a complex healthcare system.

The focus needs to shift from why it is needed, and compassion being an aim for healthcare, to a firm understanding of how it translates into practice. As nurse training starts at the pre-registration level, it makes sense to focus the aims of this study on nurses' education at University level.

The meaning of compassion is "to be with suffering". However, this level of intimacy is not always practical in nursing given the number of patients' nurses spend time with during their shift. Conversely, unemotional engagement would not be a pleasant experience for the patient (Cayton, 2014). Moreover, when standards suggest it is a trait that all nurses should aspire to, compassion becomes a desirable rather than an essential element of their nurse training (NMC, 2010). Cayton further suggests that regulators need to take a pragmatic approach and make the behaviour of compassion more explicit, so that it can be measured and assessed to aid in its development.

1.8 Aims and objectives of the thesis/study

The recent reports recommend a need to create education programmes for nursing students so that they can continue to demonstrate compassionate care in practice. It is not clear however what type of specific training has been developed for nursing students or how effective such programmes are at teaching compassion. Therefore, the aim of this study is to develop a model of learning that will help nursing students understand and demonstrate the practical and emotional elements of compassion in practice. The proposed outcome of this aim is that the Measure Explore Try Apply (META) model will help bridge the gap between education and practice. This will be achieved by first allowing participants to measure themselves for compassion strengths, then provide an online education platform where participants can explore the background and importance of these strengths in nursing, followed by a series of

nurse-patient scenarios to try out their knowledge, and then apply these strengths to their practice.

This study contains the development of two interventions, and two models that are based the on the following overall research question, “Can compassion be taught and measured in nursing?”, and includes the following sub-research questions;

1. *What is compassion in nursing?*
2. *How is compassion taught to nursing students?*
3. *How is compassion measured in nursing?*
4. *Can the META model help bridge the gap between education and practice?*

To fulfil the aim and research questions of this study several objectives must be considered.

- First, it will investigate the characteristics of compassion in nursing, how compassion is taught and measured.
- Second, it will explore and validate these findings further with a series of stakeholder groups.
- Third, the results will then be used to create a compassion strengths model for nurses’ compassion.
- Fourth, using the compassion strengths model as a foundation it will develop a psychometric scale and online learning intervention to measure and teach compassion strengths.
- Fifth, both interventions will be validated with a cohort of nursing students and assessed for their individual and combined effectiveness in relation to the META model.

1.9 Structure of the thesis

This thesis comprises nine chapters.

Chapter one sets out the theme of the thesis, including the motivations and rationale for undertaking this piece of research. It also contains an overview of the problem with compassion in nursing, and contributions to knowledge.

Chapter two traces the origins of compassion in the domains of philosophy and religion. Next, the definitions associated with compassion are discussed and their differences are explained. It then provides the different perspectives of compassion from psychology, including how "classic theories" might increase our understanding of compassionate behaviour in the nursing role. The chapter then turns to nursing theories, such as Nightingale's, and nursing education and how compassion is situated within nursing practice. The final section of this chapter will focus on the factors that facilitate and hinder compassion in nursing.

Chapter three consists of a systematic literature review of compassion in nursing and is guided by three review questions: "What are the qualities of a compassionate nurse"? "How is compassion taught to nursing students"? "What instruments have been developed to measure compassion in nursing?" The review process and steps taken are outlined in detail. An in-depth view of the findings, highlighting the gaps in the literature that will guide the rationale for the thesis research area subsequently follows on from the literature review.

Chapter four begins with an introduction to the theoretical framework of pragmatism that underpins mixed methods research. It then explains the history, definition, and strengths of mixed methods, and more specifically sequential explanatory design. The

methods used for data collection and analysis are discussed as well as the ethical implications for conducting this study.

Chapter five reports on the findings from a series of focus groups and one to one interviews in which several themes were identified in relation to the characteristics of a compassionate nurse and how to teach it to nursing students.

Chapter six reports on the validation of the Bolton Compassion Strengths Indicators (BCSIs), and the results of the psychometric properties of the scales.

Chapter seven includes the development and evaluation of the Compassion Strengths Builder Online Nurse Education (CSBONE), along with the findings from data collected to assess the effectiveness of the online scenario based educational course.

In chapter eight the findings for each stage of the study are discussed in relation to the META and Compassion Strengths models, including limitations and suggestions for future research. This chapter also discusses the implications it has for nurse practice, education and policy.

Chapter nine is the final chapter and provides overall conclusions to the study and its unique contribution to knowledge.

1.10 Chapter summary

This chapter has outlined the structure of the thesis. It first gave my reasons for choosing compassion as a topic for my PhD. It then stipulated the rationale, using examples from a number of reports to demonstrate the statement of the problem for why this study is important. Next, it outlined the aims of the thesis with the objectives taken to achieving them, and the research questions guiding the study. A brief overview of the chapters followed.

In the next chapter a general review of the literature traces the broad history of compassion and nursing specifically. It explores the definition and origins of compassion from a wide range of views and perspectives and discusses their implications for nursing.

Chapter 2. General review of the literature on compassion in relation to nursing

"*The most authentic thing about us is our capacity to create, to overcome, to endure, to transform, to love and to be greater than our suffering*" - Ben Okri

2.1 Introduction

This chapter will provide a background to compassion. First it discusses the definition of compassion and how it differs from similar concepts. Next it explores the historical perspectives of compassion tracing its foundations to the early Greek philosophers, before moving onto views from theology. Then using classic and current studies in psychology it explains the various ways that compassion is demonstrated. It then looks at the history of compassion in nursing and the current strategies for developing compassion in the UK. Finally, it reports on the factors that hinder and allow compassion to flourish in practice.

"The beginning of education is the examination of terms" – Antisthenes

2.2 Defining compassion

Despite its universal value in nursing compassion is not very well defined (Maxwell, 2017; Van Der Cingel, 2011; Von Dietze & Orb, 2000). For instance, Jull (2001) argues that compassion is often used throughout the nursing literature without a clear definition, inasmuch as it could easily be assumed that nurses understand the concept without requiring any explanation. As Schantz (2007, p.54) states "*to claim ownership to the virtue of compassion, it is necessary first of all to identify, understand, and internalise its profound meaning*". Therefore, this thesis will now explore some of the general definitions of compassion as well as those more specific to nursing.

The Oxford English Dictionary defines compassion as, "*sympathetic pity and concern for the sufferings or misfortunes of others*", and that it stems from the two Latin words "com" and "pati, or patior", which translates as "*to be with suffering*". The Latin "patior" also translates into the word "*patient*", or the one who is suffering (Simpson & Weiner, 1989). Extending this definition, The Dalai Lama (1995) suggests that compassion is "*a sensitivity to the suffering of self and others, with a deep commitment to try and relieve it*". Similarly, Gilbert (2009, p. 13) offers the following definition of compassion as "*a deep awareness of the suffering of another coupled with the wish to relieve it*", while Goetz et al., (2010) define it as "*the feeling that arises in witnessing another's suffering that motivates a subsequent desire to help*" (p. 351). Extending this further, Kanov et al., (2004), propose that compassion is dependent on three internal processes: noticing suffering, an emotional reaction to that suffering, and responding to suffering. The feelings that are evoked from witnessing suffering can lead to either an unpleasant or pleasant experience of compassion, with the latter most likely to assist in the reduction of another's distress (Condon & Feldman-Barrett, 2013). Compassion can be considered a negative state (to be with suffering) that becomes positive when the person is driven to alleviate another's suffering, and consequentially their own feelings of distress (Lomas, 2015; Simon-Thomas et al, 2011). For nurses, Von Dietze and Orb (2000) describe compassion as a moral virtue that not only allows them to do more than alleviate suffering, but is also the driving force that empowers them to participate in the patients experience and share in their pain and connect at the human level. Jull (2011, p.18), suggests that compassion can be defined as a "*deep response to suffering, and its expression requires action from the compassionate*".

However, these definitions seem limited as they suggest that compassion is a response to another's suffering, and nothing more. Equally, as personal accounts of pain can sometimes be difficult to interpret (Nijboer & Van der Cingel, 2019), arguably these definitions could only serve to make compassion difficult for nurses to understand when attempting to gauge whether a patient is suffering. This raises an important question in nursing, for example "what other patient experiences does compassion attend to, as not all can be assumed to be suffering?"

Using data collected from patients, Sinclair et al., (2017, p.44) posit that compassion can be defined as "*a virtuous response that seeks to address the suffering and needs of a person through relational understanding and action*", and that it is motivated by love. In support of this, Dewar et al (2014) argue that rather than suffering, compassion in nursing needs to be understood as the thing's nurses do to make patients feel more comfortable when responding to their vulnerability. It is thought of as a relational activity that *"involves noticing another person's vulnerability, experiencing an emotional reaction to this and acting in some way with the person, in a way that is meaningful for people.*" (Dewar 2011, p. 263). Thus, unlike many other definitions that require a compassionate response to another's suffering, this suggests that the same processes can attend to the vulnerability of the patient, their family, and indeed, the nurse themselves. In short, the definition of compassion has evolved from its Latin roots to compliment modern day nursing, where people do not need to be in a state of suffering to receive another's compassion as numerous definitions seem to imply.

A common thread throughout these definitions is that compassion is concerned with more than just sharing in the suffering of others, it can also be a response to vulnerability and attention to the needs of patients. It also requires a motivated action to "do something" to address this. However, as Power (2016) suggests, the lack of a

universal definition of compassion in nursing, can lead to difficulties when attempting to standardise and develop a theory of compassion that encompasses all the aspects required in practice.

2.3 How is suffering defined, and what does it mean to suffer?

In considering the link with compassion, it is important to understand what is meant by suffering. Suffering is defined as, “the pain, misery, or loss experienced by a person who suffers” (Collins English Dictionary). Taken from the Latin word “suffere”, suffering is a concept wherein humans endure the harshness of life so that they can undergo some form of psychological growth (Milton, 2013). Some see suffering as a great source of learning and self-development, or a way to find meaning in life and turn evil into good (Gibson, 2015; Dalia Lama, 1995; Frankl, 1959; Shantall, 1999). From the loss of a loved one, work related stress, to mental and physical illness, it is very much a part of what makes us human (Van Dyke & Hovis, 2014; Goldberg, & Steury, 2001; Quick & Henderson, 2016). Suffering can be assigned to God’s will (Gray & Wegner, 2010; Wilt et al, 2016), or to the Hindu idea of Karma, in that it is punishment for behaving immorally based on societies’ perspectives of what counts as moral behaviour (Sullivan et al 2012). In ancient Greece, as in many of today’s films and literature, life’s tragedies were portrayed in plays so that society could connect to the characters’ suffering as a means of developing empathy and compassion for them. This brought the individual closer to the harsh realities of life, whilst at the same time asked them to question and consider what they could do to show compassion towards their fellow human beings (Armstrong, 2011). Therefore, as it remains today, suffering was also an opportunity for learning that could lead to growth. The goal is not to dismiss the suffering completely, but to understand the difference between mild and serious pain and assess its worthiness of a compassionate response. As will be

discussed further in this chapter, there are a number of psychological processes that occur before arriving at this conclusion.

2.4 Related concepts and their differences

Compassion is often used interchangeably with terms that hold a similar but altogether different meaning. However, this only serves to confuse matters even further. The problem with compassion is it tends to be synonymous with empathy, sympathy, pity and care. Schantz (2007) argues, this can “muddy the waters” when it comes to understanding the “true” value of compassion, creating a flawed assumption of what compassionate care actually means for nurses. Consequently, Maxwell (2017) states that this also creates the “illusion” that nurses are born with compassion, and therefore do not need to be educated to deliver compassionate care. Arguably, such certainty this belief can become detrimental to the type of compassionate care that is demonstrated by practitioners and received by patients. Without knowing what it is that authors are referring to when they discuss such terms as empathy and compassion, arguably it can be difficult to teach or train nurses in these areas.

2.4.1 Kindness

Quite often compassion and kindness are mistaken for one another, usually because they share many similarities. Both are associated with helping others. In the Oxford English Dictionary kindness is defined as “the quality of being friendly, generous and considerate”. Kindness too is found as a sub construct of compassion for others and self-compassion and is referred to as a character strength in positive psychology (Peterson & Seligman, 2004; Neff, 2003). Whilst compassion and kindness share similar qualities that can be equated with happiness or a positive outcome (Otake et al, 2006), they equally have their own unique properties that make them distinct from

each other. For example, kindness does not usually require an emotional reaction to suffering for it to be displayed, and in certain cases compassion extends far beyond an act of kindness (Strauss et al., 2016).

2.4.2 Empathy

Empathy is another concept normally associated with but distinct from compassion. The psychotherapist Carl Rogers (1975) viewed empathy as a way of being with the other person to understand them more. Whereas, Davis (1983, p.113) defines empathy as "*the reactions of one individual to the observed experiences of another*". He further suggested that empathy is a multidimensional construct with four distinct elements; perspective taking, fantasy, empathic concern, and personal distress. In a sense empathy holds the same cognitive and emotional responses that originate in the psychological process of compassion. Yet, because it can be elicited by fantasy such as when reading a book, empathy can be activated in ways unique to compassion, in that one is seldom motivated to help a fictional character with their suffering despite wanting to or relating to their story (Davis, 1983). Furthermore, studies show that empathy is associated with pro-social behaviours, but this can depend on the methods used to measure it. As Eisenberg and Lennon (1983) observed, simulated experimental situations elicited a significantly stronger empathic response than a picture or story. A more recent study suggests that empathy evolved to serve the species and protect against possible threats and as well as cognitive, is underlined by biological and genetic functions (Decety et al., 2015). Conversely, Bloom (2017a) claims that while empathy is certainly beneficial to promote prosocial behaviours, emotional empathy should be used with caution as it can lead to an increase in negative feelings such as burnout and emotion fatigue, poor moral judgement and makes us more prone to biases where we favour one person over the

many (Bloom, 2017b). Sinclair et al., (2017) also propose that empathy has a potential darker side, in that it can be used to exploit a patient's weakness or cause empathic distress that leads to burnout in the caregiver. For instance, a nurse may feel less empathy for a patient who is a convicted paedophile, or murderer, and more for the victims, thus seeing them as deserving of their suffering and potentially affecting the care that is delivered. In contrast, driven by a compassionate response, concern for the patient's condition, regardless of crime, might help them to see these patients with less blame. Thus, Bloom (2017a, b) proposes that rational compassion should take its place as a more practical response to suffering.

In a similar manner, Bloom is also discussing the different affective and cognitive systems associated with Empathy outlined above by Davis. In support of this, Dal Santo et al., (2014) found that cognitive empathy, such as perspective taking, was positively associated with job satisfaction, work engagement, and retention, whereas a negative trend was observed for nurses measured for emotional compassion. Furthermore, intrinsically, nurses can adapt their emotional empathy to include more perspective taking, while support at the organisational level can provide the extrinsic resources to reduce burnout and compassion fatigue (Hunt et al., 2017).

Nevertheless, empathy is of particular importance when trying to understand the patient's situation, especially when faced with some of the crises that bring people into contact with nurses (Williams & Stickley, 2010). However, Hunt et al., (2017) argue, when there is less emotion involved, nurses are better able to "feel for" rather than "feel with" in response to their patients, and as a result reduce the risk of becoming burned out. Moreover, Jull (2001) argues that terms such as "therapeutic empathy" taken from psychotherapists such as Rogers do not always fit well into nursing practice. Williams and Stickley (2010), postulate that empathy in nursing relates more

to the presence nurses bring to help foster a genuine human encounter. Thus, considering these debates, it seems important that nurses are educated on the different types of empathy so that they become better informed of the impact such various empathic responses can have on their emotional health, wellbeing and ultimately their practice.

Equally, this is not to say that empathy is not a motivating force in compassionate care. In fact, empathy is a key factor in motivating individuals to act in response to suffering or the needs of others (Bloom, 2017b). Therefore, it can help to think of compassion as "empathy with legs." Whereas one can relate to the suffering or needs of another human being and empathise with them during their struggle, compassion forces us to take those vital steps towards helping alleviate that suffering and addressing the patient's needs.

2.4.3 Sympathy

Sympathy is a concept like, yet distinct from compassion and empathy. In most cases the dictionary definition of sympathy is inaccurately associated with compassion (Oxford Dictionary). The concept of sympathy was discussed in relation to ethics and morality by the philosophers Hume (1739) and later Smith (1759) in ways similar to the concept of empathy. For both, sympathy formed part of a moral conscience and was a way of experiencing the feelings of another by imagining oneself in their situation. Drawing a distinction between the two concepts Wispe (1986) claims that empathy is a way of knowing the other person and how suffering affects them, whereas sympathy involves being aware of and concerned for another's suffering. Unlike the compassionate person who feels a deep connection with the suffering, a sympathetic person acknowledges another's suffering and nothing more (Jull, 2001). Nevertheless,

Gilbert (2005) suggests that sympathy is a key indicator for compassion as a response to suffering, in the same sense that Smith describes sympathy as the glue that holds people together in times of need.

2.4.4 Pity

Pity is defined in the English dictionary as the sympathy or sorrow felt for the sufferings of another (Oxford English Dictionary). The beginning of compassion can be seen in this definition. That is to say, when first encountering another's suffering, feelings develop in relation to another's plight. However, Jull (2001) argues that pity is a fear based response to the pitier's raised awareness of their own vulnerability. Both pity and sympathy can be considered passive in nature whereas, to a lesser extent than compassion, empathy is an active endeavour. For example, an individual can show pity believing they have contributed to alleviating another's suffering without becoming involved in it (Von Dietze & Orb, 2000). According to Brandon (1990), through the combination of arrogance and sympathy centred in a smugness and complacency, pity impedes true genuine giving, seeing people as lesser beings. This, according to Von Dietze & Orb (2000), can evoke thoughts of "rather them than me" in nurses.

2.4.5 Care

The dictionary definition of care is "*to provide physical needs, help, or comfort* (for)" (Collins English dictionary), or "*the services rendered by members of the health professions for the benefit of a patient*" (The Free Dictionary, Medical Dictionary). Care is often defined as the heart of nursing, but can mean different things amongst nurses, which can affect the type of care given (Delves-Yates, 2015). Depending on perspective, care can be viewed as either another task the nurse must perform, or a commitment to be actively involved in and attending to the patients' needs (Lachman,

2012). The UK NHS holds care as one of its six C's of Compassionate Care, saying that, "*Care is our core business and that of our organisations, and the care we deliver helps the individual person and improves the health of the whole community. Caring defines us and our work. People receiving care expect it to be right for them, consistently, throughout every stage of their life*" (Cummings and Bennett, 2012, p. 13). Indeed, compassion is seen as being central to how care is delivered, yet how nurses express their caring and compassionate nature can be considered as being separate behaviours (Dewar & Christley, 2013)

Although considered necessary for the delivery of compassionate care, and part of the same "compassion family" (Goetz et al., 2010), empathy, sympathy and other related states are separate constructs in their own right (Von Dietze & Orb, 2000; Nussbaum, 2003). When used interchangeably within nursing discourse there is a risk of compassion losing its own identity and the true value of what it means to be compassionate becoming ignored in practice (Schantz, 2007; Jull, 2001). Arguably, this misunderstanding of the term can also prevent organisations and educators from both teaching and measuring compassion among staff and students (Davidson & Williams, 2009).

In their study exploring the difference between, sympathy, empathy and compassion from the patients' perspective, Sinclair et al., (2017) uncovered the following major categories and themes that distinguish between each concept. As seen in table 1, the findings suggest that at a basic level, sympathy can be seen as a way to acknowledge suffering; empathy is to acknowledge and understand someone's suffering; and compassion is to acknowledge, understand and act on another's suffering. In support of Bloom, this research also highlighted how patients preferred compassion to empathy, because it was linked to action. While patients welcomed an empathic

response, compassion was noted as coming with the intention to transform suffering and attend to their needs, guided by love (Sinclair et al., 2017). This is not to suggest that for them to be compassionate nurses should have romantic feelings for patients but illustrates how a love of humanity can help motivate compassion for them.

While many health organisations promote compassionate care, the processes involved are not clearly identified. In attempting to address this gap, Dewar (2013) postulates, through a 7 C's of Caring Conversations model, that the actions and behaviours associated with compassion are best exemplified through the ways in which nurses communicate with patients, their families, each other and within the care team. However, this seems to limit compassion to communication alone and does not consider the other valuable actions such as kindness, "going the extra mile" or the ways in which nurses can adopt self-care techniques to protect from emotional stress.

Sympathy (Acknowledge)	An unwanted pity-based response A shallow and superficial emotion based on self-preservation An unhelpful and misguided reaction to suffering
Empathy (Acknowledge + Understanding)	Engaging suffering Connecting to and understanding the person Emotional resonance: putting yourself in the patient's shoes
Compassion (Acknowledge + Understanding + Action)	Motivated by love The altruistic role of the responder Action oriented. Small supererogatory acts of kindness

Table 1. Difference between compassion, sympathy and empathy, with the researcher's additions in parentheses (Sinclair et al., 2017)

In sum, it seems that the definitions of compassion vary depending on profession, and that compassion itself differs from other similar concepts such as empathy. While there is a strong case that both help motivate prosocial behaviours involved in care,

educating nurses on how they differ is important for understanding and improving compassionate care.

A further limitation from the dictionary and earlier definitions of compassion, is that the literature seems bereft in explaining the actions to address patients' needs and alleviate suffering. While attempts to address this have been limited to communication, more is needed to explore this in greater detail. Equally, McCaffery and McConnell (2015), propose there is an ambiguity running through the literature as to what compassion implies for nursing, and that its role needs to be separated from other similar definitions so that it can be understood in nursing practice.

As a fundamental human quality, the foundations of compassion are not particular to nursing. Therefore, the next section provides an overview of compassion from a range of philosophical, theological, evolutionary and psychological perspectives concerning the origins of compassion.

2.5 Philosophical perspective on compassion

Aristotle was perhaps one of the most significant Greek philosophers who ever lived. Nussbaum (1996) claims that Aristotle (355-322) gave the first ever conceptual account of compassion (*eleos*) when he spoke of pity as *the pain felt by one when witnessing the evil put upon another who was not deserving of that misfortune, and was someone with whom those witnessing the pain could relate to in some way*. According to Aristotle, pity/compassion is dependent on three beliefs. First, that the suffering is serious. Second, that the suffering was not brought on by the person's own doing. Third, those bearing witness to the suffering recognise that they too might also be susceptible to the same kind of anguish (Aristotle, 355-322; Nussbaum, 1996; Cassell, 2002). In considering this, failures to provide compassion may arise when

nurses deem a patient suffering as enough to warrant compassion. Furthermore, patients with uncontrollable issues such as cancer or Alzheimer's may elicit more of a compassionate response in nurses, than ones with controllable problems like obesity and addiction (Goetz et al., 2010). Undeserved suffering could then lead to a compassionate response, whereas patients seen as undeserving may be judged as being culpable for their suffering, and thus not worthy of compassion. This is not to assume that one should not feel compassion for more trivial matters, but to suggest that a compassionate response is commensurate to the degree of suffering (Crisp, 2003; Nijboer & Van der Cingel, 2019).

Later philosophers saw compassion consisting of the direct participation in the easing of another's suffering regardless of any ulterior motives. For Schopenhauer (1937) compassion was the sole source of all moral actions. Whereas, Hume's (1739, 2003) interpretation was that compassion for another arose out of sympathy for their plight. Hobbes (1651), held a similar position of thought to Aristotle, when he said that grief grew from imagining that the adversity of another might also happen to oneself. However, rather than call it pity, He referred to this experience as "compassion", or in the presence of another's suffering, "fellow-feeling".

Plato, Nietzsche, and Kant, challenged this, believing that "showing" pity towards another was more rational than to "feel" pity for them as in doing so they removed the misery of feeling another's pain (Parkin, 2004). In a similar debate, it is often argued that pity and compassion are based on an emotional rather than a virtuous response to suffering (Carr, 1999). Arguably, if this were to be the case compassion would occur naturally, as people do not always have control over their feelings, whereas virtues are driven by choice. Rather, it seems that both are present when responding compassionately to suffering.

Likewise, Kant (1774) saw sharing in another's pain as only serving to double the suffering between people. Plato and Nietzsche both proposed that compassion and pity use valuable energy that might otherwise be spent helping the individual heal their wounds (Weber, 2005). This is seen in Plato's (1894) criticisms of compassion and pity in book Ten of the Republic when he said, "*that we should take counsel about what has happened, and when the dice have been thrown order our affairs in the way which reason deems best; not, like children who have had a fall, keeping hold of the part stick and wasting time in setting up a howl, but always accustoming the soul forthwith to apply remedy, rising up that which is sickly and fallen, banishing the cry of sorrow by the healing art*" (Plato, 1894, p. 262). Plato also considered this dwelling on misfortunes as perpetuating suffering, often referring to it as "irrational", "idle" and "a friend of cowardice" (Plato, 1894). Similarly, many philosophers argued that compassion and pity should be reserved for a fellow reputable citizen who had fallen from hard times and might respond with thanks upon being pitied (Blowers, 2010).

Some also argue that the Stoic philosophers were also less in favour of compassion, preferring to see it as an emotion that prevented rational thought (Nussbaum, 1996). Indeed, in Marcus Aurelius' book "Meditations" there are many references throughout to the benefits of helping, and how one should treat their brethren, their community and others in their community with kindness (Aurelius, 1559). Despite compassion not being discussed as such, the thoughts put forward by the Stoics suggest that compassion or elements of it, were a valued virtue that should be developed daily to build strength of character.

As it is often seen today, many accomplished thinkers and practitioners had mixed views on the implications compassion brought to society. It stands as a reminder that compassion is not always understood as straightforward, both for its emotional aspect

and expressed behaviours. Taking some of these ideas further, theology discussed ways in which compassion was expressed through the belief in a higher power.

2.6 Theological perspectives on compassion

Armstrong (2011), states that all religious faiths follow the Golden Rule that was first set out by Confucius when he said, "*to treat others as you would like them to treat you*". There are an estimated 5.8 billion people, 84 percent of the world's population, who have some affiliation to a religious faith (Hackett & Grim, 2012). Christianity, Hinduism, Judaism, Buddhism, and Islam are some of the largest religious groups in the world today. Religion is often associated with compassion and prosocial behaviours. For example, although many Christian texts are inspired by Greek philosophy (Kappelli, 2008), the process outlined earlier by Aristotle where one might or might not be deemed deserving of compassion did not feature. As is said in the Bible, The Lord Jesus Christ was sent to earth to "*bind the broken–hearted*", "*comfort those who mourn*" (Isaiah 61:1) and to protect the whole of humanity, "*For God did not send the Son into the world to judge the world, but that the world might be saved through Him*" (John 9:39).

Both Matthew and Mark wrote extensively about how "Jesus' compassion was displayed through his healing of the sick and those filled with disease" (Mark 1:41; Matthew 9:35). Similar to the Buddhist idea that the "right" balance of compassion and intelligence make a helpful person, the Christian theologian Thomas Aquinas argued that compassion required a certain level of intellect to be moved to action, because in the course of this cognitive process a solution to the suffering is found (Barad, 2007).

In more modern times Christians demonstrate their compassion through acts of charity, seeing themselves as the conduit between God and his children (Barad, 2007;

Feldmeier, 2016). Krause and Hayward (2015) found that practicing Christians who attended worship showed more commitment to their faith, were subsequently humbler and more compassionate, and more likely to provide emotional support to their friends and family.

The idea of compassion as service to others can be found in other religions. In Hinduism, God's love, mercy and compassion stretched far beyond the faith of the believer, even to those who denied God's very existence, while suffering occurs from attachment, and the law of Karma (Whitman, 2007). To connect with God, Hindu's believe in a debt to nature, to their parents, to friends, to the animals that provide nourishment, the oxygen and water, and their blessings, and that they must show compassion towards the suffering in humanity (Sivananda, 1999).

The Buddhist tradition also shares in the idea that suffering comes from the pointless endeavour of attachment to things outside of self (Harvey, 2000, 2013). Only when this suffering is brought into awareness can one free themselves and become truly engaged in the virtue of compassion for others (Dalai Lama, 1995; 2001). Buddhism is therefore the practice of the Buddha's teachings (Dharmas) so that all living beings can be liberated from suffering (Gyatso, 2011). In all Buddhist traditions, the spirit of the Buddha is one that embodies compassion and loving-kindness. Loving kindness to rescue all people by whatever means possible, and, compassion to suffer with the suffering and be with their illness (Kyokai, 1966). According to the Buddha, one needs only to develop two qualities equally to reach perfection: Compassion [karuna] which represents qualities of the heart and emotion, such as charity, love, tolerance, kindness, and wisdom [panna] which represents the intellectual qualities of the mind. If one or the other is out of balance then the individual either becomes "*a good-hearted*

fool", or a "*hard hearted intellect without feelings for others*" (Walpola, 1974, p. 46; Rinpoche, 2003).

Compassion in Judaism is seen as a virtue that all are deserving of and that when shown to others can be rewarding. Much like the Buddhist idea of wisdom and compassion, engaging in compassionate acts as well as the pursuit of knowledge is encouraged. Compassion is also considered a way of advocating for another in their time of need (Sinclair, 2003). Human weakness was met with compassion because none could withstand God's wrath. Thus, compassion extended to all of God's creations, the poor, the widowed, and the persecuted (Kholer, 1918) and brought joy to those who demonstrated it to others, expressed here as "*He who despises his fellow sins, but he who shows compassion to the humble is happy*" (Proverbs, 14:21).

In the Islamic faith, compassion is an essential virtue for all Muslims and is at the centre of their beliefs. Compassion appears often throughout each of the chapters in the Quran. When reciting the Quran, a Muslim begins by saying "*in the name of Allah who is compassionate and merciful*" (Engineer, 2001). Similar to other scriptures, the Quran speaks of justice and compassion for the poor and unfortunate seen here in Women, (4:75) "*And why would you not fight in the cause of God, and the helpless men, and women, and children, cry out, Our Lord, deliver us from this town whose people are oppressive, and appoint for us from Your Presence a Protector, and appoint for us from Your Presence a Victor*." For Muslims compassion represents the same virtues as all other religious beliefs. That is to say, those who are true believers must also be sensitive to suffering, want to do something to alleviate suffering, and be willing to extend this to all beings (Engineer, 2001). In Islam, judgements such as ego, colour of skin, ethnicity, interest and beliefs can all affect how compassion is shown to others. However, an omnipresent Allah is the only one who can witness all beings and

therefore pass judgment, and so Muslims are encouraged to widen their compassion to all and as far as possible (Engineer, 2010).

According to Gibson (2015), compassion for another's suffering can in some cases be counterproductive to the growth of the sufferer. Conversely, pain and suffering can also lead to flourishing and opportunities for self-development (Hall et al., 2010). The story of Martin Luther King is used as an example as to why suffering can in some cases lead to great change, and transformative learning (Gibson, 2015). Equally, some Christian theologians argue that too much compassion can become crippling, leading to fatigue and ineffective care, whereas too little makes people seem less human (Ryan, 2010). Where a certain amount of suffering can be necessary for the development and growth in sensitivity aimed at compassion for others, Tinsley (1964, p.7) posits "*the problem becomes acute when we reflect on the intensity of human suffering*". In other words, do the ends justify the means? Indeed, one can argue that suffering itself can be productive for human growth, but it should never replace compassion for learning or indeed for suffering's sake. Understanding how different ethnic groups understand compassion and suffering is important for both the patient and the nurse, as each will have a different perspective that ultimately affects how they give and receive compassionate care (Singh et al., 2018).

These examples show how compassion underpins many of the world's religions. Compassion lies at the heart of each of these traditions as a guiding example of service to others through action more than feeling. Exploring the different psychological theories and models involved in compassionate behaviour is helpful when attempting to understanding how nursing students can learn about demonstrating compassion in practice.

2.7 The psychology of compassion

"*Compassion is the courage to descend into the reality of human experience*"
Paul Gilbert - founder of Compassion Focused Therapy

2.7.1 Evolutionary aspects of compassion

Research into primate behaviour shows that compassion served as an evolutionary function predating philosophy and religion (DeWall, 1999). In the Descent of Man, Darwin (1879) spoke of kindness and sympathy as being beneficial for reproduction. Most commonly known for suggesting that the survival of the fittest guided evolution, he also wrote that kindness was more important for survival, as it related to flourishing and subsequently more reproduction. More recent views propose that kindness was rewarded with more mating opportunities, because altruism was viewed as a positive attribute when raising families (Keltner, 2010). The work of developmental psychologist John Bowlby (1969) has shown how attachment and compassionate behaviours can equally have a positive impact on vulnerable children (Mikulincer et al, 2005). Whereas studies show that even at the age of 18 months, children display helping behaviours (Warneken & Tomasello, 2006).

In an extensive review of the literature, Goetz et al (2010), concluded that compassion is a unique emotion that evolved specifically to alleviate suffering, assist the raising of offspring, mate selection, and cooperative behaviours between groups. In support of this, Stellar et al (2015) identified the vagus nerve, a part of the autonomic nervous system that had evolved to react with compassion when presented with the suffering of another. Indeed, Keltner (2010) suggests that both humans and animals have what he called a “compassionate instinct.” Charting the development of compassion among

early humans through evidence presented in archaeological records Spikins et al., (2010) found that compassion played an important part in the development of the species over time leading to collaboration, sharing of grief, and the comfort in “things”, what today might been seen as symbolic for comfort or God. Indeed, Gilbert (2015) proposes that compassion is very much a part of the human capacity that evolved through caring motivational systems and social characteristics, cultivated through cognitive, societal, social-identity, and cultural processes that brought benefits to the tribe and the mind of the individual.

Alternative theories suggest that gene selfishness can translate into individualism for the sole benefit of the gene rather than the organism. In this way, a limited amount of altruism is present but only to serve the selfish goal of the gene (Dawkins, 1976). Some individuals may also react compassionately to the suffering of others to seem moral and just in the eyes of others and gain reciprocal favours (Trivers, 1971; Brosnan & De Waal, 2002). As Goffman (1959) proposed, humans present themselves to the rest of society as an actor would on stage, to project an image that is desirable for work related reasons, or to form relationships and gain information about others. However, Grinde (2005) argues that through their own actions human beings can adjust their way of thinking to see how compassion benefits them as well as society.

2.7.2 Social identity

The relationship between the helper and sufferer is equally as important. Familiarity with the person who is suffering mediates the level of compassion and altruism shown towards them (Valdesolo & DeSteno, 2011). Sharing a social identity with the in-group, or someone “like them”, is a determinant for how one behaves in relation to other members and those not “like them” in the out group (Tajfel, 1979; Brewer, 1999; Struch

& Schwartz, 1989). Evidence for this can be seen in more recent arguments on the topic of social welfare. On the one hand conservative thinkers who believe that those in receipt of benefits are lazy and have created their own situation see them as undeserving, whereas more liberal followers will attribute those in need of welfare as a consequence of external forces (Petersen et al, 2012; Skitka & Tetlock, 1993; Morgan et al, 2010). For example, Gill et al (2013) found that an out-group that was perceived as suffering in circumstances outside of their control received more compassion from the in-group. Interestingly, based on a greater awareness to potential social and environmental threats, Stellar et al (2012) discovered that individuals from lower-class groups were more attuned to another's suffering than their upper-class counterparts.

Identification with a victims' suffering also determines whether they will be treated with compassion and is more likely to happen if one identifies with a similar mutual fate (Lerner & Matthews, 1967). Petersen et al (2012) argue, that this stems from human beings first encounters with social exchange and could be guided by anger or compassion depending on the outcomes of previous interactions. Arguably then, compassion is "softwired" rather than "hardwired" into human behaviour, suggesting that there is a predisposition to learn and develop compassion in each person, as opposed to it being "built in".

The model by Goetz et al (2010) presented in figure 1 outlines the psychological process taken when developing a compassionate response to suffering. It resembles a similar pattern outlined by Aristotle and other philosophers in earlier sections of this chapter. A goal is to challenge any initial judgements nurses may have about patients, especially during the early stages of their training.

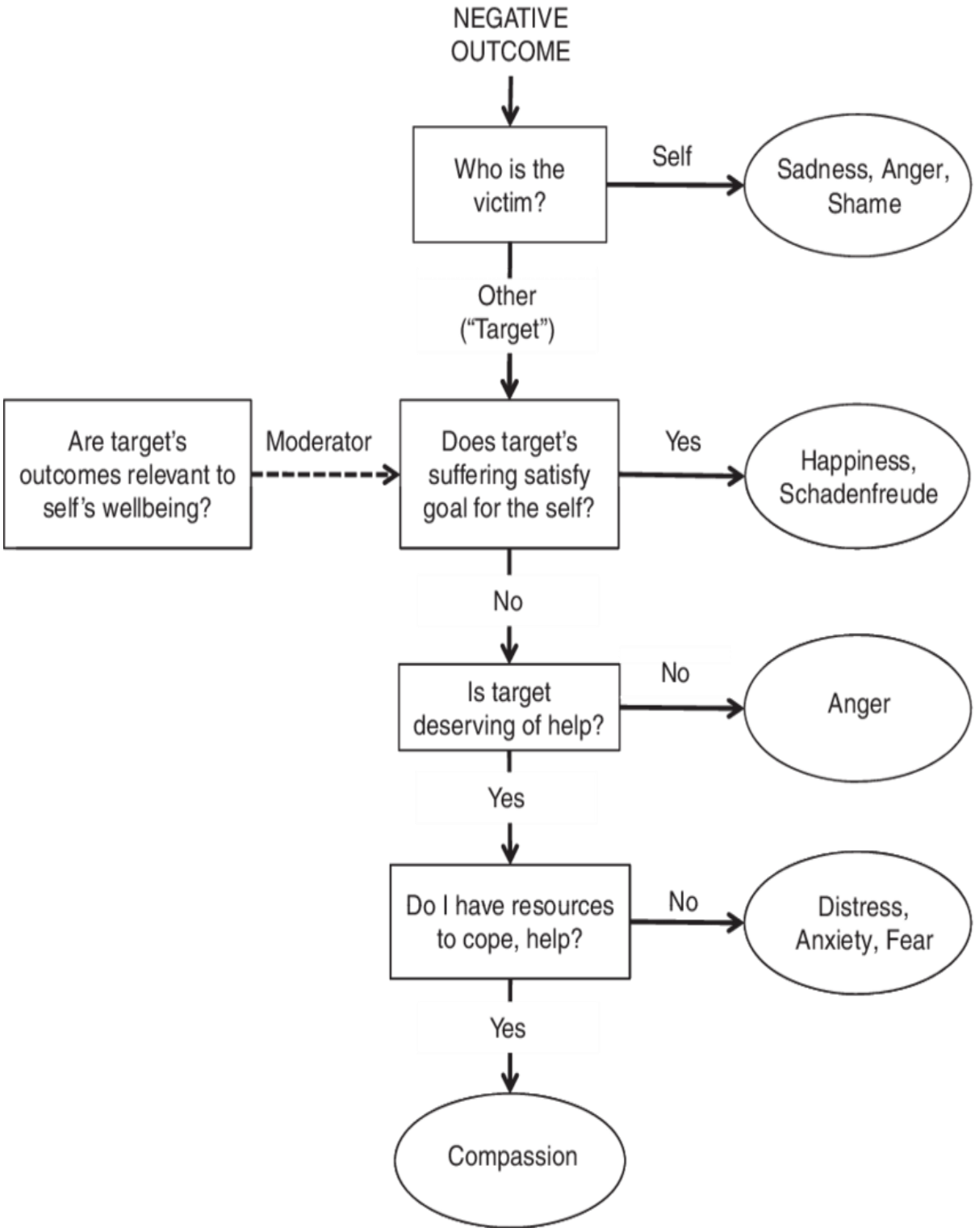


Figure 1. A proposed model for how compassion develops in those witnessing another's suffering (Goetz et al, 2011).

2.7.3 Psychological predictors of behaviour

2.7.3.1 Beliefs

Compassion is a virtue that leads the individual to what they believe to be a just and moral life; one that brings them happiness and a sense of meaning (Jull, 2001). For example, someone who follows a certain religious doctrine might be motivated by the need to serve God, whilst psychologically, showing compassion and helping others makes people feel good about themselves (Cornelius, 2013). Nevertheless, beliefs play an important part in the motivation to help others, and are a salient feature in nursing (Paley, 2014).

2.7.3.2 Self-Fulfilling Prophecy

In a classic study about self-fulfilling prophecies, (Rosenthal and Jacobson, 1968), teachers at an American school were given false information about a randomly selected group of pupils in their class. The teacher was led to believe that these students possessed extraordinary academic potential. In a series of non-verbal IQ tests at the beginning and again at four and eight month intervals, this group had significantly higher IQ scores than the rest of the class. The results were reported as being a consequence of the greater expectations the teacher had placed in these students. An example of the opposite effect of this is when based on a “one-time” incident a nursing student is labelled as being lazy by a ward manager. Others respond to this label and the student starts to accept the label and begins to exhibit lazy behaviours (Quinn & Hughes, 2007). Similarly, nurses and nursing students can be affected by a self-fulfilling prophecy, believing that they do not have compassion nor have the capacity to become compassionate. A potential consequence of this type of self-belief is that the nurse loses their motivation to learn or develop their compassion.

Certainly, with the reports of poor care and media coverage of these incidents it is important that nursing students are encouraged to develop their compassion.

2.7.3.3 Theory of Planned Behaviour

Social cognitive theories play a pivotal role in helping understand the cognitive mechanisms that underline the beliefs and intentions to predict behaviours among nurses and other healthcare professionals (Godin et al., 2008). The Theory of Planned Behaviour (TPB) might help with understanding the psychological process that occurs when nurses chose, or do not, to be compassionate. The TPB was designed to predict human behaviour, based on a person's subjective norms, perceived behaviour control, and attitude towards the behaviour that drives their intention to behave in a particular way (Ajzen, 1991) (See figure 2). A person's subjective norms are based on their perception of the behaviour, which in turn can be influenced by significant others. Perceived behaviour control relates to the individual's perception of the ease or difficulty of completing the behaviour, and whether or not they have the resources to carry out the task. The individual's attitude refers to the person's valuation towards the behaviour under consideration (Ajzen, 1991). When combined, these factors determine the likelihood of the behaviour being carried out. If an individual's attitude and subjective norms are similar, and the greater perceived control they have, the stronger their intention will be to perform the behaviour when the opportunity arises (Ajzen, 1991).

The TPB builds on the theory of reasoned action (Ajzen, 1985), and is seen as an extension of Bandura's (1977) theory of self-efficacy. The theory of self-efficacy proposes that to carry out a behaviour an individual is driven by the beliefs of task performance, motivation, and the disappointment of repeated task failures. These

beliefs are grouped into separate categories; one is self-efficacy, and the other is outcome expectancy. Bandura (1977) proposed that self-efficacy drives the belief that an individual can carry out the behaviour to achieve a certain outcome, whereas the outcome expectancy suggests that the outcome will favour the individual. The attitudes and beliefs nurses hold about a patient and their ill health can have a profound impact on the care the patient receives (Higgins et al., 2007; Pope, 2012; Hellzen et al., 2003). Having a negative perspective of patients can lead to faulty judgements and attribution bias, whilst a positive attitude improves the chance that the patient will have their needs met (Rana & Upton, 2013). Educators can utilise the theory of planned behaviour to understand how attitudes, subjective norms and perceived behaviour control affect behaviour, and implement strategies that remove barriers to change in compassionate care (Eccles et al., 2005; McConnell, 2015). Addressing the issue of perceived behaviour control, specifically a lack of resources, by providing students with the necessary techniques to perform particular tasks through application of background theory, simulations and constructive feedback, could increase confidence towards the behaviour (Archer et al., 2008).

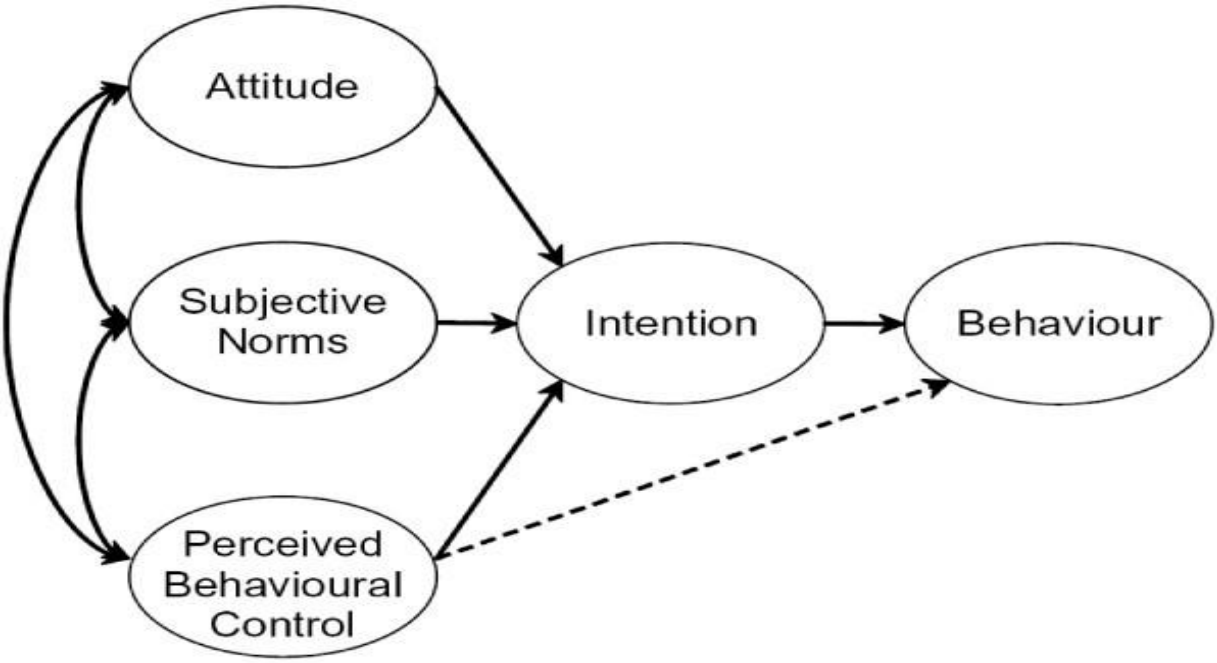


Figure 2. The theory of planned behaviour model (Ajzen, 1991).

2.7.3.4 Agentic state in relation to compassionate behaviour

Beliefs and attitudes towards particular people can have a profound effect on the subsequent behaviour. Acting on one's beliefs to challenge a current immoral and malevolent authority can be facilitated by an autonomous state or hindered by an agentic state (Milgram, 1963) (Fig. 3). According to Milgram (1965), the agentic state is when a person does not take responsibility for their actions and acts as an agent for another's will, which is usually someone in a position of power. Conversely, an autonomous state refers to when people direct and take full responsibility for their own behaviour (Milgram, 1974).

The Francis Report (2013) suggested that some of the occurrences at Mid-Staffordshire NHS Trust were as a result of staff following orders. Therefore, a nurse who is exhibiting a lack of compassion may do so because they are under strict orders to only perform their clinical duty, and nothing more. Acquiescing to authority in this

way could render the nurse as unable to present a fully human response when tending to another human being, thus ostensibly showing them to be lacking in compassion. This type of conformity could also be understood as a coping strategy that novice nurses adopt to cope with conflicting personal goals to maintain their compassion values and organisational goals (Nijboer & Van der Cingel, 2019). In relation to judgements made towards patients, Milgram (1974), found that some participants in his Obedience Study viewed subjects as unworthy individuals who were deserving of their suffering. This raises an intriguing question, “do some nurses look upon their patients with a similar disdain?” And if so, what can be done to challenge this.

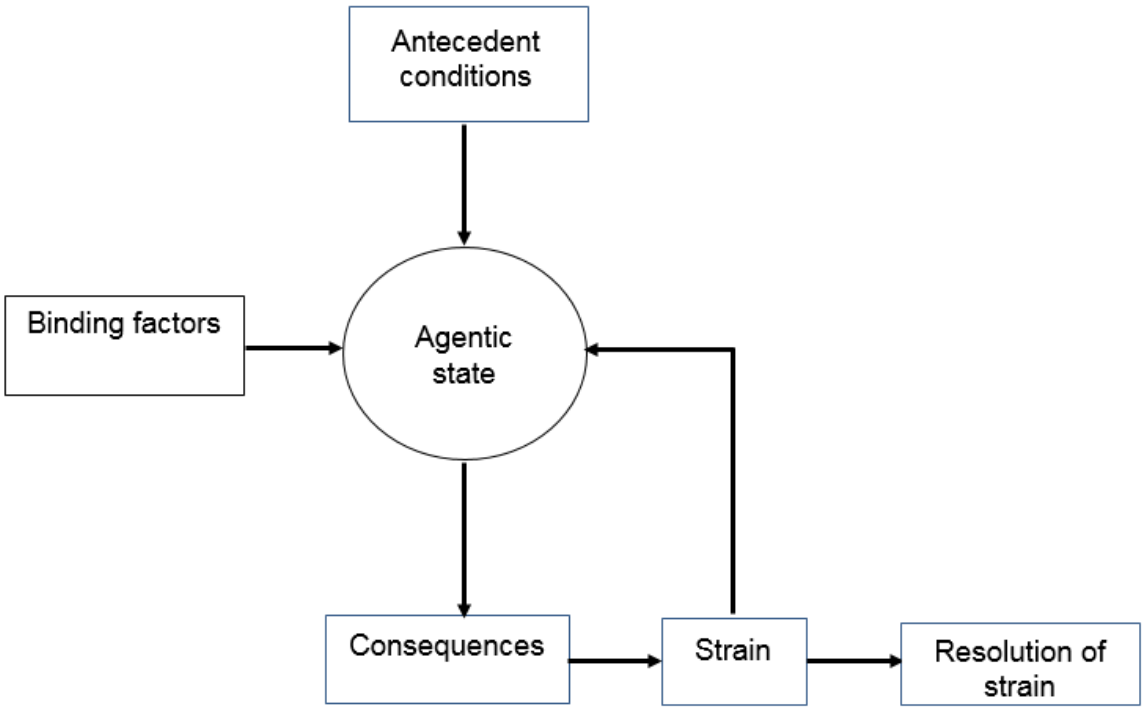


Figure 3. Model of the agentic state

2.7.4 The psychological benefits of compassion

Equally, a person's beliefs can be greatly influenced by the psychological benefits that completing a certain behaviour might have on an individual. For many years, psychology (clinical) has been concerned with understanding, and finding solutions to the various problems people face. However, recent developments and the advent of positive psychology have seen clinical terms such as dysfunction, illness, and problems, balanced with resilience, flourishing and compassion (Gillham & Seligman, 1999; Seligman, 2003; Seligman & Csikszentmihalyi, 2000). Studies in positive psychology suggest that practicing compassion and engaging in compassionate acts can increase happiness, self-esteem, and help reduce symptoms of depression, along with many other positive benefits (Mongrain et al, 2011). For example, compassion has the power to transform the person and move them beyond their own suffering (Lomas, 2015), as it can heal both the giver and the receiver (Stone, 2008). Compassion has also been shown to aid social relationships (Crocker & Canevello, 2012). When individuals show compassion and kindness to others, they form similar emotional bonds to those found in friendships (Crocker & Canevello, 2008).

2.7.5 Self-Compassion

Self-compassion had been shown to alleviate the symptoms of depression, anxiety, as well as reduce shame, guilt and critical self-judgement (Kirby, 2017; MacBeth & Gumley, 2012; Devenish-Meares, 2015; Gilbert, 2014; Gilbert & Proctor, 2006; Germer & Neff, 2013). Studies investigating the effect of self-compassion on university student's wellbeing and resilience have so far proved promising (Gunnell et al, 2017; Smeets et al, 2014). Having more compassion for the self is commonly associated with positive psychological strengths such as happiness and optimism (Neff et al,

2007). People scoring high on this trait are more likely to help another and be more accepting of human error when they perceive the person as being responsible for their situation (Welp & Brown, 2013). Gilbert's (2009) model of the Compassionate Mind posits that human behaviour can be guided by three types of affect regulation system (See figure.4). This can be viewed as the psychologies that govern the interplay between systems of drive, contentment, and threat. He proposes that with practice one can learn how to control the system associated with contentment, safety and connection to develop a compassionate mind using soothing and positive feedback.

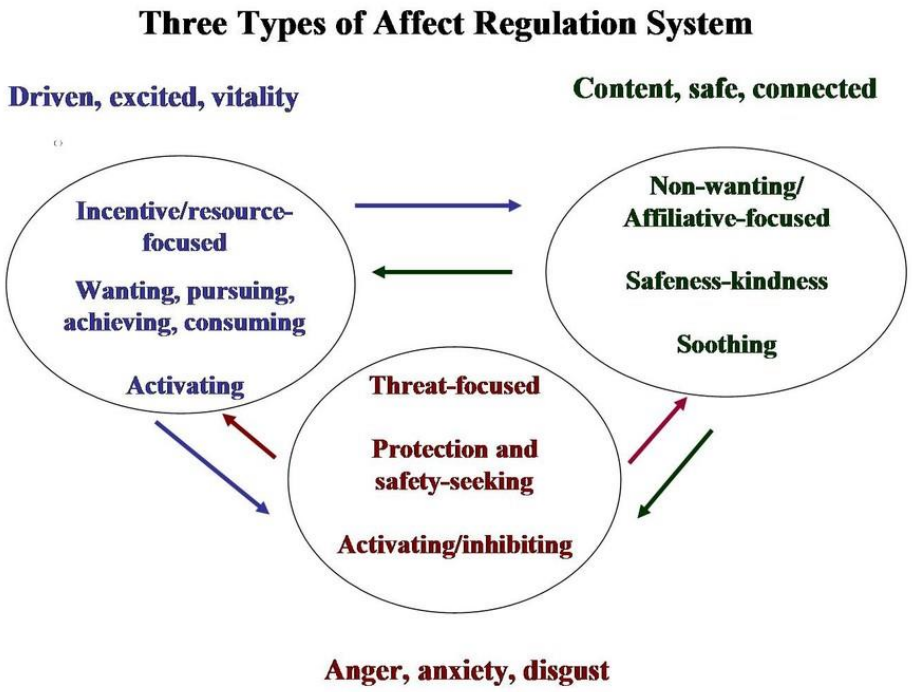


Figure 4. Gilbert's model of the compassionate mind

In sum, compassion can lead to many positive psychological outcomes both for the giver and the receiver. Studies discussed here suggests that it is dependent on certain intrinsic beliefs, attitudes, perceptions and behaviours as well as external circumstances. These factors combined can potentially shape the outcome for the level of compassion shown to others.

2.8 Compassion in nursing

The origins of modern nursing care can be traced back to Florence Nightingale, who argued that nursing needed to separate itself from the dominant medical model and develop its own unique body of knowledge (Nightingale, 1859). Nightingale emphasised the need for nurses to cultivate a “compassionate character” alongside their technical skills (Bradshaw, 2011). The former dean of the Florence Nightingale School of Nursing and Midwifery suggests that “*we can read Nightingale as a credo for compassion today*” (Rafferty, 2011, p.3).

2.8.1 Florence Nightingale

Nightingale’s work was largely influenced by positivism, the branch of philosophy which states that knowledge is based on the interactive properties of natural phenomenon. This is evident in her use of statistical analysis of data, and the positive relationships she wrote about between a patient’s health and their environment (McKenna, 1997). Nightingale considered nursing as both an art and a science, with care as the art, and clinical knowledge the science. The art of nursing included virtues such as compassion, which were based on the current Christian beliefs, whereas the science was driven by practice based on the accepted research and methods of care at that time (Selanders, 2010). Through her book “Notes on Nursing: What it is and what it is not.” Nightingale expressed her own philosophy and provided an explanation of the nature of nursing. She spoke of nursing as being concerned about the patient and their environment, and the attention given to altering the surroundings to improve health (Nightingale, 1859). Nightingale’s approach was very much based on a philosophy of caring for patients by focusing on health as well as illness. She summarised the nature of nursing as preparing the patient for a restorative process

and putting them into the best condition for nature to take its healing course (Nightingale, 1859), expressing here what can arguably be considered her example of the behaviours associated with compassion in nursing. However, during the 1950's, the very same science of positivism that had influenced Nightingale, posed a threat to the nursing values that were grounded in the religious ideas of compassion and suffering. Nursing witnessed a shift towards a scientific approach to care that was seen as being inimical to the religious values of suffering and compassion that had guided nursing prior to that era (Aita, 2000), prompting the fear that nursing would become medicalised and lose sight of the importance of compassion (Bradshaw, 1997).

2.8. 2 Nursing theory and compassion

The concept of compassion is rarely found within nursing theories (Schantz, 2007), despite many nursing textbooks throughout the 20th century highlighting that among other things nurses should be compassionate (Bradshaw, 1997). Although not formally described as a theory, arguably, one of the most comprehensive explanations of nursing care is that of the Canadian nurse Sister Simone Roach (1992). Roach's theory outlines a specific set of concepts, originally described as the 5C's of caring, then updated to the 6C's sometime later. The six concepts of "*compassion*", "*competence*", "*confidence*", "*conscience*", "***commitment"***, and "*comportment*", provide a clear and concise set of qualities to help in the delivery of compassionate care. Roach (1992) saw caring as the human way of being stating that nurses care not because they are nurses, but because they are human. She developed a sound conceptual understanding of compassion but did not specify how nurses could adopt these behaviours and bring them into their nursing care. Whilst important for understanding why nurses care, McCance, (1999) argues that these concepts are too abstract to be followed in practice.

Similarly, Watson (2011) defined caring as a significant moral and ethical guide that represented the values of empathy, communication, competency, interpersonal skills, using such words as compassion, joy, hope, openness, love and peace to reflect the connection between the physical and spiritual worlds of patient and nurse (Jesse & Alligood, 2014). According to Smith and Godfrey (2002), personal characteristics such as, compassion, communication, respect, and kindness are a few examples of the virtues that nurses bring with them that represent what it means to "*do the right thing*". Likewise, in the spirit of "The Good Samaritan" nurses need to act as compassionate strangers to those who are suffering regardless of kin or kind (Benner, 1998).

Ethics are the basis for the standards of norms and values for behaviours endorsed in society. Nursing practice is guided by values and morals, yet issues can arise when there is a difference of opinion between professionals on behaviours that may harm the patient, or those that do not meet professional values (King, 1999). This highlights the importance of questions that ask how nurses address the moral phenomena they are presented with on a daily basis? Or how nurses come to understand the basic rights of patients, and what morals and values should to be used to direct nursing practice, and the ethical judgements they must make in relation to care (Fry, 1999). As Lindh et al (2009) suggest, simply knowing what is "good for patients" is not enough, nurses need to be able to deliver "the good."

Though popular among nurses, especially for its moral implication, many argue that Peplau's theory does not explicitly label compassion as a skill that can be developed nor does it contain a guide for development (Senn, 2013; Gastmans, 1998). Deane and Fain (2016) suggest that during the orientation phase of Peplau's theory, nursing students are given the perfect opportunity to practice compassion through interactions with patients. Halldorsdottir (1991, p.44), describes this as "*the lifesaving mode of*

being with a patient" requiring nurses who are "*skilful, knowledgeable, committed to the provision of personalized care, and know how to safeguard the personal integrity and dignity of the patient*". This approach to "*professional nursing care"*, is guided by "*Compassionate competence, genuine concern for the patient as a person, undivided attention when the nurse is with the patient, and sober cheerfulness*" (Halldorsdottir, 1991, p, 44).

The art of nursing, that which involved the development of virtues such as compassion, communication, empathy, togetherness, connection and the humanness of patients, alongside medical practice, was fundamental to what nursing is and what it means to nurse. Roach's (1992) approach to nursing care is by far the more explicit and clearly defined explanation for the importance of compassion as an art form in nursing but lacks a clear definition or guidance for its practical application. As a result, Corbin (2008), argues that the current states of care in hospitals around the world indicates that the artistry of care is nursing has become lost.

More recently, compassion in nursing has been described as a relationship between nurse and patient where both are close enough to give and be open to suffering (Van Der Cingel, 2009). Likewise, Day (2015) found that compassion was described by nurses as understanding, care, empathy and listening, showing that it consists of several components but can also mean something different to each person. Among healthcare staff, particularly those working in mental health, compassion is viewed as skill that can shape the emotional climate of a workplace, which also helps make difficult patients more manageable (Brown et al., 2013). Yet, in a recent review of the literature Feo et al., (2018) found that there is still a lack of understanding for the fundamental aspects of compassion in nursing and how it relates to care in practice. Therefore, more research is needed to understand what compassion is in nursing.

2.9 Current strategies and frameworks for compassion and care in the UK

In the UK's National Health Service (NHS), compassionate care is at the forefront of nursing practice. Compassion has become a prominent item of discussion since the findings of the Francis Report (Francis, 2013) were first published. As a result of the report the government set out to change the current culture within the health service with the aim of bringing about a more compassionate workforce. This led to the development of strategies such as the "Compassion in Practice" (Cummings & Bennett, 2012), and the Leadership in Compassionate Care Programme (Dewar & Cook, 2014). However, strategies to improve compassion in practice are not new. For instance, "The Point of Care" (Firth-Cozens & Cornwell, 2009) was established in 2009 to help improve the level of compassionate care given to patients using NHS services. Also, the NHS Constitution for England (2015) has as its core values, Respect and dignity, Commitment to quality of care, Compassion, Improving lives, Working together for patients, and Everyone counts. In the same year NHS Scotland had Care and Compassion, Dignity and Respect, plus Quality and Teamwork as their core values (NHS Scotland, 2015).

2.9.1 The Point of Care

The Point of Care programme at The Kings Fund was set up with the specific aim "*to improve patients' experience of care in hospital, and to help staff deliver the sort of care they would like for themselves and their own family*" (Firth-Cozens & Cornwell, 2009, p.2). Through a series of workshops involving healthcare staff who had direct experience of caring for patients and families, Firth-Cozens and Cornwell (2009) discovered that compassionate care was fundamental to both patients and staff. Their report concluded that compassion was a two way process between patient and staff,

guided by mutual feelings of empathy and respect, with “real dialogue” used as a means of reaching a deeper level of human connection with the patient. They argue that for compassionate care to be realised in the acute hospital setting, more research would be needed to explore the factors that enable or stop compassion from flourishing, both at the individual, team, and organisational level. In addition, research should also investigate and agree on a definition of compassion, how it is assessed, and what effect working in teams has on compassionate care. They also suggest a need to develop and test teaching and training methods for compassionate care, which includes visual examples of what uncompassionate care looks like.

In a series of follow up workshops, “Schwartz rounds”, where members of a healthcare team meet to share their stories about looking after patients, or health related topic, and have their emotional needs met, were discussed as a way of developing compassion for patients. Exploring this in a longitudinal study, Maben et al., (2017) found a link between better staff wellbeing, compassion for patients, communication with patients and colleagues and Schwartz rounds.

2.9.2 Compassion in Practice

The “Compassion in Practice” vision and strategy was created by England’s Chief Nursing officer as a national response to the findings of poor quality care outlined in several reports of neglect (Youngson, 2008; Health Service Ombudsmen, 2011; Care Quality Commission, 2011; Tadd et al, 2011). Following a series of “engagement exercises” and “forming groups” involving over 9000 nurses, midwives, care staff, patients, service users’ stakeholders and members of the public, the final document was published by the Department of Health (Cummings & Bennett, 2012). The strategy consists of a framework for compassionate care known as the 6 C’s and includes such

values and behaviours as “compassion”, “competence”, “communication”, “courage”, “care”, and “commitment” (Cummings & Bennett, 2012). Compassion is defined in the 6C’s as “*how care is given through relationships based on empathy, respect and dignity – it can also be described as intelligent kindness and is central to how people perceive care*” (Cummings & Bennett, 2012, p.13). Despite claiming that all the 6C’s are considered equal in importance (Cummings & Bennett, 2012), compassion seems central to the drive behind the Compassion in Practice strategy. This potentially leaves the importance of the other five C’s as being secondary to practice, when one without the other will not suffice (Baillie, 2015).

In an opening statement to the document, the Chief Nursing Officer for England Jane Cummings states “*I want to make sure we give our patients the very best care and compassion and clinical skill, ensure pride in our profession and build respect*….” “….*The actions set out in this vision and strategy, which have been developed with you, will change the way we work, transform the care of our patients and ensure we deliver a culture of compassionate care*” (Cummings, 2012, p.6). Her co-author, Viv Bennett, Director of Nursing for Public Health England adds to this with “…..*Making the 6C’s real across all our services and taking actions to make every contact count for health and wellbeing, will make a difference to individual people and to the public’s health*” (Bennett, 2012, p.6).

The aim of the strategy was to promote the 6C’s among all staff members throughout all care settings in England to develop a culture of compassion through a shared vision of the 6 values and behaviours (Cummings & Bennett, 2012). Since their inception into the NHS in England, the 6C’s seem to have gained ground and have been welcomed into nursing and midwifery (Baillie, 2015). Two recent DoH documents published in 2014 and 2016 entitled “Compassion in Practice Two years On” and “Evidencing the

Impact", claim that the strategy has begun to make a positive difference to people in care and the NHS workforce (Cummings & Bennett, 2014; 2016), with various trusts adopting approaches unique to them to bring the values to fruition (Baillie, 2017).

2.9.3 The Leadership in Compassionate Care Programme (LCCP)

The Leadership in Compassionate Care Programme was initiated in response to a growing awareness that some of the things most important to patients had been lost within practice and were not always made explicit within preregistration nursing and midwifery education programmes (Adamson et al., 2012, p.14). Developed by a group of nursing academics at Edinburgh Napier University as a three year research project, the aim of the Leadership in Compassionate Care Programme was to "*embed compassionate care as an integral aspect of all nursing practice and education in NHS Lothian and beyond* " (Adamson et al., 2011, p.14). The project consists of four specific strands that impact on nurses. They are, "*establishing beacon wards to showcase excellence in compassionate care*, *facilitating the development of leadership skills*, *to embed relationship-centred compassionate care into undergraduate nursing and midwifery programmes*, and *supporting newly qualified nurses in their role"* (Adamson et al., 2011).

Some of the most important and useful factors to emerge out of the LCCP project were the use of emotional touch points to listen to the patients' story, getting to know patients on a personal level, and caring conversations (Dewar et al., 2009). Using findings from the LCCP, Dewar (2013) produced a guide for healthcare staff on how to cultivate compassionate care. She proposes that this is achieved by being compassionate to the self, connecting emotionally with and getting to know patients, their families, colleagues through caring conversations, and through developing

compassionate organisations. These underlying principles that form the LCCP were also employed into a leadership programme to assist leaders when developing compassion as part of the leadership strand (Dewar & Cook, 2014). They found that after engaging in the 12 month programme exploring and reflecting on issues to do with practice, nurse leaders felt more self-aware and a deeper understanding of themselves, that the programme had enhanced their relationships, and reflective thinking, which encouraged them to use different conversations in practice, and overall, motivated them to learn about others. In addition, appreciative enquiry and action research were also used when developing the beacon ward strand to develop compassionate care in an old people's care setting (Dewar & MacKay, 2010). The study identified several significant processes that helped staff deliver compassionate care. Specifically, getting to know the patient and what mattered most to them, and the small and often hidden little things that made a difference were key to delivering compassionate care. Using "emotional touchpoints", that is, asking patients and their families to focus on emotions from a selection of emotional words to describe certain points throughout their patient journey, can also be helpful in shaping how compassionate care is delivered on the ward (Dewar et al., 2009). Overall, research associated with the LCCP help to understand that for nursing students compassion involved action, and reflection during the learning process, and that natural traits of compassion could be nurtured.

2.10 Criticism of the current frameworks for compassion in nursing

In response to the Compassion in Practice document, Dewar and Christley (2013) suggest that a cultural change of this magnitude requires a clear articulation of the

vision and values. They argue that rather than focus on a well-defined outline of the vision, the document introduces the six values that lack the clarity needed to promote the compassionate care staff should aim towards. In addition, Baillie (2015) suggests that the 6C's have been introduced without question nor a critical review of their acceptance into nursing and midwifery. Equally, the 6C's were formulated from a top-down with nursing management, rather than a bottom-up approach involving patients staff and students first. This arguably questions the integrity of the Compassion in Practice strategy and the 6C's especially. The 6C's seem more prescriptive in their approach, telling nurses and staff why they should be compassionate rather than explaining that nurses may already have these qualities and/or how they might develop them.

Professor Helen Allan, from the Centre for Critical Research in Nursing and Midwifery at Middlesex University London was commissioned to evaluate the Compassion in Practice Strategy (CiP). In a survey sent out to 37 NHS trust in England found that from 2,267 survey responses, that 58% knew what CiP was, 30% were not aware of it, and 71% had not had any involvement in the CiP strategy (Kendall-Raynor, 2016). It also seemed that staff with a higher band level were more likely to have been involved in some aspect of the CiP strategy (Allan et al, 2015). Some resented the approach as they were already doing the best, they could to implement compassionate care into their practice. This called for recommendations to extend the approach to how the 6C's strategy can be taught to nurses with consideration given to constraining factors, rather than simply making them aware of it (Allan et al., 2015).

More importantly, both Bradshaw (2016) and Braillie (2015), have criticised the 6C's for its resemblance to Roach's 7 C's of caring. Bradshaw (2016) goes onto to argue that without reference and a fundamental understanding of Roach's ideas, the 6C's

could become a box ticking exercise devoid of all virtue, similar to the McDonalds models of customer service, or the American concept of “intentional rounding”. Intentional rounding is a concept adopted from nursing in the United States, more commonly referred to as “care rounds” in the UK, in which nurses visit patients at set times throughout the day (Meade et al, 2006; 2010). However, this too has been criticised for in an already target driven hospital the care rounds approach could prove ineffective as it might force nurses to focus more on hitting targets than the effective delivery of compassionate care (Hewison & Sawbridge, 2016). Moreover, this is an example of a rigid approach to nursing care, which does not consider the individuality of the nurse and how they may express compassion in their own way.

The lack of theory, data collection and empirical research used to develop the 6C’s framework raises critical issues surrounding its implementation into NHS care. Furthermore, the concept of compassion set out by the 6C’s is arguably too abstract to provide practical guidance for its application in practice (Bradshaw, 2016). Arguably these polices are generated from Government as straightforward responses to complicated problems within the NHS. The 6C’s for example can be considered a simplistic intervention that never really delved deep enough into what compassion is and how it can be demonstrated effectively so that patients feel cared for. As proposed by The Point of Care, the definition of compassion itself needs to be a lot clearer with explicit instruction as to how nurses can apply it to practice so that they can deliver the required level of compassionate care in a manner that benefits the patient’s needs (Dewar et al., 2013; McCaffery & McConnell, 2015). Ballie (2017) suggests, that the 6C’s and compassion in general are relevant to nursing, but more is needed to explore these values in greater depth.

In a critical analysis of the LCCP in local NHS practice, McArthur et al (2017) suggest that despite its many positive qualities, the LCCP worked best on all outcomes when there was a high level of adoption into practice, indicating that the programme was only as good as the people using it. Consequently, the programme required those in practice to be motivated enough to want to partake in and make the programme work. Moreover, the role playing sessions were delivered in class. While effective at nurturing compassion, this approach imposes both a practical and financial limitation of applicability to large groups (Ricketts, 2011). Furthermore, the questionnaire used to measure compassionate care did not undergo assessment of its psychometric properties, posing problems with the scale's validity. Nor did it make the behaviour of compassion explicit. Further research would benefit from a more robust measure of compassion. However, the LCCP did demonstrate that an evidence based approach to compassionate care could be developed to improve the understanding of compassion at different levels, from student to leader, and that a focus on the needs of staff was imperative to its sustainability (McArthur et al., 2017).

There was a noticeable limited number of service users and nursing students involved in designing these strategies and frameworks. As the outcomes of compassionate care have a directly impact upon patients and service users, and the aim is to develop ways of nurturing compassion in nursing students, including both groups is essential for this kind of research.

2.11 Factors that enable and hinder compassion in nursing

Compassion is at the forefront of nursing and healthcare professions as the essential quality needed to deliver effective care, yet there is a growing expectation that nurses should achieve this with fewer resources (Frampton et al, 2013; Guastello & Frampton, 2014). Indeed, there are certain personal costs involved in the devotion of compassion to others, yet studies show that the ability to cope with stressful situations is positively related to compassion and negatively to feelings of distress (Goetz et al., 2010).

Personal and professional contextual factors contribute to the hindrance or flourishing of compassion in practice. Various stressors can result in the normally kind nurse detaching emotionally from patients restricting their motivation to be compassionate to self and others (Cole-King & Gilbert, 2011). Studies in nursing reveal that this depends greatly on the work environment, socio-economic status and individual personality traits. In one study of intensive care unit nurses, extraversion was associated with compassion satisfaction, and neuroticism, and agreeableness linked to burnout and compassion fatigue (Barr, 2018). Whereas paediatric nurses who scored high on extraversion, agreeableness, conscientiousness and were more engaged in outdoor activities had greater compassion satisfaction, those with less emotional stability and who were single were more at risk of compassion fatigue (Chen et al., 2018).

The Point of Care Programme proposes that teaching compassion alongside clinical simulation exercises, getting closer to patients through stories, the provision of role models, plus assessment and feedback can all enable compassion in nursing. Equally, it is important that nursing programmes attend to the stress and burnout that can befall nursing students as they navigate through their journey and which hinder their

compassion (Firth-Cozens &Cornwell, 2009). Compassion fatigue and burnout have become the norm among nurses due to mounting pressures on them. Joinson (1992) coined the term ‘compassion fatigue’ after noticing that a growing number of nurses reporting feelings of exhaustion after working with patients. Adding to this, Figley (1995) referred to compassion fatigue as the “cost of caring” that resulted from experiencing another’s suffering.

Putting this into perspective, an international study involving 33, 659 nurses found that 42% reported feeling burned out (Aiken et al, 2012). Burnout is the feeling of exhaustion that nurses experience when working in a stressful and unsupportive environment (Maslach & Jackson, 1984; Yang & Kim, 2012). This is perpetuated by poor working conditions, heavy workloads, and negative workplace cultures (deZulueta, 2013; Curtis et al., 2012; Christiansen et al., 2015). As a result of working in these conditions, nursing students in particular experience negative self-judgements which in turn compromise their compassion for others (Durkin et al., 2016), making them more susceptible to depression (Cornwell & Goodrich, 2009). According to Dev et al., (2018), nurses generally experience fewer barriers to compassion but greater workplace related barriers than physicians, highlighting the need for interventions to reduce these limitations for nurses.

Newly qualified nursing students experience various impediments to providing compassion, such as the negative attitude of staff who had adopted a clinical approach to care, whereas supportive environments enable compassion to flourish (Horsburgh & Ross, 2013; Cole-King & Gilbert, 2011). Indeed, Figley (1995) suggests that younger caregivers are more susceptible to compassion fatigue and burnout than their more experienced counterparts. Furthermore, nurses bear witness to human suffering each and every day. Without adequate training or awareness of the deleterious effects of

workplace stressors nurses and nursing students' professional quality of life and compassion can suffer (Mason & Nel, 2012).

Nurses' cultural beliefs, their characteristics, having a positive role model, and patient experience can foster a deeper understanding of and motivation towards compassionate care (Zamanzadeh et al., 2018). Personal characteristics such as being non-judgemental and approachable help foster compassionate emotional connections between patient and nurse (Christiansen et al., 2015). Nurses with these qualities usually report having a positive role model during their upbringing who taught them how to be compassionate (Firth-Cozens & Goodridge, 2009). Equally, nurses can also benefit from role-play exercises in which they take turns in playing the role of patient, demonstrating that compassion can be taught, or at the very least nurtured in nurses and nursing students (Zamanzadeh et al., 2018).

Nurses who feel supported, valued and have their concerns validated both in and outside of the workplace, are better equipped to deliver compassionate care (Jones et al., 2016). Learning how to recognise barriers to compassionate care coupled with the self-care strategies that protect nurses from compassion fatigue and burnout enables individuals to navigate through their working environments and become more compassionate practitioners (Burridge et al., 2017). Self-care helps foster a greater feeling of compassion satisfaction, which can also help nurses who are battling with compassion fatigue and burnout (Hinderer et al., 2014). Compassion satisfaction is the positive feeling practitioners experience from their work helping others, which leads to improved engagement, pleasure and fulfilment (Stamm, 2009). Adapting to stressful situations in this way has been likened to a form of resilience (Russell & Brickell, 2015). More importantly, it is has been associated with an increase in compassion for others among nursing students (Durkin et al., 2016).

There are a number of reasons why nurses might struggle to be compassionate that are grounded in psychological theory. For example, Paley (2014) using a number of "classic" studies from social psychology argues that the hospital environment and a "cognitive deficit" rather than the beliefs, attitudes or character of staff could be blamed for the compassion deficit at Mid-Staffordshire. Applying the findings of an early "Good Samaritan" study, Paley quotes intentional blindness, and outsider disbelief in that nurses were too busy focusing on other tasks to notice that patients were in need of care. In addition, the fundamental attribution error is also used to suggest that behaviour is falsely assumed to be a result of an individual's personality and not the circumstances they find themselves in. Indeed, Zimbardo's Stanford Prison Experiment shows how seemingly "good" participants were tested on personality and behaviour traits prior to participation in the study, yet still exhibited cruelty towards others. As the study showed, it was situational variables that influenced behaviour and not the attitudes or beliefs of the participants (Haney et al, 1972). Likewise, Tierney et al., 2018, propose that healthcare organisations should take responsibility for allowing compassion to flourish, rather than lay the blame solely at the feet of nursing staff. Similarly, Traynor (2014), argues that rather nurses work in complex bureaucratic organisations where external factors that supress individual moral values are to blame for failures of care in practice. However, inadvertently, this line of argument makes a strong case for the need to nurture compassion in nurses that work under such conditions (Bradshaw, 2016).

In questioning Paley, Darbyshire (2014, p.888) critically suggests that practitioners are not "*moral prisoners of their situation*", further advising that these studies should not be used to disregard character, personality, disposition or human agency. This is similar to the "shitty nursing" argument. Likewise, Rolfe and Gardner (2014), argue

that nurses are trained to notice when patients are in need, therefore in-attentional blindness holds no weight in a hospital setting. They reference the “cocktail party effect” as further support that people can attend to more than one stimulus at any given time. More importantly, the scenarios that Paley presents bear no resemblance to nurses or the environment they work in. In support of Francis (2013), they suggest that a lack of compassion and not a cognitive deficit was to blame for the poor care exhibited at Mid-Staffordshire.

Furthermore, Nijboer and Van der Cingel, (2019) found that nurses who challenged, rather than conformed to the dissonance between their own values and conflicting reality in practice, increased the motivation to sustain their compassionate behaviours. This is not to dismiss the fact that both individual and environmental factors play a mutual role in determining human behaviour. Instead, it serves as a reminder that the harshest of environments will test even the most compassionate nurse, and that no amount of training will change those who do not possess the intrinsic qualities of a caring nurse (Darbyshire, 2014). What they all seem to agree on is that education plays a key role in nurturing nurses who have the character, competence, intelligence and compassion necessary to support the care and flourishing of patients (Bradshaw, 2016).

Introducing key theories, knowledge and examples of behaviours that are deemed compassionate into the curriculum, may provide nursing students with the resources to help them increase their perceived behaviour control to deliver effective compassionate care. Indeed, providing them with the psychological space to explore previously held views about groups or individuals through a series of scenarios may also create a more reflective approach towards compassion in practice, and assist them in understanding what it is like for the patient.

Compassion in nursing can be hindered or it can be enabled through supportive or non-supportive environments. Yet, under the right conditions, and with guidance for self-care and practice that facilitate their beliefs and values, there is the suggestion that compassion can be taught, and nurses can learn how to flourish as compassionate practitioners. However, there seems to be very little evidence in the literature for the behaviours that typify a compassionate nurse, how nursing students learn about compassion, or how it is measured.

2.12 Teaching compassion in pre-registration nurse education

To gain validation by the UK Nursing and Midwifery Council (NMC), all nurse education programmes need to provide evidence that during their three year education, students have learned the essential skills of compassion, care and communication (NMC, 2010). Due to the complexity of compassion, especially in the face of 21st century challenges, some argue that such a short length of time can prevent nursing students from reaching any real depth of understanding of what it means to be compassionate (Pearcey, 2007). As a result, nursing students report feeling underprepared for the emotional labours of practice and unable to maintain their compassion as they progress towards the role of Registered Nurse. This sense of uncertainty creates dissonance between the nursing student's ideals and the reality of practice (Curtis, 2013). Curtis (2014) argues that unless strategies are put in place to provide emotional support and help them build resilience there is a risk that nurses will struggle to continually provide compassionate care.

So that nursing students do not lose sight of the importance of compassion, Booth (2016) also recommends that nurse education should utilise any available resources to create innovative ways of demonstrating and modelling compassion behaviours.

However, Waddington (2016) argues that a "*compassion gap*" in UK universities has added to the crisis in the NHS but can be addressed by creating cultures of compassion in academia. To address this concern, Curtis et al (2012) recommend that university and practice settings work together to design novel methods of helping nursing students becoming socialised into compassionate practice and sustain the professional ideals of nursing. Others recommend that universities give nursing students a personal development tutor as a "port of call" during difficult and challenging times to support them to feel valued and respected, especially after experiences that expose their vulnerabilities in practice (Ross et al., 2014).

Some educational establishments have taken a character based approach when recruiting potential nursing students, in the hope that they will identify nurses who can demonstrate compassionate care (Waugh et al., 2014). Although this can reveal the desirable traits deemed necessary for nursing, it has been criticised for failing to consider how applicants would behave in a real life hospital environment.

Having a model to guide those entering the profession would provide a space to examine the difficulties that arise in practice and help build what some refer to as critical resilience (Traynor, 2014). Similarly, Richardson et al (2015) suggest that nursing students can be taught about compassionate care using a model of nursing therapeutics that encourages nursing students to consider how they would demonstrate empathy, care and compassion with patients. Involving service users and practitioners in the design of such programmes allows for a greater growth of compassion in nursing (Crawford et al., 2014). Indeed, using the patient's narrative to understand their needs is paramount for the delivery of effective compassionate care.

Nevertheless, it is important to understand that each nurse is different, with each bringing their own experiences, beliefs and attitudes that impact on their delivery of compassionate care and ability to manage stressful situations (Day, 2015). The use of clinical case-studies, role play and reflection, can help those nursing students who do not re-evaluate their attitudes, beliefs and response to care (Percy & Richardson, 2018), and thus help build on or develop further their compassion strengths. Leffers & Martins, (2004) also found that the use of non-academic literature was an effective resource for helping nursing students facilitate a deeper understanding of the difficulties vulnerable groups encounter and increase compassionate concern for others.

The Francis Report (Francis, 2013) recommended that in addition to the theory, nurse education needed to include elements of the practical skills associated with delivering compassionate care. Despite these recommendations, very few studies have endeavoured to implement and evaluate these skills into nursing curricula (Durkin et al., 2018).

2.13 Interventions for teaching compassion in nursing

Compassion is highly regarded as the principle virtue of healthcare and forms the foundation of the caring professions. Nurses play a pivotal role in the delivery of compassionate care, and strategies to implement it into practice can be found in studies globally (Papadopoulos et al., 2016). The task of academia is to encourage nurses to understand the significance of compassion and become proficient compassionate practitioners (Von Dietze & Orb, 2000). However, two opposing views as to what constitutes good quality care are separated by one that considers science as the best indicator, and the other the intuitive art (Van Der Cingel, 2014).

Courses aimed at teaching nurses about compassion include, staff training sessions, the adjustment of care models, or staff support programmes to address issues of stress and boost psychological resilience. Training programmes are mainly dedicated to the development of skills such as empathy and communication, whilst others are focused on the improvement of psychological wellbeing in nurses. Despite the need to strengthen compassion in nursing and the positive outcomes reported in certain studies, Ball & Griffiths, (2017) argue that many fall short in their methodology. Most consist of short uncontrolled pre and post studies, and lack a framework of compassion, indicating a need to create better designed intervention studies that include a clearer conceptualisation of compassionate care in nursing (Blomberg et al., 2016).

The continued development of clinical, communication, empathic and interpersonal skills helps ensure that nurses are able to deliver compassion to their patients (Price, 2013). This is shaped by personal and interpersonal values and beliefs, personal experience of caring for others, organisational factors, and experience with positive role models (Zamanzadeh et al., 2018). Although, role modelling a 'master of compassion' can assist in this endeavour, it has long since been argued that much more is needed to shape a deeper understanding of the attitudes that help symbolise genuine compassion. Knowing *why* and *how* to express compassion, is the difference between the individual who wants to please their peers, and those for whom compassion means helping alleviate the patient's suffering (Pence, 1983).

Nurses who become "*compassion literate*" embrace continual learning and foster a more insightful understanding of how compassion is demonstrated in nursing care. This can help increase self-awareness of the importance of compassion, and the self-care strategies that can protect them from burnout and compassion fatigue (Burridge

et al., 2017). Bearing witness to suffering, especially in end of life care can have adverse effects on nurses' wellbeing. Contrary to this belief, Sabo (2011) suggests that developing a "*compassionate presence*" acts as a buffer to stress, and fosters an appreciation of the fragility of life, which in turn creates the space for empathy and connection to flow between patient and nurse. A feature of this is the ability to be courageous in the face of adversity. Courage is the reflexive response to a difficult situation that benefits, patients, staff and leaders (Quinn, 2017). It enables nurses to act with compassion, or as Hawkins and Morse (2014, p.267) suggest "*one may have compassion for another, without action, but to be courageous one must act"*. Arguably, without courage, nurses' may maintain a safe distance rather than attempt to connect with patients who are suffering (Kim & Flaskerud, 2007).

Understandably, the amount of suffering nurses' experience can have a negative emotional impact on their wellbeing. In an attempt to address this issue, Wasner et al (2005), developed a three day training programme aimed at helping nurses' come to terms with the harsh realities of suffering and how to respond effectively. Techniques on how to listen with compassion, recognise one's own fears and spiritual suffering in relation to a patient's, had a long lasting positive effect on practitioner wellbeing and compassionate attitude. Similar spiritual approaches encourage the practice of mindfulness and other meditation techniques. Studies show that mindfulness helps reduce stress in nurses' and gives them the mental space to focus on providing patient centred compassionate care (Hunter, 2016). In addition, Dewar et al (2009) found that patient centred care could be demonstrated through a range of different approaches, such as emotional touch points that involve focusing on the emotional aspects of a patient's story. As a result, nurses gained a richer understating of the patient and their family's experience, leading to an increase in compassionate care.

Structured tools to enhance self-awareness, the ability reflect on experiences in practice, and development of caring practices have been successful in enabling nurses' delivery of compassionate care (Dewar & Cook, 2014; Dewar & MacKay, 2010). This was the case when a toolkit for cultivating compassionate care in healthcare settings was created based on a number of compassion indicators. Through the use of digital stories, a wide range of literature and resources on self-compassion, mindfulness and compassionate leadership, along with "how to" activity cards, evidence of behaviour change was observed, and a greater appreciation of self-compassion developed in practitioners (Curtis et al., 2017).

A successful method for teaching compassion to nurses include a six module course for healthcare staffs' continuing professional development (Shea et al., 2016). Each module was theory based, included presentations, real-life stories, role play, and videos delivered "in class". The results revealed that teaching compassion is not fixed like some would suggest, but a skill that can be enhanced with training and reflective learning. The videos and real life stories exposed the nurses to the reality of and importance of compassion in practice. The authors recommend that future interventions should include both blended e-learning and face to face learning and use measurements to assess compassion pre and post training. However, this study did not conceptualise compassion, nor did it include a scale to measure it, and was limited to registered nurses, highlighting a gap in the literature for pre-registration nurse education.

Despite the emphasis of the thesis being on nurses' compassion, it is also worth mentioning here other teaching interventions that have been developed for health and care teams. For example, the Creating Learning Environments for Compassion Care (CLECC), is one such initiative that was developed as an intervention aimed at

promoting compassionate care (Bridges & Fuller, 2015). This research reported on a novel four month implementation programme that was designed to improve leadership and team practice to help enhance compassionate care. The intervention included a mix of several key activities, including ward managers learning sets, team learning, peer observations in practice, classroom training, cluster discussions and reflective discussions. Through a blend of individual and organisational development it is proposed that workplace learning was key to developing compassionate care (Bridges & Fuller, 2015). While encouraging, the evidence for this comes mainly from research conducted with older patients, therefore limiting the interventions' generalisability.

Gould et al., (2018), evaluated delivery of the intervention with a control group in an acute care setting, using a pre and post measures of patient emotional care (PEECH), and nurse's self-reported empathy. Despite reaching significant scores on increased connection and less negative interactions between staff and patients, this was not the case between the intervention and control group. Thus, the intervention did not significantly improve compassionate care. In a study Bridges et al (2018) reported similar results and recommended that further research into interventions for compassion in nursing would benefit from a mixed methods approach to evaluate their impact. While the researchers suggest that it would be feasible to implement the CLECC intervention into practice, the limitations of these studies are that it drew on research conducted with older patients' groups and included a measure of connection and empathy to evaluate compassion. Neither did the intervention improve nurse's empathy. As has already been discussed in this thesis, while empathy is considered a precursor to compassion, the two are very different concepts. Thus, to measure compassion in this way limits the effectiveness of the intervention considering it was designed to aid in the development of compassionate care. Therefore, also

inadvertently, it highlights the need for a valid and reliable scale for compassion in nursing.

Although available online and hosted in the future learn platform, a MOOC course for compassion entitled, Compassionate Care: Getting it Right, did not have any supporting literature. While its existence can be acknowledged, due to the lack of literature or research, its effectiveness cannot be discussed here.

In addition, there is scant evidence in support of online virtual learning environments to teach nursing students about compassionate care (Hofmeyer et al., 2018; 2016). Notwithstanding the claim that technology could cause nurses to "*lose touch*" when providing care (Dean et al., 2017), research indicates that the use of online methods is a growing trend in nurse education.

2.14Virtual Learning Environments (VLEs) in nurse education.

Technology can be used to enhance the teaching experience of nursing students. The advent of web based resources such as online learning, Virtual Learning Environments (VLEs), and their effect on learning has seen their popularity rise in nurse education. Virtual worlds like Second Life offer new and effective ways to educate nurses and nursing students (Wood & McPhee, 2011). The added advantage of online learning is that it is are accessible to the learner, anytime and anywhere (O'Neil, 2013a). This ability to practice in private has a positive impact on the nursing student's identity as they transition from novice to qualified nurse, especially among the more introverted (McKenzie & Murray, 2010). Thus, online learning is extremely flexible for the learner, allowing them to log on and review their progress whenever they wish, and wherever a computer is available.

Virtual Learning Environments (VLEs) stimulate active learning and offer a more interactive experience by providing hypothetical and real life simulated environments where nursing students can develop new skills. The endless possibilities as to what scenarios can be created are limited only by the designer's imagination (Phillips et al., 2010). However, studies show that many educational establishments have not utilised the interactive functions of the VLE in nursing, rather they have become a repository of information for course information and key learning materials (Moule et al., 2011). A consequence of this is that it limits nursing students to an instructivist rather than a constructivist approach to teaching (Moule et al., 2010). Edwards et al (2008) however, developed a VLE to enhance nursing student's competence in working with older people. Participants responded positively to the stories and interactive element of the programme. This helped them cultivate and communicate a greater understanding of the challenges faced by older people. Similarly, nursing students benefitted from a VLE that was developed to support a course on human anatomy and physiology (Green et al., 2006).

Although online video clips for communication, perspective taking, empathy training, and self-efficacy in nursing students have been shown to be effective (Bas-Sarmiento et al., 2017; Choi et al., 2015; Cunico et al., 2012; Lobchuk et al., 2018; McConville & Lane, 2006), there are limited studies that have used similar methods to assist nursing students in their development of compassion. It is also apparent that there are very few Point of View (POV) videos in support of this endeavour. Therefore, more research is required to test the effect of video recorded case scenarios that include the patient's POV to help nursing students understand and cultivate their compassion.

2.15 Rationale for measuring compassion in nursing

In a speech given at the NHS confederation's Annual Conference in 2008, the Secretary of State for Health, Rt Hon Alan Johnson M.P announced that in order to become champions in all aspects of care "*it is important that we measure not only the effectiveness and safety of patient care but how compassionately that care is given*" (Johnson, 2008). In response to this, the deputy director of the National Nursing Research Unit at King's College London said, rather than "smileyness", second order activities associated with compassionate care should be measured (Ford, 2009).

Despite the emphasis on a measure of compassion, a review of the literature revealed that since the speech nine years ago, no evidence for a validated UK measure of nurse's compassion existed (Durkin et al., 2018). Burnell and Agan (2013), argued that despite empirical research being important to nursing there was not a standardised scale for compassionate care in nursing. Since then four scales have been developed for measuring compassion in nursing, but none of these were in the UK. The scarcity of measures prior to 2013 may have stemmed from the ongoing arguments based on whether or not compassion can actually be measured, or whether one should attempt to measure it at all (Flynn & Mercer, 2013) with Ford (2009) suggesting that this may be due to the complexity surrounding the reliability of such a measure. Nevertheless, Griffiths et al (2008) suggest that the lack of measures for compassion could pose both a challenge and an opportunity for nursing.

Psychometric scales are essential for nursing research and practice, especially as they can assess various subjective states (Streiner & Kottner, 2014). Indeed, nurses usually provide compassionate care out of the view of, and often unnoticed by others, which makes compassion difficult to measure (Sturgeon, 2010). As such, some

question the ability to empirically measure a nurse's compassion. Rather, they suggest that it is through actions and behaviours that bring forth evidence for a nurse's compassionate character. In any attempt to measure such qualities, some worry that nurses will simply become actors of, and miss the point of what it means to be compassionate (Bradshaw, 2009).

Moreover, educational and practice organisations have a duty to identify nurses and nursing students who either have, or exhibit the potential to become compassionate nurses (Davidson & Williams, 2009). Indicators create the tools by which care providers become accountable for the quality of nursing care they provide (Griffiths et al, 2008). Crucially, before a suitable measure for compassion in nursing is developed, one must consider the consequences of creating either a tool that indicates if an individual has or does not have what is regarded as a fundamental human attribute (Davidson & Williams, 2009). Without careful deliberation of this, there is a risk that such a scale could be used against nurses to criticise them for not being compassionate.

Tierney et al (2016) found that although most practitioners would welcome a measure of compassion several areas would need to be addressed before developing the scale. For instance, the measure should separate compassionate care from similar concepts. Meaning, that effective communication, empathy, kindness and patient satisfaction should not be confused as compassionate care alone, but rather accepted as part of the whole. In addition, it should also include less informal indicators, and have a set of recognised compassionate behaviours. Following this, "*making the subjective objective*" was another theme for how to measure compassionate care. In making the meaning of compassion and the expected behaviours such as connecting to patients explicit, staff could measure and develop their knowledge and understanding of these

specific areas to improve patient care. A further feature includes "*incorporating external influences*". This supports the need to include ways of measuring the impact that working conditions, work related stress, and the drive to meet targets can all have an effect on the practitioner's compassion. Lastly, "*putting it to use*", highlighted the need to create a measure that practitioners could use to identify, reflect on, and confirm that they are working in a compassionate way, so that all team members could progress through practice with confidence.

Echoing this, Griffiths et al (2008) suggest that an indicator for any nurse's quality, should acknowledge the importance of the phenomena, quantify characteristics, describe performance towards health service goals and be relevant to recognising the nurse's responsibility for improving care. For compassion specifically, indicators should reflect all elements of compassion and key indicators identified, developed and validated in cooperation with professionals and service users. It is increasingly challenging to measure compassion accurately without a valid and reliable instrument, especially when also assessing the effectiveness of related educational programmes.

2.16 General measures of compassion

There are still several psychometric instruments for measuring compassion in general populations, despite the suggestion it cannot be measured in nursing. These measures range from compassionate love, motivation to help others, to self-compassion, as indicators of the many facets of compassion among with clinical and non-clinical samples. Curiously, some individuals have a fear of compassion, for others, from others, and themselves. As such, Gilbert et al (2011) developed three self-report scales that measure fears of compassion. The results of one study

suggesting that certain people may actually resist compassionate behaviours to protect themselves from the discomfort that it brings.

Despite being used extensively with a wide range of participant samples, including nurses and other healthcare staff and students (Beaumont et al., 2016a&b; Durkin et al., 2016), debate surrounds the Self-Compassion Scale, with questions concerning the positive and negative subscales in relation to overall self-compassion. Some argue that the total score does not reflect a true account of self-compassion, nor are the items indicative of the motivation required for compassionate behaviour (Gilbert et al, 2011; Lopez et al., 2015; Muris & Petrocchi, 2016, 2017).

In a scoping review of the psychometric scales for compassion, Strauss et al (2016) concluded that despite the number of measures available, none of them provided a vigorous way of measuring compassion. They further suggest that future compassion scales should include practical ways in which to support wellbeing and resilience towards distress tolerance, alongside empathy, connection to suffering, and the motivation to reduce it.

The suggestion that further compassion scales should include measures pertaining to resilience and wellbeing is highly pertinent to nursing. These and other characteristics can be considered just a few of the many strengths needed for compassion in nursing. In addition, these general measures of compassion draw mainly on the spiritual and Buddhist references to compassion. Although, these factors bear some relation to the humanity in nurses, they are not specific to compassion in nursing. Moreover, the existence of these scales to generate data and help individuals identify their compassion, suggests that nurses could also benefit from a similar scale.

2.17 Chapter summary

This chapter has shown how compassion has long been established as a human quality and is defined as “the awareness of suffering coupled with the motivation to alleviate it”. It has discussed how different concepts such as pity, kindness and empathy are often misunderstood for compassion which can affect how compassionate care is understood in nursing. In addition, this chapter has given a brief overview of the history of compassion as it appears in philosophy and theology as a moral virtue that all humans should strive for in the service of others and God. It has touched on the psychology of compassion, explaining how it affects behaviour, yet holds many benefits to the giver and receiver and has been instrumental in human and animal evolution. Furthermore, the models and frameworks for compassion in nursing were considered as well as the various internal and external factors that can either hinder or enable nurses’ compassionate care.

To address some of the gaps in the literature, the next chapter will take a closer look at the characteristics of a compassionate nurse, how compassion is taught to nursing students, and how compassion is measured in nursing.

Chapter 3. Systematic literature review

"If I have seen further than others, it is by standing upon the shoulders of giants." — Isaac Newton

3.1 Introduction

This chapter will explore the current literature for studies identifying the characteristics of a compassionate nurse, approaches to teaching nursing students about compassion, and the scales that have been developed to measure compassion in nursing. Incorporating a systematic review of the literature review guided by three separate questions;

- What are the qualities of a compassionate nurse?
- How is compassion taught to nursing students?
- What instruments have been developed to measure compassion in nursing?

The review process and steps taken to investigate the current research literature are outlined in detail. Following this, an in-depth view of the findings, and a discussion that also highlights the gaps in the literature which help guide the overall rationale for the research behind the thesis are presented.

Compassion is at the core of nursing care. However, due to the complexity surrounding this concept there is a need for further exploration into the meaning of compassion in nursing. According to Francis (2013) poor patient care occurs as a result of the absence of compassion. To help address this, there is a need to help teach nurses, and nursing students about compassion so that they can deliver a better

standard of compassionate care (Willis, 2011). In addition, measuring nurses' levels of compassion may also help them become more aware of and ultimately improve their ability to deliver better quality care. As Mooney (2004) argues, it is one thing to claim compassion as a nursing value, but another to fully comprehend it and measure its effect on practice. Pitt et al (2014) highlight the dearth of quantitative tools to measure the personal qualities in nursing students and whether or not these change during their education. It is also clear that because the concept of compassion in nursing is often confused with sympathy, empathy and other such terms that relate to care, there is a need to understand what compassion means in the field of nursing.

3.2 Review methods

3.2.1 The aim of the literature review.

This literature review was guided by three separate questions. The aim of this literature review was to first identify a specific set of compassionate qualities that nurses have. Secondly, to find out if and how these qualities are taught to nursing students? And thirdly, to discover how compassion is measured in nursing? To address these the following three questions were used to direct the search.

I. What are the qualities of a compassionate nurse?
II. How is compassion taught to nursing students?
III. What instruments have been developed to measure compassion in nursing?

3.3 Methods for reviewing effectiveness.

To address each of these questions and assess the effectiveness of the literature a systematic review of published research was conducted. The review followed

published guidance for undertaking reviews in healthcare (Centre for Reviews and Dissemination, 2009).

3.3.1 Design

Types of studies included in the review. The reviews for this study only considered articles that were, peer reviewed, research articles, or articles grounded in evidence based practice. International articles in English were also included.

Types of participants. Participants that were included in the reviews had to meet the following criteria. Nurses (all specialisms), nursing students (all levels of education), educators and patient groups.

Types of outcome measures used. Due to the nature of the literature review addressing three separate questions, principal outcome measures used were;

- Self-report descriptions from staff, students and patients.
- Outcome measures that contained the qualities of compassion present in nurses and nursing students.
- Teaching methods that showed an improvement in compassionate behaviour, competencies, or an increased understanding at the post intervention stage.
- Studies which used measures of compassion that were aimed at nurses rather than other healthcare professions or compassion in general.

3.4 Search methods

Table 2. Database search results.

Database	Number of records
CINAHL	655
EBSCO	87
SCOPUS	926
PubMed	1,885
Ovid Nursing	692
Total	4245
Duplicates	3866
Total (with duplicates removed)	379

Studies were identified by searching major electronic databases (Table 2). Each database was searched using the search terms presented in Box A. To refine the search to articles that best reflected each research question, the following related words were applied using the advanced search option when searching databases, nurses, education, and psychology.

Inclusion criteria were:

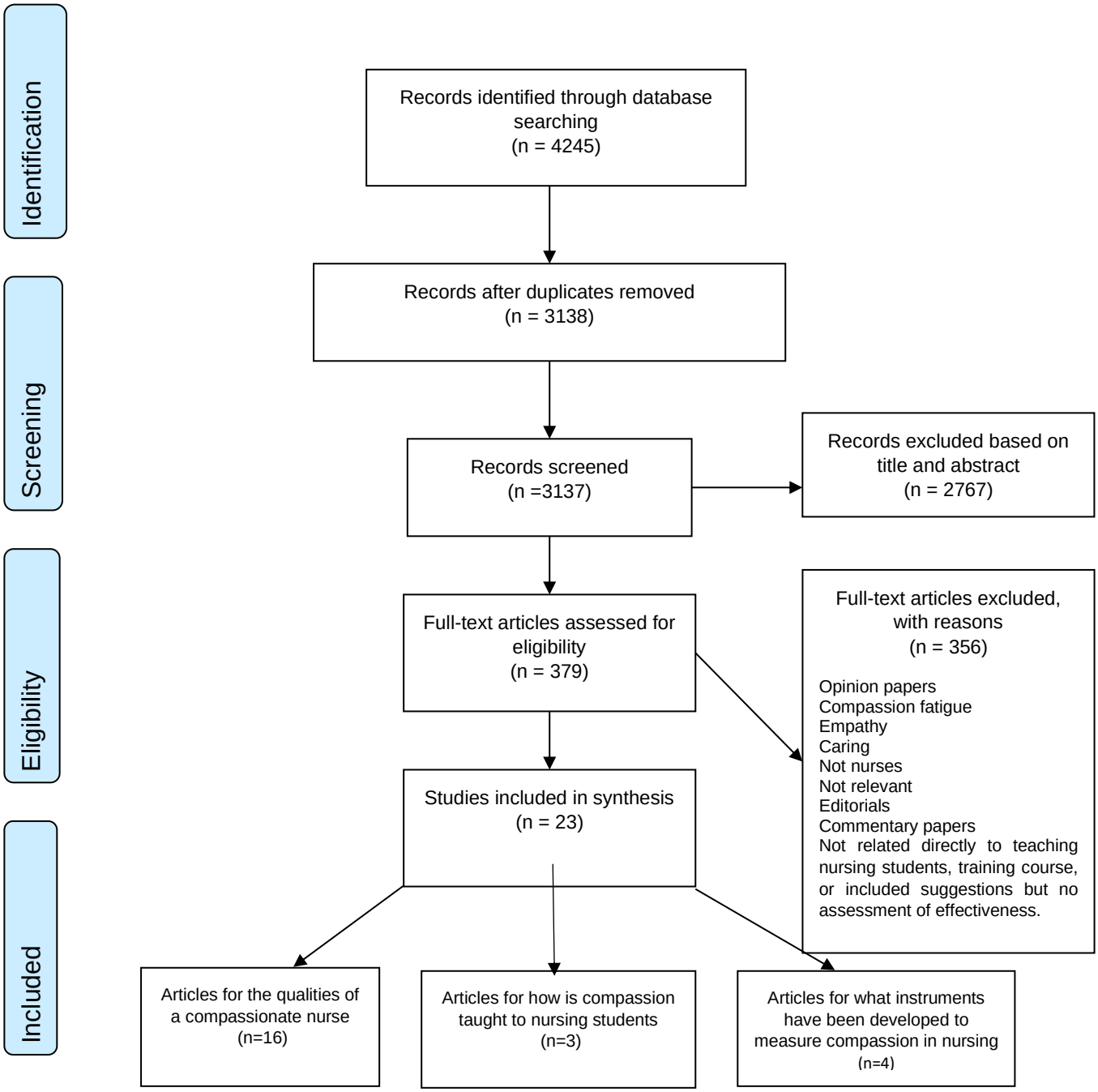
- Peer reviewed.
- Research articles.
- Articles grounded in evidence based practice.
- International articles that were presented in English.
- Nurses (all specialisms).
- Nursing students (all levels of education).
- Educators and patient groups.
- Self-report descriptions from staff, students and patients.
- Outcome measures that contained the qualities of compassion present in nurses and nursing students.
- Teaching methods that showed an improvement in compassionate behaviour, competences, or an increased understanding at the post intervention stage.
- Studies that used measures for compassion that were aimed at nurses rather than healthcare professions or compassion in general.

Box A. Search terms used in the literature review.

Compassion in nursing
Compassion qualities and nursing
Qualities of compassion
Qualities of a compassionate nurse
Components of compassion
Compassion and nursing students
Values of compassion
Nurses training and compassion
Nurses education and compassionate care
Nursing students training and compassionate care
Nursing students education and compassionate care
Measuring compassion in nursing
Measuring compassionate care in nursing

The design of the review followed the recommended criteria outlined by PRISMA (Liberati et al., 2009) seen in figure 5.

Figure 5. PRISMA flow chart



3.5 Quality assessment

Three reviewers first screened and rated each paper independently using the Standard Quality Assessment Criteria for Evaluating Primary Research Papers. Each paper was scored accordingly following the criteria set out for collecting either qualitative (10) or quantitative data (14) collection methods (Kmet et al., 2004). Each of the review team scored the papers between 10% and 90%. Several meetings were held between the team to discuss ratings, and make decisions on final inclusion. After discussions, papers were included that fell above the agreed cut-off point of .65. This is in-between the somewhat conservative (.75), or liberal (.55) cut-off points (Kmet et al, 2004). One of the studies that did not meet the criteria was excluded (see table 3).

Table 3. Excluded paper based on low score

Minogue, V. (2014)	0.5

The findings from the review are presented here in order of each question. Firstly, an overview is given of the studies which identified the characteristics of a compassionate nurse. Following this, a summary is given of the selected literature about how compassion is taught to nursing students. Finally, literature on developing an instrument to measure compassion in nursing is examined.

3.6 Qualities of a compassionate nurse

A total of fifteen studies were identified that met the criteria. The studies were conducted in the United Kingdom (n=7), United States (n=3), Canada (n=2), Korea (n=1), Thailand (n=1), the Netherlands (n=1), and Iran (n=1). Thirteen used qualitative methods. One used quantitative. Another used mixed methods. From these studies, eleven characteristics of a compassionate nurse were identified (See table 4).

The eleven characteristics were derived from the literature by assessing the frequency that each characteristic occurred either stated explicitly, or implicitly as for example when describing empathy as “being in the patient’s shoes”. Each article was read thoroughly and references to each characteristic, collated and tabulated to evidence the number of times these characteristics occurred in the literature. All characteristics and virtues were included from the literature, combing those with similarities into one overarching theme. For example, understanding and kindness were placed into the theme “character.” In addition, courage was considered an emotional strength rather than a character trait of a nurse’s compassion. This decision was based on the belief that courage is not a character trait but more a state of mind that develops through experience.

3.6.1 Character

Pre-registration nurses and qualified healthcare professionals understood compassion as an act of warmth (Bray et al., 2014). Kneafsey et al., (2015), added that being genuine and kind was also thought of as being compassionate. Honesty, trust, value, respect, sympathy, openness, kindness, genuineness, authenticity, acceptance and loving concern were important qualities for a compassionate nurse to have (Sinclair et al., 2016b; Perry, 2009; Lundberg & Boonprasabhai, 2001). Nursing students also

understood that they gained a lot more from sharing these qualities with their patients (Lundberg & Boonprasabhai, 2001). Caring was also the major theme found by Kret (2011). In a study involving Dutch nurses, compassion was predicated by a helping attitude (Van de Cingel, 2011).

3.6.2 Connecting to and knowing the patient

Nurturing a natural humanistic connection to patients was considered compassionate (Peters, 2006). Badger and Royce (2012) found that patients recalled feeling like a person when a nurse said good morning to them. Bramley and Matiti's (2014) study found that getting to know the patient helped nurses understand each patient's individual needs. Some patients reported feeling truly cared for when staff members connected with them or gave them their full attention (Kneafsey et al., 2015). This attentiveness coupled with respecting their dignity and privacy were noted by Bray et al., (2014). The value of this was highlighted by Dewar and Nolan (2013) as establishing a shared understanding with the patient, identifying their needs, guided by curiosity, with a humble approach to patient care. Indeed, if they could not understand the emotional and psychological states of their patients, some nurses felt that he or she could not be compassionate (Tehranineshat et al., 2018). Being attentive was reported by Kret (2011) as the second highest identified theme for qualities of a compassionate nurse.

3.6.3 Awareness of needs/suffering

Being aware of the patient's context such as experiencing a lack of independence, or financial constraints, emotional or family issues, was viewed as being compassionate (Dewar & Nolan, 2013; Sinclair et al., 2016). Involvement in the patient's suffering helped create bonds between a nurse and patient by Van der Cingel (2011). Lee and

Seomun (2016a) reported that professional knowledge helped give the nurse more insight into a patient's condition and heightened their awareness of suffering. Indeed, this was corroborated by Peters (2006) as an essential quality of a compassionate nurse. Sinclair et al., (2016) and Way and Tracy (2012) noted that compassion also meant taking action to address the patient's suffering and improve wellbeing and could be achieved by getting to know the patient through empathy and communication.

3.6.4 Empathy

Similarly, other studies support this sense of how it feels to be in the patient's shoes as compassionate practice (Bramley & Matiti, 2014; Sinclair et al., 2016). Nurses reported empathy as being important for showing compassion to patients (Lee & Seomun, 2016a). This can be described as thinking of them as a relative, or trying to think what the patient was feeling, so that nurses could understand how to ease their suffering (Lundberg and Boonprasabhai, 2001; Badger and Royce, 2012). Empathy as compassion was also linked to acting in a way you would like others to treat you (Bay et al., 2014). Van der Cingel's (2011) use of the Dutch word 'medelijden' or 'meelijden' which means "feeling the same" echoed this as being essential for compassionate care. An advantage of this according to Dewar and Nolan (2013) is that considering another's perspective allows for more open dialogue. Indeed, Jack and Tetley's (2016) study noted empathy was a gateway into understanding the difficulties of how the patient might be feeling.

3.6.5 Communication

For patients in the study by Bramley and Matini, (2014), communication between staff, patients, and their families was viewed as compassionate. Having good listening skills and using an appropriate tone of voice, especially when breaking bad or sensitive

news were considered important (Kneafsey, 2015). Likewise, actively listening to patients as a way to demonstrate compassion was highly valued by participants in one study (Bray et al., 2014). Lee and Seomun (2016a) found that having emotional communication skills such as listening carefully, encouraging expression, warm conversations, and expressing interest helped patients open up. Van der Cingel (2011) found that listening was crucial for compassionate care, as it allowed patients to tell their story. Humour and appreciative caring conversations with patients were viewed as a means to be compassionate in the study by Dewar and Nolan (2013). In addition, opening a dialogue, using supportive words, really listening and tone of voice were considered as being compassionate (Sinclair et al., 2016). Communication embraces both verbal and non-verbal exchanges between patient and nurse (Badger & Royce 2013), and with active listening, is key to compassionate care (Hunter et al., 2017).

3.6.6 Body language

Non-verbal communication such as offering a warm smile was seen as an expression of compassion (Dewer & Nolan, 2013; Kneafsey et al., 2015), as was demeanour, posture and eye contact (Sinclair et al., 2016). Effective use of body language can also be used to communicate an understanding towards the patient's needs (Tehranineshat et al., 2018). Collectively this might be interpreted as being approachable, (Kret, 2011).

3.6.7 Involving patients

Building on approachability, involving patients, their family (Kneafsey et al., 2015), and working together to deliver collaborative care were also highlighted as being compassionate (Bray et al., 2014; Dewar & Nolan, 2013; Peters, 2006; Kret, 2011). This links together with individualised care. Individualised care was viewed as being

the second most important aspect of compassionate care (Bray et al., 2013). Focusing on the patient was especially important for burn victim survivors (Badger & Royce, 2013). In the same way that adhering to moral values places the emphasis on the dignity and rights of the patient (Tehranineshat et al., 2018).

3.6.8 Having time for patients

In one study patients reported how sometimes even brief moments of time were enough to establish a compassionate connection (Bramley & Matini, 2014). Nurses, in the study by Lundberg and Boonprasabhai (2001) spoke of giving their time and being friendly to patients when they saw that they were lonely. Putting the patient's needs first was viewed as a compassion quality (Sinclair, 2016). According to both patients and nurses, having presence or being there was one of the most important qualities of a compassionate nurse (Van der Cingel, 2011).

3.6.9 Small acts

Patients in the study by Bramley and Matini (2014) spoke of the power of small rather than grand gestures that helped convey compassion. The simple act of holding a patient's hand was enough to make a difference to their suffering (Peters, 2006). Poems composed by nursing students revealed the little things that mattered to patients, such as playing cards, making tea and having a chat (Jack & Tetley, 2016). Similarly, small acts like bringing patients their favourite soap, helping them with eating or bathing, making them feel comfortable, were also perceived as compassionate by both Canadian nurses (Perry, 2009) and nursing students in Scotland (Hunter et al., 2017. Patients felt compassion from nurses who went above and beyond their regular work (Sinclair et al., 2016).

3.6.10 Emotional strengths

Having the courage to work with uncertainty, ask questions, challenge practice, helped staff connect emotionally, and compassionately (Dewar & Nolan, 2013). Without it nursing students report feeling helpless and unable to be compassionate (Jack & Tetley, 2016). The ability to manage emotions, especially when dealing with difficult situations where patients become hostile, was an important quality for compassionate care (Lee & Seomun, 2016a; Peters, 2006). Tolerance was cited as one of ten virtues required of a compassionate nurse in the study by Sinclair et al., (2016).

3.6.11 Professionalism/Competence

Competence becomes compassionate when all staff know what they are doing, and perform their duties with confidence (Badger & Royce, 2013). As nurses in one study concluded, being competent in evidence and knowledge based practice was how they were able to help patients' (Tehranineshat et al., 2018). This includes an understanding of professional boundaries (Lee & Seomun, 2016a) and using that awareness to allow patients to take responsibility for their own lives (Peters, 2006). A feature of boundaries includes advocacy in the nurse's role, where this act offers strength to the patient (Jack & Tetley, 2016), and in some ways resonates with Dewar and Nolan's (2013) feeling of compassion as celebrating a patient's accomplishment.

Table 4. Summary of papers selected for the qualities of a compassionate nurse

Reference	Country	Sample	Sample size and data collection	Research aim
Bramley, L & Matiti, M. (2014)	United Kingdom (UK)	Hospital inpatients from six acute medical wards specialising in respiratory medicine, stroke, endocrinology, and health care of older people.	10 Interviews	To understand how patients, experience compassion within nursing care and explore their perceptions of developing into compassionate nurses
Bray et al., (2013)	United Kingdom (UK)	Qualified health professionals and pre-registration nursing students.	248 surveys and semi-structured interviews	To explore qualified health professionals and pre-registration students' understanding of compassion and the role of health professional education in promoting compassionate care
Dewar, B., & Nolan, M. (2013)	United Kingdom (UK)	Range of staff including registered nurses, patients, and families.	57 observations, interviews, stories, and group discussions.	To actively involve older people, staff and relatives in agreeing a definition of compassionate relationship centred care and identifying strategies to promote such care in acute hospital settings
Hunter, D.J. et al (2017)	United Kingdom (UK)	1st, 2nd and 3rd year Nursing students	15 face to face, semi structured interviews	To address the gap in literature between nursing students' experiences of compassionate care
Jack, K. & Tetley, J. (2015)	United Kingdom (UK)	1st year nursing students	24 student reflections	The use of poetry to understand compassion
Kneafsey, et al., (2015)	United Kingdom (UK)	Academic staff, students, and service users.	45 focus groups	To report findings from a qualitative study of key shareholders perspectives on compassion in the healthcare context. To present the framework for compassionate interpersonal relations.
Kret, D. D. (2011)	United States of America (USA)	Medical surgery nurses and patients	200 using a compassion scale	To explore the complexities of compassion and its effects on patient care, the historical roots of compassion, and attempts to measure levels of compassion delivered by the health care team.
Lee, Y. & Seomun, GA. (2016)	Korea	Nurses	3 to 6 interviews and review of previous literature	To identify the attributes of the concept of compassion
Lundberg, P. C. & Boonprasabhi, K. (2000)	Thailand	Final year female nurses	170 interviews and observations	To describe and express the meanings of good nursing care among female last year undergraduate nursing students
Perry, B. (2009)	Canada	Nurses	7 unstructured interviews	To take the nebulous concept of compassion and attempt to describe some practical actions nurses use to convey compassion to the older people they care for
Peters MA. (2006)	United States of America (USA)	Undergraduate nursing faculty	11 open-ended interviews	To explore baccalaureate nurse educators' experiences of compassion within the context of nursing education
Sinclair et al, (2016)	Canada	Advanced Cancer patients	151 semi-structured interviews	To investigate palliative cancer patients' understandings and experiences of compassion so to provide a critical perspective of the nature and importance of compassion
Tehranineshat et al., (2018)	Iran	Nurses, hospitalised patients, and family caregivers	34 in depth and semi-structured interviews, focus groups and field notes	To identify and describe compassionate nursing care based on the experiences of nurses, patients, and family caregivers.
Van der Cingel, M. (2011)	Holland	Specialised nurses and Patients	61 interviews	To understand the benefit of compassion for nursing practice within the context of long-term care
Badger & Royce (2013)	United States of America (USA)	Burn survivors	31 focus groups	To investigate the concept of compassionate care and how it is described from the perspective of the burns survivor
Way & Tracy (2012)	United States of America (USA)	Hospice staff	93 observations and interviews	To explore the communication of compassion and develop a new conceptualisation of compassion

Figure 6. The characteristics of a compassionate nurse.

3.7 How is compassion taught to nursing students?

A search of the literature generated only three papers that had investigated teaching compassion to nursing students. Two of the studies were from the UK and had the specific aim of introducing teaching methods that would enhance nursing student's skills of compassionate care. Both of these studies were guided by qualitative research methods. The third article was based on an Australian study (Table 5).

In the study by Adam and Taylor (2014) staff and students used an experimental learning approach to gather themes from student reflective accounts of practice. Students also selected images and scenarios that related to their own experiences of compassionate care, which were then role played and reflected on with the rest of the class. Students spoke of situations that had left them feeling powerless. This led to the identification of five learning needs. These were:

1. Communication skills to challenge practice by staff who lacked compassion.
2. Communication skills to respond calmly and professionally to anxious or aggressive behaviour from relatives.
3. Assertiveness skills to respond appropriately to staff bullying.
4. Emotional strength to deal compassionately with highly emotional situations.
5. The ability to recover their strengths and resilience following emotionally difficult experiences.

Staff worked with students to develop individualised toolkits that were designed to meet their individual learning needs. The toolkits helped students and tutors to recognise communication, assertiveness, and the mutual value of small gestures for giver and receiver, reflective learning, coping strategies, resilience, self-care, realistic expectations of practice, and healthy boundaries as key skills for compassionate

nurses (Adam & Taylor, 2014). As a result of the exercise nursing students in this study felt empowered to turn stressful conditions into positive learning experiences. They also engaged in regular self-care activities, and saw an improvement in their communication skills (Adam & Taylor, 2014).

Adamson and Dewar (2015) used stories from clinical practice to engage nursing students in reflective learning about compassion. This was part of a teaching module used in the recognition of acute illness and deterioration. This study incorporated information gathered from a three year action research project (The Leadership in Compassionate Care Programme) and this was introduced into a module. The LCCP aimed to condense the meaning of compassionate care into a teaching method for practice development and education (Adamson & Dewar, 2015). The teaching sessions involved simulation exercises with either actors or manikins. Theoretical learning was delivered through the virtual learning environment application Moodle, and the main elements of compassionate care intertwined with the module content. Participants were asked to reflect on a collection of stories about compassionate care uploaded as podcasts, relate them to their own practice, and then discuss their thoughts in an online forum. In total, thirty seven students enrolled onto the module, all of them listened to the stories. Only sixteen students contributed to the online discussion. The study presented data from five participants taken from one story relating to the theme of caring conversations. Findings from the Adamson and Dewar (2015) study indicated that through this teaching method, nursing students understood how it feels to be in hospital, that they should not automatically assume that relatives understand hospital procedure, and how this knowledge of compassion should be applied to practice.

In the study by Hofmeyer et al (2017), final year nursing students were introduced to a 5000 word online self-directed compassion module. The module was delivered over eight segments and took four to six hours to complete. Each segment focused on the following areas:

1. The concept of compassion
2. Practicing compassion in healthcare
3. Practicing compassion towards patients
4. Practicing compassion towards colleagues
5. Practicing compassion towards self
6. Leading with compassion
7. Cultivating self-care
8. Cultivating resilience

Hofmeyer et al (2017)

Open ended questions pre and post intervention led to the identification of four key learning themes relating to how compassion is understood in practice. They were; "*being present"*, "*acting to relieve suffering*", "*getting the basics right*", and "*going forward"* (Hofmeyer et al., 2017, p.3). Further reflections showed that students developed a deeper understanding about being present, putting yourself in the shoes of others, taking time to listen, smallest acts, doing things that mattered, helping colleagues to thrive, building resilience, making positive lifestyle choices, having boundaries and support, and progressing with a mindful approach to practice (Hofmeyer et al., 2017). Interestingly, these factors resonate with previous studies on the characteristics of a compassionate nurse. The study showed that online learning environments can have a positive impact on nursing students' ability to develop compassionate and self-care practices that facilitate their compassion for patients, colleagues and self.

Table 5. Summary of papers that explored how compassion is taught to nursing students.

Reference	Country	Sample	Sample size and data collection	Research aim
Adam, D., & Taylor, R. (2014)	United Kingdom (UK)	Undergraduate adult nursing students	30 reflective accounts of practice discussed with second year tutor	Evaluate a teaching approach designed to enhance students ability to deliver compassionate care
Adamson, E. & Dewar, B. (2015)	United Kingdom (UK)	Pre-registered and registered nursing students	37 interviews and online discussions based upon reflections of giving and receiving compassionate care	To describe the use of stories within the curriculum to enhance knowledge and skills in compassionate caring
Hofmeyer, A., Toffoli, L., Vernon, R.,...et al (2017)	Australia (AUS)	Undergraduate nursing students	42 pre and post open-ended intervention questions	To investigate nursing students understanding of compassion and compassionate practices toward self, patients and colleagues after studying an online compassion module.

3.8 What instruments have been developed to measure compassion in nursing?

To address the third review question, only the studies that used psychometric instruments were included. The literature review produced four articles that met the search criteria. Three studies were undertaken with American populations, two of these studies collected data from patient groups, and the third from nurses. The fourth article was taken from a sample of Korean nurses (Table 6).

The study by Burnell and Agan (2013) aimed to develop a standardised scale that would capture the behaviours and actions of nurses that patients could identify as being compassionate. The Compassionate Care Assessment Tool (CCAT) combined the findings of two pilot studies using a Spiritual Needs Survey and the Caring Behaviours Inventory to generate a 28 item scale for compassionate care. Surveys were administered to 250 patients in the USA with 177 of them rating the whole scale, giving a response rate of 70.8%. The final scale included four subscales of meaningful connections, patient expectations, caring attributes, and capable practitioner. Scoring is achieved through adding a value from 1 (not important) to 4 (extremely important) for each statement.

The study by Kemper et al., (2015), evaluated two scales that assessed clinician confidence, one of which was the Confidence in providing Calm, Compassionate Care Scale (CCCS). This scale had ten items with questions such as "*In what percentage of your patient encounters do you practice centring (being peaceful and focused)*?" Participants were asked to state their level of confidence for each statement in increments of 10% where 1 =10%, 2=20% and so on until 100%. This scale was developed using a sample of clinicians of which 30 (14%) were nurses.

The Compassion Scale by Kret (2001) asked patients to evaluate compassion in nurses. The scale compromised of five items measuring psychometric properties of warm/cold, unpleasant/pleasant, distant/compassionate, insensitive/sensitive, and caring/uncaring. Kret (2001) adapted this scale from a study that investigated whether a video of a compassionate physician helped reduce anxiety in patients (Fogarty et al, 1999). This scale used a visual analogue scale where participants were asked to place an X on each line on a scale of 0 to 10. Participants were also asked to list the qualities they felt a compassionate nurse should have.

Finally, the Compassion Competence Scale was developed and validated with a sample of 660 Korean nurses (Lee & Seomun, 2016b). This scale has three factors (Communication, Sensitivity, and Insight), and seventeen items that ask questions such as "*I always pay attention to what patients say*". Responses vary from strongly agree to strongly disagree. The purpose of this article was to develop, validate and report the findings of an instrument that could measure compassion competences among nurses.

Table 6. Summary of papers selected for review. What instruments have been developed to measure compassion in nursing?

Reference	Country	Sample	Sample size and data collection	Research aim
Burnell, L. & Agan, D.L. (2013)	United States of America (USA)	Hospitalised patients	250 Questionnaires Factor analysis Quantitative study	To develop a tool for measuring compassionate care in nursing
Kemper et al., (2015)	United States of America (USA)	Nurses who were part of a wider study of healthcare staff (n=213)	30 Focus groups Convergent validity	To evaluate instruments that assess confidence in delivering compassionate care
Kret, D.D. (2011)	United States of America (USA)	medical patients	100 Quantitative Questionnaire measure Qualitative questions	To measure and explore compassion in nurses as perceived by patients
Lee, Y., & Seomun, G.A. (2016)	Korea	Nurses	660 Concept analysis Factor analysis Quantitative study	To develop a psychometrically valid scale to measure compassion competencies in nurses

3.9 Quality of studies

3.9.1 What are the qualities of a compassionate nurse?

Results from studies for the qualities of a compassionate nurse were encouraging. Many of the themes identified in this review, were similar to but also added to those described by Papadopoulos and Ali (2016). This study found similarities for the characteristics across a range of nursing and patient groups. However, one study combined the qualities, whilst others separated them, for example, empathy and connection to make empathic connection. Combining qualities in this way could create confusion as to which is the more discerning of the two? In addition, not all of the studies gave feedback for what the qualities meant to the participants, and how nurses might display them in practice. Equally not all of the studies collected data on what compassion meant to patients.

It is also not clear from the evidence whether these are characteristics or processes to deliver compassion. Potentially they can be both. With characteristics being what nurses strive to and patients look for, and the processes underlining the actions and procedures that express compassion.

The overall methodological quality of the studies was poor, as there was a large disparity within the studies in terms of design, data collection and patient populations employed when collecting data. This made it difficult to compare or generalise the findings to other nursing or patient groups. Added to this, data analysis in some of the studies was also intrinsically weak, and not clearly defined. Furthermore, response rates in each study were low.

3.9.2 How is compassion taught to nursing students?

This review found only two papers that had explored how compassion is taught to nursing students. This could reflect the thoughts of some who think compassion is not something that can be taught (Johnson, 2013; Bray et al., 2016). Despite this, findings revealed that compassion can be taught using reflective learning, and scenarios that students can then apply in practice. These studies highlighted some important learning needs faced by nursing students in relation to compassion, and also made suggestions on how to address them. However, the evidence was not convincing enough to demonstrate a consistently effective approach towards teaching nursing students about compassionate care. The quality of the studies was low, as both focused on one teaching method in particular, and not a full module on compassion. Neither was it explained how compassion was incorporated into the course content. Furthermore, the methods used in both studies were not made clear, thus limiting replication or further exploration. This supports a previous review in which interventions for compassionate care were not deemed applicable for practice (Bloomberg et al., 2016). Conversely, the study by Hofmeyer et al (2017) provided a clear outline of the course content and data collection methods. However, the sample response rate was 42 (11.6%) out of a possible 362 participants. Curiously, there were more responses from participants post intervention (25) than pre (17). Moreover, all were nursing students in their third year of study, with an already established interest in compassion.

Furthermore, participants' response rates varied in both studies, suggesting a possible selection bias. Both used stories to facilitate reflective learning, therefore limiting the scope of the teaching methods employed in the studies. Nonetheless, students in both interventions reported that they developed a greater understanding of compassion,

and how to deliver compassionate care to patients. However, follow up studies were not performed to test the long term effects of the training to facilitate compassion over time. Both studies were conducted using small samples of nursing students at two separate locations in the UK. It is therefore difficult to generalise the results to other nursing students within or outside of the UK.

3.9.3 What instruments have been developed to measure compassion in nursing?

This review identified four papers reporting on instruments used to measure compassion in nursing. Surprisingly, the review found that the available instruments measuring compassion in nursing were limited. Three were American, and one was Korean. To the best of one's knowledge none of the instruments have been applied with UK nursing populations. Given that the UK has stressed the importance of nurses being more compassionate and on improving strategies for measuring compassion (Sturgeon, 2010; Johnson, 2008; RCN, 2008), it was surprising not to find a measure for UK nurses. In addition, this review did not find a measure that considered the views of nursing students. The results also support previous research that suggests there are very few studies conducted in the UK that measure compassion effectively (Dewar, 2011).

In addition, very few provided a rationale for using certain methods and data collection procedures within their studies. Several considerations were noted. One, the inclusion criterion in one study was based on the participant's ability to define compassion. Two, a compassion scale was developed using a previous measure of spiritual beliefs taken from a Christian perspective. Third, compassion was used as an individual item in one of the scales aimed at measuring overall compassion. Fourth, participant numbers in some of the studies was low. These weaknesses question the construct and face

validity of the scales, and evidence bias in recruiting participants. This supports previous research where similar limitations were identified for the overuse of the “Holy Spirit” as a defining attribute of compassion (McCaffery & McConnell, 2015). All of the measures included specific behaviours associated with compassionate nursing, yet not one captured the complexity and multifaceted nature of compassion in any great detail. For instance, empathy was considered part of the communication element in the scale by Lee and Seomun (2016), yet the literature shows that the two are deemed separate constructs.

In addition, a scale that included a measure of compassion fatigue, burnout or other form of work related stress that might hinder nurses’ compassion could not be found in the literature. Moreover, only one of the studies used data from a previous study on the qualities of a compassionate nurse to develop a compassion scale.

From the results of this review, it seems difficult to recommend a reliable scale that measures compassion in nurses. Also evident is the absence of a validated measure of compassion for UK nurses. Only two were seen as being more comprehensive in assessing compassion in nurses (Brunell & Agan, 2013; Lee & Seomun, 2016). However, the Brunell and Agan (2013) scale was validated with medical inpatients. Although the Lee and Seomun (2016) Compassion Competencies Scale had a large sample size it was validated using Korean nursing students only, and the scale items were generated only from interviews with nurses and did not consider the views of service user groups. Therefore, it is not clear if both scales can be validated using nursing populations in the UK and other nurses globally.

3.10 Limitations

This systematic review focused on three specific review questions. The first focused on the qualities of a compassionate nurse. Of the 95 papers identified only 16 were considered suitable. The second explored how compassion was taught to nursing students. From the 95 articles, only 2 met the inclusion criteria. The third asked what instruments were used to measure compassion in nursing. Only 4 articles met the criteria. Perhaps the shortage in papers, especially for the second and third review questions, highlights the apparent confusion around the concept of compassion in nursing, or if compassion can be taught at all (Sturgeon, 2011). As participants in this study were mainly adult nurses, it is also conceivable that other nursing groups and health professionals may have a different understanding of what compassionate care means to them. Future research could explore these findings with more varied nursing and healthcare professions.

Some of the studies included other healthcare professionals. However, as the data held important information collected from nurses and patients, they were deemed suitable for inclusion. In addition, suggestions for the qualities of a compassionate nurse as well as ideas on how compassion can be taught to nursing students could be found in editorials and opinion papers from a diverse group of nursing professionals. Disregarding grey literature and other policy and educational documents, potentially limits the strengths and quality of the review as useful and informative information that has not been researched or evidenced, cannot be included. This in turn presents an imbalanced view of the evidence, and could lead to publication bias where only positive results are presented.

Equally as this systematic review was conducted separately from the rest of the study, it was not guided by the philosophical framework of pragmatism, and thus poses a further limitation. However, due to its scientific approach and a rigorous review criterion, grey literature and other policy papers could not be included in this review. Reasons being that the inclusion of non-commercial publications, effects the validity and reliability of the systematic review (Paez, 2017). As was the case of the ways in which compassion had been taught, the purpose of the systematic review was to evaluate research that had explored the effectiveness of teaching interventions. Thus, it would be difficult to assess the impact of such interventions without the evidenced based research to support this. Plus, the review was conducted at a time when only the included articles were available, while the other policy and education documents did not meet the criteria for inclusion. In light of this, a “grey search” of the “grey evidence” may have helped inform the research, and provide a more rounded and inclusive presentation of the evidence on the characteristics of a compassionate nurse, how it can be taught and measured in nursing.

3.11 Implications

Increasing the knowledge base for the required qualities of a compassionate nurse, could give nursing students a solid framework for the behaviours necessary for compassion in nursing. Incorporating the qualities of a compassionate nurse into a teaching intervention and psychometric scale and investigating their effectiveness to assist nursing students in their understanding and development of compassionate care is recommended. Further research would also benefit from the inclusion of longitudinal studies to measure the impact both have on nurse’s compassionate care.

3.12 Conclusion

Considering the findings of previous research that suggests there is a lack of clarity as to what compassion is in nursing, this review supports the idea that compassion can be grouped into a set of qualities. As such it may help to reconsider the concept of compassion in nursing as being a multidimensional one. In line with previous research, this study has shown that currently no quantitative instrument that describes and measures the qualities of a compassionate nurses over time exists (Pitt et al., 2014). It is also evident that these characteristics have yet to be placed into a teachable module to help nursing students build their understanding of the characteristics of a compassionate nurse. Despite this, there is insufficient evidence to suggest that nurses understand the qualities of a compassionate nurse, nor is it clear whether these qualities can be taught and if they would have a long-term effect on facilitating compassion among nursing students. Therefore, there is a need to develop a scale that comprehensively measures the associated behaviours in nurses.

This study identified a number of limitations with regards to teaching and training programs aimed at developing knowledge of compassion at the pre-registration nurse level. Although wide in scope, compassion in nursing is based on partial understanding and limited resources. For teaching nursing students' compassion there were two studies that had investigated this. Both were insufficient as they were small scale studies and based in the UK. This does not represent the extended nursing population both in this country and the wider world.

Moreover, the current instruments to measure compassion in nursing are limited, especially those aimed at identifying compassion in nursing students. It is also apparent that there are currently no measures of compassion for nurses in the UK.

Current instruments that measure compassion demonstrate that nurses can be judged as lacking in compassion. This alone has negative repercussions as to how care and compassion are delivered in practice as it implies that nurses are missing a fundamental human attribute. It would seem much fairer to assess nurses not only on their overall compassion, but the individual skills or qualities that represent their "compassionate strengths". As each personal quality will undoubtedly fluctuate with personal, environmental and professional experience, it seems apparent that their compassion will also change as they do.

Measuring compassion as something that an individual has but whose qualities vary allows for the development of weaker skills, and the continued enablement of the strongest strengths. Despite the abstract ways in which the qualities of compassion are identified in the literature, this review has managed to synthesise several overarching themes. These themes can be used to develop a measure of compassion that focuses on each as a strength. Considering that the literature represented global nursing populations, there is scope to develop a scale that is culturally sensitive which could also be used as a global indicator of self-reported compassion for nurses worldwide. Since one of the themes related to nurse's self-care, an additional benefit would be to introduce this into the new scale.

To attend to the three gaps outlined in this systematic review this study will develop, validate and pilot a nurse's compassionate strengths scale that can be used in conjunction with an e-learning application compassion module. The scale will act as the indicator for nurses' compassionate strengths enabling them to identify where their strengths lie, whereas the compassion module will provide an information space where nursing students can practice and cultivate these strengths. In outlining a set of compassionate strengths, a new definition and theoretical framework for compassion

in nursing will also be created. This will be one that embodies the qualities of a compassionate nurse which can be used to further expand the knowledge and understanding of compassion in nursing.

In progressing this research forward, evidence from this review will be used to develop a compassion module that will consist of information on the importance of compassion in nursing, the qualities of a compassionate nurse, and show visual examples of how these behaviours are performed in practice. A series of nurse patient/family scenarios will be developed so that nursing students can identify and test their understanding of compassionate strengths in action. In addition, based on the limited psychometric instruments for compassion in the UK, a compassion scale to help nursing students measure their compassionate strengths in line with the online learning tool, could help them become more compassionate practitioners. In sum, there is a need to design and develop an intervention that not only teaches the qualities of a compassionate nurse but also measures these qualities in nursing students.

Chapter 4. Methodology

"*There are more things in Heaven and Earth Horatio, than are dreamt of in your philosophy*" — William Shakespeare, Hamlet

4.1 Introduction

The systematic literature review chapter highlighted a dearth of empirical research to support the identification of teaching and measurement of the characteristics of a compassionate nurse. As the current study aims to develop a new psychometric questionnaire, and an online scenario based learning course to help teach nursing students about compassion, a mixed methods approach was considered the most suitable approach. This chapter begins with an introduction to the theoretical framework of pragmatism that underpins mixed methods research. It then details the use of mixed methods, and more specifically sequential exploratory design. The methods used for data collection and analysis are discussed as well as the ethical implications for conducting this study.

4.2 Research paradigm

All research needs a foundation that originates in the worldview of the researcher (Sandelowski, 2003). This is sometimes described as the overarching perspective of inquiry, or what Kuhn (1962) referred to as a "scientific paradigm". A paradigm consists of the researcher's, epistemological, ontological and methodological proposition, or the interpretative framework that guides action (Guba & Lincoln, 1994). All are features of the philosophy of knowledge. Epistemology is described as the way in which one comes to understand the world around them, and the relationship between them and the known (*what it means to know something*). Ontology is

concerned with the nature of human beings and reality as a whole (*what is that something*). Methodology considers the best ways to acquire knowledge about the world (Denzin & Lincoln, 2018).

For many years research was dominated by two major paradigms; post-positivism and social constructivism. Because of their opposing views, these two approaches have long been considered incompatible with one another, leading to what became known as the “paradigm wars” (Cherryholmes, 1992). This mainly stemmed from the early obsession with empiricism in social science research where many chose quantitative over qualitative methods (Tashakkori & Teddlie, 1998; Onwuegbuzie & Leech, 2005). However, pragmatism emerged as a third paradigm that reconsidered the idea of truth and reality, accepting that there are multiple as well as singular realities open to inquiry, choosing to orientate itself towards solving “real world” problems (Feilzer, 2010). In doing so, it is argued that pragmatism brought an end to the so called “paradigm wars”. As the social sciences matured new worldviews evolved to take on the ever growing complexity of problems. Along with pragmatism which is an approach suited for mixed methods research, the advocacy and participatory approach associated with action research emerged to offer alternative approaches to the post-positivist/constructivist dichotomy (Creswell, 2003).

4.3 Philosophical worldview

Before undertaking any research study, Creswell (2003) suggests it is important for researchers to identify a philosophical worldview that is suitable to the method of enquiry and the outcomes they hope to achieve. A person’s worldview shapes the way they see and experience the world around them. This in turn affects how they go about designing, conducting, analysing and reporting the findings of their research.

The appeal of pragmatism is that it places the research question as central to the investigation rather than concerning itself with ontological and epistemological debates around truth and reality (Johnson & Onwuegbuzie, 2004). Pragmatism also considers the blending of subjective and objective perspectives and utilising both in designing research studies. In this way pragmatism is the philosophy that lends itself well to mixed methods research as it allows the researcher to use a "pluralistic" approach to understand a research problem (Creswell, 2003).

In choosing pragmatism, the researcher can gather important data from multiple sources, by means of inductive and deductive research methods that utilise the best of quantitative and qualitative data collection and analysis. This approach is seen as connecting the scientific empirical "singular" methods of quantitative methods with the "freewheeling" inquiry of qualitative research studies (Tashakkori & Teddlie, 2003, p. 52). Pragmatism, therefore, allows the researcher to focus on more than one method of enquiry. It also bridges the gap between quantitative and qualitative research methods, and as such works well with mixed methods research.

4.4 What is Pragmatism?

The word pragmatism derives from the Latin "*pragmaticus*" and the Greek "*pragmatikos*" meaning "*deed*", or "*action*", and is related to such terms in the dictionary as pragmatic and practical (Ormerod, 2006, p.894). Pragmatism is an approach that seeks to explore practices that solve problems, with the larger aim of creating a better world (Koopman, 2006). Shields (1998, p.197), refers to pragmatism as the philosophy of "*common sense, because actions are assessed in light of practical consequences*". Some argue that the essence of pragmatism is to find "*what works*" when it comes to research (Tashakkori & Teddlie, 2003, p. 713). However,

Morgan (2014) considers this summary too simplistic a definition because pragmatism is a philosophy of meaning that goes far beyond problem solving.

Pragmatism grew out of a scepticism towards traditional British and European philosophy and current scientific approaches that had dominated scientific thinking during the early nineteenth century (Tashakkori & Teddlie, 2003). The earlier pragmatists had become frustrated with what they considered, the fruitless debates surrounding 'knowledge' and 'truth'. They argued that absolute truth could only be found through the testing of ideas that were driven by a common sense approach to research that was based on action rather than assumptions (Tashakkori & Teddlie, 2003; Ormerod, 2006; Kloppenberg, 1996). As such, many consider pragmatism to be the "quintessential" American philosophy, due to its "go getting" attitude towards research, and the influential founding American scholars such as John Dewey, William James, Charles Saunders Pierce and Oliver Wendell Holmes Jr, who brought the philosophy into the mainstream (Ormerod, 2006).

According to Pierce, pragmatism was a philosophy based on meaning. Concepts, beliefs and ideas that had real world applications should be measured by observable results, rather than simply relying on abstract principles (Ormerod, 2006). Peirce, introduced pragmatism into research methodology around 1861-1862, based on a "*triadic scheme*" in which the aim of science was to understand the world on three levels: "*the observed object; the working scientist; and the signs scientists used to understand, describe and explain the world*" (Tashakkori & Teddlie, 2003, p.53). However, Pierce's work did not have much influence on the greater academic community and remained largely unnoticed, until 1907, when psychologist William James published an influential book on the subject of pragmatism and brought the philosophy to a wider audience (Ormerod, 2006).

James (1907), argued that the true purpose of philosophy was to discover how and what differences can be made to peoples' lives. For James, pragmatism represents a method of enquiry that challenges an individual's previous truths, beliefs and theories about phenomena (Kloppenberg, 1996). In doing so old truths are either conserved, or new truths found (James, 1907). In addition, concrete and abstract truths could be merged depending on the practical outcomes that they brought to people's lives. Ideas about what is good for mankind's struggles were considered truths, but only inasmuch as those truths did not conflict with other beliefs. In support of pragmatism, James (1907, p.12) argued that while rationalism tends to the logical, and empiricism focuses on the external senses, pragmatism "*is willing to take anything, to follow either logic or the senses, and to count the humblest and most personal experiences*". In short, pragmatism puts the practical outcomes of research and its benefits to people over an idealistic pursuit of truth, whilst respecting that all truths can either contradict, help modify, or conserve any preconceived ideas about the world.

Arguably, the work of Dewey has been the most influential of all the pragmatists due to his long career, contribution to scientific debates, and extensive writing on the subject of pragmatism (Tashakkori & Teddlie, 2003). For Dewey, beliefs were what drove actions, and actions helped form new beliefs (Morgan, 2014). In this cycle of thought, action and experience, individuals find meaning, which in turn shapes their behaviour and conduct in life. Dewey argued that from an early age, human beings derive meaning from the people and establishments around them. So powerful in fact, that these social influences continue to affect the individual's beliefs later in life as they mature, with emotional and context specific factors also impacting on the decisions they make (Morgan, 2014). As a result, Dewey believed it was important that educational establishments teach skills and knowledge that students could apply into

their lives, rather than “dead facts” (Hickman and Alexander, 1998). So that ideas and ways of being could be developed further, Dewey also argued that attention should be given to actions or activities that have or would eventually lead to change, as opposed to old fixed ideas of logical thinking (Tashakkori & Teddlie, 2003). He understood that truth could be found in both subjective and objective methods of inquiry, as both lead to knowledge that resembles reality (Feilzer, 2010).

Both Dewey and James saw pragmatism as how an individual’s conscious self, interacted and experienced the world around them. Historically, as different cultures emerge, they test and develop their own values and communicate them to others. Language was considered just one important aspect of understanding how others experience the world around them, along with the spiritual, non-verbal, religious aesthetic, symbolic and interpersonal methods. Communication can both feed the imagination and yield activities that benefit the mutual interest of the community, or restrict one’s understanding by reducing meaning to a specific range of thinking. Nevertheless, as human experience is meaningful and these meanings change over time and between cultures, it is important to capture the individual’s underlying perspective of the world around them and how this is transmitted through their behaviour (Kloppenberg, 1996). Pragmatism is the approach that helps the researcher “test” these meanings (Tashakkori & Teddlie, 2003). Based on this principle, pragmatism can help when attempting to discover how nurses and service users communicate their understanding of compassion and what it means to them in practice. In doing so, new ideas can be found, or old ones preserved in the further pursuit and development of nursing student’s compassion.

4.5 Rationale for using pragmatism

In explaining the pragmatic approach, Thakore and Teddlie (1998, p30), offer the following suggestion to researchers; "*study what interests and is of value to you, study it in the different ways that you deem appropriate, and utilise the results in ways that bring about positive consequences within your value system*". According to Onwunegbuzie and Leech (2005), this places the researcher at a great advantage, because they approach both qualitative and quantitative methods with 'positive enthusiasm' and understanding that both are helpful in exploring meaning. Pragmatism also answers any epistemological concerns with regards to measuring and observing the different layers of phenomena through the use of mixed methods (Feilzer, 2010). Qualitative research methods can be used to examine certain elements of the phenomena, whilst quantitative methods for assessing others. This gives the researcher flexibility when conducting research in that they can utilise quantitative methods to help generalise qualitative data and apply qualitative approaches to explain findings in quantitative data (Onwunegbuzie & Leech, 2005). The flexibility of pragmatism allows for a synergy between the two research methodologies and gives the researcher more scope to explore phenomena under question.

While other approaches such as, transformative-emancipation, dialectics and critical realism, can be used with mixed methods research to collect data from a wide range of sources, pragmatism was more advantageous for this study. This is because pragmatism highlights the importance of communication and shared meaning making and action to find practical solutions that will make a difference to social problems. With a strong emphasis on transferability, it allows for observations to be converted into theories and then those theories assessed through action that can be extended

to other areas (Shannon-Baker, 2016). As, this study aimed to find a practical solution to learning and teaching about compassion, and that transformative emancipation is more concerned with addressing social inequalities to enact social change, this approach was not suited to the aims of the study. Similarly, a dialectic approach seeks to highlight and address differences between data and theory, thus, this too was not deemed appropriate. Arguably, critical realism would have been suitable, however where pragmatism focusses more on making practical changes, critical realism explores the deeper underlining mechanisms of observed reality and experience (McEvoy & Richards, 2006). Thus, this approach would also not fit with the specific aims of the study. Pragmatism was also chosen because it aligns with my own personal beliefs and world view in that a practical approach to research where more is done to solve real world problems rather than simply uncover and discuss them.

Ontologically, pragmatists argue that, if a belief has a function and its outcomes apply to real world problems then it deserves to be called true. In considering the belief that compassion can be taught to nursing students, research must be conducted to test the truth of this claim. Therefore, when designing and conducting research studies, epistemologically, taking a practical approach to research in the pursuit of discovering a deeper understanding of the meaning behind individual experiences, is key to pragmatism. This influences the choice of methods that the researcher uses when conducting research.

This pragmatic approach allowed me as the researcher to explore freely the research question using a variety of methods to gain a better understanding of the research problem, without being bound to one particular philosophy.

Pragmatism was “woven” throughout the study in the form of the methods undertaken to address the research question that in turn could attend to the wider issues surrounding compassion in nurse education, as demonstrated in the sequential exploratory design. This is demonstrated in the use of qualitative and quantitative methods at different stages and then the combination of both in the third study, to support the research outcomes.

For example, the previous chapter showed that compassion in nursing is characterised by several contributing behaviours and virtues. Based on these findings, the current study aims to design, develop and test an online scenario based learning course, and a psychometric scale, to assist nursing students in developing their compassion. In recognition of this and the multiple factors that can be found to influence compassionate care, the uniqueness of the nurses and patient experience, plus the internal and external stressors that can shape how compassion is shown, a pragmatic approach seems the most appropriate for this study. As pragmatism allows the researcher to collect information from real life stories and examples of compassion and explore the meaning behind these factors in more detail, a number of interviews and focus groups will be conducted with key stakeholders. Data will be collected from participants during interviews in an attempt to explore their world, and what compassion means to them. This data will then be used to help identify suitable themes and questionnaire items in the development of a new compassion scale. The data can also be used to inform the course content for the online educational course and help facilitate nursing students’ understanding of compassion from a real world perspective. Following on from this, a quantitative approach will be implemented to analyse data and evaluate the psychometric properties of the scale. Then using both

quantitative and qualitative methods, the impact of the online course on nursing students' development of compassion strengths will be assessed.

Hence, to fully explore the experience of compassion in nursing and develop two interventions to help teach and measure compassion to nurses, a pragmatic theoretical framework and a mixed methods sequential exploratory design is more suited to this endeavour.

4.6 Purpose of the study

Newman et al (2003), argue validity is strengthened when researchers understand the "why" as well as the "what" when conducting social research. This means that researchers should identify and understand the purpose behind why they approach their research in a certain way. In doing so the researcher knows not only where they want to go and how to get there, but also why they are going there in the first place. To assist with this a typology of nine general purposes is presented in table 7 below.

Although broad, these typologies provided a systematic process to help researchers understand the purpose behind their investigation and questions that reflect the need for using mixed methods. Each typology can be applied to a variety of perspectives, and more than one typology can be applied to a particular study. (Newman et al., 2003).

As the main purpose of this study is to contribute to new knowledge by exploring the previously mentioned aims in chapter 1, several purposes are identified from the typologies presented in the table along with an explanation for how the current study will address each of them using mixed methods.

Table 7. Typology of purpose (Newman et al, 2003, p.185)

	Typology of Purpose	Explanation of purpose	Application of purpose in this study
1	Predict	Using all the things we know in the knowledge "base" to explain a field and what might yet unfold in the future (so that historians can describe these things in the future; return to #1).	Quantitative research methods will be used to predict changes in compassion as a result of the scale and online learning tool. The results of which can be used further to build future educational programmes
2	Add to the knowledge base	Organise all the things we know into a "base" of knowledge.	This study will add to the knowledge and understanding of how nursing students learn about compassion, and the specific practical applications that this knowledge brings.
3	Have a personal, social, institutional, and/or organisational impact	Struggling with the complex environments we experience; particularly when we know that some things we know and experience are just, fair, and in keeping with our ethical or professional purpose.	Both interventions are being developed within an educational setting with and for nursing students. This has wider implications for educational programmes and healthcare organisations.
4	Measure change	Measuring what happens when we change things.	This study will include a quantitative study where data is collected on nursing students to measure changes in compassion over time as result of the online course.
5	Understand complex phenomena	Understanding what things we now experience and know.	To address the need for a greater understanding of compassion in nursing, the present study also plans to collect qualitative data on personal experiences of what compassion means to nurses, patients, educators and students.
6	Test new ideas	Testing these new things.	As part of the study a new way of teaching compassion will be tested.
7	Generate new ideas	Discovering some new things	Taking the information that is generated from purpose number 5, the underpinning characteristics will be applied to a new compassion scale and learning intervention.
8	Inform constituencies	Telling what things we know to those who need to know them.	Following on from number 3, the findings will inform the higher level organisational infrastructure at the university, as well as NHS establishments.
9	Examine the past	What things we already know from the past.	This study will analyse previous data based on compassion in nursing, as well as collecting new data from current nursing populations.

4.7 Research design

Mixed methods research has been referred to as “blended research”, “integrative research”, “multimethod research”, “multiple methods”, “triangulated studies”, “ethnographic residual analysis”, and “mixed research” (Johnson et al, 2007). However, to lessen the confusion surrounding such a wide range of terms a more precise language to describe mixed methods was deemed necessary (Tashakkori & Teddlie, 1998). Linking thoughts and explanations from leaders in the field, Johnson et al (2007, p. 123), provide the following overall definition of mixed methods research in the behavioural sciences: “*mixed methods research is the type of research in which a researcher or team of researchers combines elements of qualitative and quantitative research approaches (e.g., use of qualitative and quantitative viewpoints, data collection, analysis, inference techniques) for the broad purposes of breadth and depth of understanding and collaboration*.”

4.8 Mixed Methods

Mixed methods can be viewed as a third methodological movement. Underpinned by the philosophy of pragmatism it gives more to the researcher than individual methods. The purpose of mixing methods is to provide a more holistic understanding of the research problem and capture a comprehensive picture of human phenomena that would not be possible with a singular method alone (Creswell & Piano Clark, 2007). A mixed methods approach also brings together the different research styles of multiple disciplines, such as the traditionally interpretivist and qualitative methods found in nursing, and the quantitative or positivist paradigms associated with psychology (Doyle et al., 2009). In essence, the mixed methods approach to knowledge (theory and practice) takes into account and considers the value of the many varied

perspectives, viewpoints and standpoints of quantitative and qualitative research to create the best of both worlds (Johnson et al., 2007).

According to Creswell and Piano Clark (2007), mixed methods are used extensively in nursing research to address the growing needs and complexities of the nursing discipline. A mixed methods approach not only reports on the outcomes in healthcare but the context in which these outcomes occur (Doyle et al., 2009). Therefore, mixed methods offer more insight into what is needed in healthcare by those who use the services. For this study, information gathered from service users, employees and educators can guide research in a direction that makes sure these needs are explored and ideally met in practice.

4.9 Rationale for using mixed methods

As compassion is considered a subjective multidimensional construct, multiple perspectives from a wide range of representative samples will help enhance the meaning behind the concept of compassion. The rationale for using mixed methods research in this study is that neither a qualitative nor quantitative approach alone is adequate enough to understand the qualities of a compassionate nurse, and how this can be measured and taught. In this study, a combination of both quantitative and qualitative methods allowed for a more comprehensive analysis of the data (Tashakkori & Teddlie, 1998). For example, themes collected from interviews and focus groups were used to develop the compassion scale, and then the scale administered to a large sample of nursing students to determine generalizability of the instrument. As the study involved using qualitative data to develop a measure and a teaching tool for compassion in nursing, the most suited mixed methods for this study was a sequential exploratory design.

While other singular methods could be used, mixed methods can help reduce some of the disadvantages of qualitative research such as, my own personal biases when interpreting the results, generalising to other groups, and testing hypotheses. Similarly, a mixed methods approach may reduce the likelihood of reductionist models that omit constructs that can be found using qualitative methods to generate theory. For models generated using quantitative methods that do not reflect a fuller understanding of phenomena from participants, qualitative data can be used to confirm quantitative data and vice versa. Therefore, a sequential exploratory design is considered the most appropriate design for this study.

4.10 Sequential exploratory design: Instrument development model

Exploratory design utilises two approaches (Qualitative and Quantitative) and is also referred to as a sequential exploratory design (Creswell, Piano-Clark et al., 2003). Exploratory design utilises the findings from one method to inform the other. Sequential exploratory design consists of a number of phases that include qualitative and quantitative elements to guide the findings of the study. In the first phase qualitative data is collected then analysed, and the findings used to inform the quantitative phase of the research. In the second, data are collected and analysed using quantitative methods. The purpose of this strategy of inquiry is to use qualitative data to enrich, explain, or elaborate upon results gained from quantitative approaches and vice versa (Creswell, 2009). Creswell and Piano-Clark (2007, p.78) highlight the following three major strengths for using an exploratory design:

- The separate phases make the design straightforward to describe, implement, and report.

- Although this design typically emphasises the qualitative aspect, inclusion of a quantitative component can make the qualitative approach more acceptable to quantitative-biased audiences.
- This design is easily applied to multiphase research studies in addition to single studies.

4.11 Notion symbols

Morse (1991) introduced notation symbols into mixed methods research designs to help researchers communicate their actions in a simple way. Where a plus (+) symbol indicates that qualitative and quantitative data is collected simultaneously at the same time, an arrow (→) symbol is used to represent that one type of data collection builds on from another in a sequential pattern (Morse, 1991; Creswell, 2009). Furthermore, capitalisation of methods indicates that primacy is given to the qualitative or quantitative data, analysis and interpretation of the study (Creswell, 2009). This is captured symbolically as qual →/ + QUAN, or QUAL +/→ quan. However, Johnson and Onwuegbuzie (2004), argue that the researcher should not limit themselves to the traditional format of Qual → QUAN when following the mixed method design sequence. Instead they recommend that the researcher be more creative and create a design that fits the aims of their study (Johnson & Onwuegbuzie, 2004).

As the current study aims to create and test a new compassion questionnaire and develop a compassion based online learning tool, it will incorporate a research design that utilises qualitative and qualitative data in three stages (Qual→QUAN→Qual), to capture the meaning of compassion, develop the scale and online learning tool, plus collect feedback from participants as to the effectiveness of both interventions. This is

represented in more detail below in the diagrammatic format of Creswell and Piano-Clark's exploratory design instrument development model.

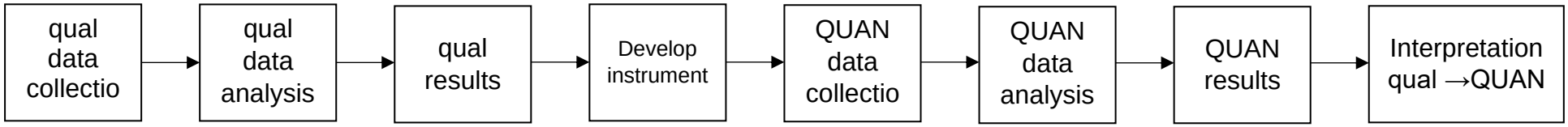


Figure 7. Exploratory Design: Instrument Development Model (Quan Emphasised) Creswell and Piano-Clark (2007, p. 76)

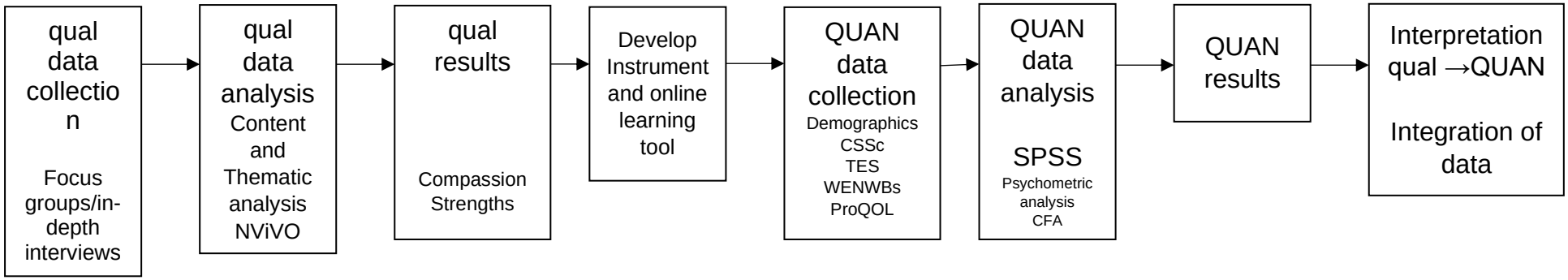


Figure 8. A mixed methods exploratory design: Instrument Development Model for the development of a nurse's compassion strengths scale and online learning tool.

4.12 Rationale for using a sequential exploratory design

This method is considered useful when developing and testing psychometric scales (Creswell, 2009), and is equally suited for those who wish to build on qualitative data to explain or design quantitative research studies (Tashakkori & Teddlie, 1998). When developing scales or psychometric measures, priority is given to the quantitative element in the 'instrument development' section in Creswell and Piano Clark's (2007) model. Furthermore, instrument development and testing is identified as one of eight reasons for undertaking mixed method studies in health and social research, as the qualitative approach can help generate questionnaire items that can later be used in a quantitative study (Doyle et al, 2009).

In the first phase qualitative data collected from interviews and focus groups on the subject of compassion were analysed for content and themes so that questions generated could be turned into survey items. In the second phase, the completed questionnaire was used to collect quantitative data from nursing students to validate the scale and develop the online learning tool. Qualitative research methods at the third stage were used to collect and analyse feedback from participants.

A sequential exploratory design was deemed the most suitable mixed methods design to meet the aims of this study. The previous systematic review of the literature shows that compassion in nursing consists of a set of behaviours that are associated with a compassionate nurse. Building on these findings, data were collected from several stakeholder groups. As the aims of the study were to measure and teach these behaviours to nursing students, a qualitative approach alone was not sufficient enough to address the research. Equally, quantitative methods would not provide a deeper understanding of the experience of these phenomena, nor would it capture the impact

using a psychometric scale and online learning course had on nursing students' compassion. Qualitative methods are important to confirm and add to the findings of previous research in relation to the characteristics of a compassionate nurse, as well as to explore the results of the study in greater detail. The results of which formed the foundation for the rest of the study. When undertaking a mixed methods study, consideration should be given to the actual research methods used at each phase (Tashakkori and Teddlie, 1998). As the questions being asked during interviews will help identify the characteristics of a compassionate nurse and ways in which these qualities can be taught, each phase of the data analysis will inform the other. Each is crucial to the overall outcome and success of the study. Overall, quantitative methods were chosen because they provided data that are empirical, theoretical and objective. Whereas, qualitative data, which is subjective, offers richer and more detailed data, which can complement gaps left by collecting statistical data alone.

4.13 Implementation of the design

4.13.1 Phase one: Qualitative methods

Qualitative research methods are seen as a way to investigate and understand the everyday lived experience of people in acquiring a greater understanding of phenomena (Braun & Clarke, 2006; Fischer, 2006). Such methods allow the researcher to grasp the importance of social phenomena in natural rather than experimental conditions (Powell & Single, 1996). As a result, findings do not claim generalizability, rather they relate to the specific interpretation and deeper meaning from each participant or group. This is very different to the quantitative approach which assumes that all phenomena are separate, material, measurable, and knowable (Denzin & Lincoln, 2018). In addition, where quantitative methods rely on empirical

data to test against hypotheses, quantitative methods utilise data to arrive at new hypotheses that inform further practice or study (Powell & Single, 1996). Thus, qualitative research methods can help generate new ideas and a way of understanding human experiences in their own right, as opposed to explaining it with independent variables. The validity of this approach is established through the selection of participants who best represent a particular group, and the appropriate methods of inquiry and data analysis (Fischer, 2006).

The initial qualitative phase of this study used focus groups and semi-structured interviews to capture the perspectives of compassion in nursing from a number of stakeholder groups.

4.13.2 Data collection methods

4.13.3 Focus groups

A focus group consists of a number of individuals selected and brought together by the researcher to discuss their personal experience of a particular subject selected by the researcher with the aim of generating data (Kitzinger, 1995; Powell & Single, 1996; Morgan & Spanish, 1984). The group discussion is usually recorded by video or audio so that the researcher has a record of what was discussed to refer back to later when analysing the data. Originally used for market research, focus groups encourage interactive communication between participants to capture rich data in relation to complex personal experience and what people think about certain phenomena (Powell & Single, 1996). This is particularly useful when examining the how's and the why's behind their thinking.

Focus groups allow for the discussion, exploration and clarification of personal views that cannot be achieved in one to one interviews. In addition, open ended questions

provide a relaxed approach to the session which creates a space for participants to explore the research topic, privately, in their own way using their own terminology. They are also viewed as a means of understanding the unique interpersonal communication that reveals the personal and work related cultural values and norms of a group (Kitzinger, 1995). In doing so, focus groups help generate data that cannot be measured by other research instruments (Powell & Single, 1996). Additionally, they encourage researchers to approach problems using multiple methods, help with the triangulation of data and help improve quantitatively focused research (Morgan & Spanish, 1984).

In this study, focus groups will be used to help collect the different perspectives of the characteristics of a compassionate nurse and how these characteristics might be taught from a number of nursing stakeholder groups. Data will be used to help generate the construct of compassion in nursing and validate it against everyday experience. In addition to using focus groups, Morgan and Spanish (1984) suggest that data collected through in-depth interviews can help the researcher delve deeper into the attitudes, thoughts and explanation of an individual's experience.

4.13.4 In-depth interviews

Semi-structured in-depth interviews are a valuable means of capturing an individual's perspective and experiences pertaining to a specific topic (Turner, 2010). Considered more than just social interaction, one to one interviews are used to try and uncover the meaning behind experiences and events, and can be applied to a wide range of research questions relating to the 'how', 'what' and 'why' of qualitative inquiry (Adams, 2010; DiCicco-Bloom & Crabtree, 2006). As with semi-structured focus groups, interviews help facilitate the collection of detailed in-depth information with regards to

a respondent's attitudes towards a certain topic (Powell & Single, 1996: Ryan et al., 2009). This not only benefits the researcher in that they are given access to a rich source of data but gives participants a "cathartic space" to talk openly about issues that concern them (Adams, 2010).

A benefit from interviews is that new insights into the personal perspectives of respondents can be discovered. This is crucial when attempting to understand human experience and designing interventions that aim to improve quality and change clinical practice (Adams, 2010; Harvey-Jordan & Long, 2001). Some weaknesses with interviews are that not all participants can articulate their thoughts, and indirect information can be filtered through the participant's particular lens. In addition participants can react to the investigator in ways that can lead to biased responding due to the researcher's presence (Creswell, 2009).

To avoid this, steps are taken to improve the validity and reliability of the research that maintains the credibility of the research (Louise-Barriball & While, 1994). Harvey-Jordan and Long (2001), suggest that records should be kept to strengthen validity and reliability, and avoid any possible error and bias in the study. The use of audio recordings to collect the distinct interactions between the interviewee and interviewer can be used to later validate the information discussed during the interview (Louise-Barriball & While, 1994). An advantage of this being that other researchers can analyse and validate audio content (Harvey-Jordan & Long, 2001).

4.13.5 Transcription

From field notes to word documents, qualitative research will typically include the transcription of data. Transcription is a process in which spoken words are transformed into written text as part of the analysis in qualitative research (Wellard & McKenna, 2001). The transcription procedure should be taken seriously so that it reflects the aims of the research (Ochs, 1979). Davidson (2009) recommends that to guarantee quality researchers need to be explicit about their transcriptions, especially with regards to the steps taken. In consideration of the contextual nature of the content, and so as to not lose the speakers authenticity, elements of both naturalised and denaturalised transcription were utilised to capture the patterns and intricacies of the language used by the particular participant groups (Oliver et al., 2005). Transcripts that are committed to the original record add to the quality, rigour and trustworthiness of the data (Witcher, 2010). The textual data from each interview and focus group was transcribed verbatim for later interpretation. Transcribing audio is a burdensome task that can take many hours per hour of interview. Therefore, to retain the quality of the research, and provide an accurate transcript, interviews were recorded on a portable MP3 player, then transcribed using an Olympus transcription kit. Pauses, sighs, and other intonations were purposively left out of the transcript so that the focus remained on what participants said.

4.13.6 Sample for qualitative analysis

Purposive sampling was used to recruit participants for the research. Purposive sampling is a method of non-probability sampling where the researcher collects data from a population because they are typical of the sample the research seeks to

understand (Etikan et al., 2016). The sample used in the qualitative stage was a mixture of nursing students, registered nurses, nurse educators and service users.

Unlike quantitative methods, the number of participants is determined as the investigation progresses, rather than from the beginning of the study (Mason, 2010). It is named saturation and can be defined as "*…the building of rich data within the process of inquiry, by attending to scope and replication, hence, in turn, building the theoretical aspects of inquiry*" (Morse, 2015. P587). This process relies on the richness of the detailed description in the data and not the frequency that something is stated. The number of interviews and focus groups was therefore flexible enough to reach the necessary depth of enquiry with a sample size sufficient enough to reach saturation of responses.

4.13.7 Qualitative data analysis

The purpose of qualitative data analysis is to make sense of text and image data. This includes the preparation of the data for analysis, conducting different analyses, understanding the data at a deeper level, representing the data, and interpretation of the meanings of the data (Creswell, 2009). There are various ways of analysing qualitative data, such as phenomenology, grounded theory (GT), Interpretive Phenomenological Analysis (IPA), or Discourse Analysis (DA), however none of these methods were deemed suitable to address the aims of the research.

Phenomenology explores the analysis of lived experience through observation to understand how meaning by those who have experienced a phenomenon, turning abstract assumptions into concrete responses (Creswell, 2003). Similarly, discourse analysis is concerned with how language is used to accomplish social, political and individual goals, and through discourse develop a shared sense of meaning (Starks &

Trinidad, 2007). Likewise, grounded theory is a form of inductive research that involves the open coding of data within text that are then categorised into themes to generate concepts with the aim of understanding how meaning is developed through the constructed structures of social interaction (Glaser & Strauss, 2017). The goal of the current study was not to generate a theory as such, but a conceptual model of compassion in nursing. Whilst GT would seem appropriate it was not the aim of this study to observe participants in their natural social environments, rather it was to explore the ways in which compassion could be taught.

Comparable to thematic analysis, IPA is a qualitative research method concerned with making sense of individual experience (Pringle et al., 2011). Although it is argued that IPA and thematic analysis share so many similarities it is sometimes difficult to set them apart (Collins & Nicholson, 2002; Hefferon & Gil-Rodriguez, 2011). There are however a couple of distinctions that needed be taken into account. For instance, IPA is considered a method that explores the subjective experiences of the individual, looking beyond their surface claims to uncover what not even the participant may be aware of to produce themes that can be compared against others (Guest et al., 2012). Conversely, TA is concerned with exploring for and making sense of themes in the broader context from the whole data corpus (Huxley et al., 2014).

Qualitative Content Analysis (CA) can be likened to grounded theory in that both are concerned with identifying themes and patterns across data using rigorous coding, however differences can be found in the way the use of each is interpreted. Some consider GT a methodology or framework and CA a method that contains hints of phenomenology (Altheide, 1987). The distinction between the two approaches however lies in the final results. Where grounded theory analysis generates a theory

to explain the phenomenon, directed content analysis produces a list of categories covering the data based on order of importance (Cho & Lee, 2014).

4.13.8 Content analysis

Content analysis is a method of qualitative research that systematically organises and quantifies phenomena into concepts or categories (Neuendorf, 2004). It is also described as a systematic method of coding and categorising large amounts of raw textual data that are then analysed to determine the frequency and occurrence of communicated words (Vaismoradi et al, 2013). Content analysis is used to examine the meanings, patterns and themes that emerge from within the text (Zhang & Wildemuth, 2009). Data can be processed for either qualitative or quantitative purposes, in a deductive or inductive way (Elo & Kyngas, 2008).

Inductive content analysis is commonly used when former knowledge about the phenomena is limited or is fragmented (Lauri & Kyngas, 2005). Alternatively, deductive content analysis is used when there is a need to test a theory based on previous knowledge of the phenomena (Kyngas & Vanhanen, 1999). An aim of deductive content analysis is to summarise the broad description of phenomena into categories or concepts so that it can be explained in more precise terms. This approach is considered useful when developing a conceptual model or conceptual system of categories based on earlier theories, models and literature reviews (Elo & Kyngas, 2008).

4.13.9 Types of content analysis

The three main approaches to qualitative content analysis are conventional, directed, and summative. Conventional content analysis allows for new categories to emerge naturally from the data. This method is particularly appropriate when there is limited

theory or research on a particular phenomenon. Conversely, directed content analysis is a more structured approach that is used to validate or add conceptually to an existing theory or framework. Using previous research, key concepts are identified as initial coding categories. Each category is then given an operational definition to assist in the identification of similar concepts. Data are analysed and relevant passages highlighted using the predetermined codes. Summative content analysis involves the quantification of words or content. At its basic level, this can used to measure the frequency of words (manifest content) or go beyond mere words to the interpretation of their meaning (latent content) (Hsieh & Shannon, 2005).

4.13.10 Rationale for using directed content analysis

Qualitative content analysis was chosen as the preferred analysis mainly because it suited the research goal, which was to identify the characteristics of a compassionate nurse founded in previous research and categorise them accordingly in line with the personal and societal perspectives of the participant sample.

4.13.11 Content analysis process

Elo and Kyngas (2008), detail a three phase qualitative content analysis step by step process. This was applied to the study as follows:

Preparation phase

In the first phase, the researcher begins by immersing themselves in the text to gain a sense of the whole data, while exploring each unit of analysis and deciding whether to include the latent (sighs, laughter, long silences) with the manifest content (Elo & Kyngas, 2008). This provides a basic understanding of what the participants are

saying and allows for exploration of the text for any “hidden meanings” that can be classified into smaller categories (Erlingsson & Brysiewicz, 2017).

Organisation phase

The second phase involves the open coding and categorisation of each topic into meaningful categories. Each unit of analysis is assigned to a category and given a numerical value. According to Duncan (1989, p.29) a unit of analysis is as “*a document or some element of mass communication*”. The population sample is also considered a unit of analysis. This has further implications for how the data is collected, in that it must relate to research (Elo et al., 2014), or as Duncan (1989, p.30 suggests, “*the sample must be representative of the universe in which it was drawn*”. For Graneheim and Lundman, (2003) the “whole interview” is considered a suitable unit of analysis. With deductive content analysis, a “categorisation matrix” based on a previous theory, model, or literature review, is developed and data coded to fit a specific category (Elo & Kyngas, 2008). This is sometimes referred to as a “codebook”. Some advantages of this are, improved intercoder agreement and accuracy, organisation of codes, and a detailed examination of the data (Fonteyn et al., 2008). Codes also make it easier to find connections between each meaningful unit, label them, and formulate a general description of the research (Bengtsson, 2016).

Reporting phase

In the third stage the results of the analysis are presented in the form of models, conceptual frameworks, and a storyline (Elo & Kyngas, 2008).

4.13.12 Thematic analysis

Thematic analysis (TA) is considered one of the simplest yet most effective methods for analysing qualitative data that works well with a pragmatic approach to research. As it does not require the same depth of theoretical knowledge as grounded theory, discourse analysis or IPA, it is an easily accessible form of analysis that is encouraged among novice researchers (Braun & Clarke, 2006). Thematic analysis has been criticised for lacking “interpretative depth”, however Braun and Clarke (2012) argue that this is at the discretion of the researcher, depending on the level of analysis they wish to achieve.

Despite the many different ways to approach thematic analysis, Boyatzis (1998) considers it a tool that can be used with different methods. Similarly, Braun and Clarke (2006) argue that it should stand alone as a method in its own right rather than the traditional lines of thinking that places thematic analysis within the methodology such as in grounded theory. An advantage of this being that thematic analysis is more flexible as it is not bound to a theoretical framework or epistemological perspective (Maguire & Delahunt, 2017). The importance of the method lies in the researcher being clear in what they are doing and then actually following through and doing what they say they will, rather than apply an “anything goes” approach. It is important then that the process and methods are made clear from the outset (Braun & Clarke, 2006). The process involved in and steps taken when analysing data using thematic analysis will be explained in more detail in the following chapter,

4.13.13 Rationale for using thematic analysis

Thematic analysis is considered the right choice for this study for the following reasons. As the purpose of this study was to find out how compassion could be taught

from a wide range of perspectives that could be analysed for latent themes to support this. It is a method that fits adequately within the pragmatic framework. It is flexible and relatively easy to use, plus personal and societal views can be analysed to produce detailed and rich data sets that can be used to interpret and compare a wide range of perspectives across multiple stakeholder groups.

4.13.14 Thematic analysis process

Thematic analysis was also used to analyse the same dataset to capture the deeper meaning behind the concept of compassion in nursing from a wide range of stakeholder perspectives. When conducting thematic analysis, it is important that each stage of the process is documented in sufficient detail so that the reader can come to a conclusion about the validity of the outcome in relation to the data. The six step coding and analysis procedure for thematic analysis, proposed by Braun and Clarke (2006) was used to analyse the data for themes and patterns.

Familiarising with the data

During step one of the analysis the researcher must engage with the accounts in the data as a “faithful witness”, be honest and vigilant about their own personal perspective, pre-existing beliefs and developing ideas (Starks & Trinidad, 2007)**.** Taking notes can help set aside any preconceived thoughts about the subject and document any early impressions that could be explored further when generating codes (Maguire & Delahunt, 2017). This also forms the beginning of the abstraction and conceptualisation process that the researcher can return to later after assessing the research material for key themes and concepts (Richie & Spencer, 1994).

Generating initial codes

In the second step of the process, data from each focus group and one to one interview are explored for potential codes connected to the patterns in step one. According to Boyatzis (1998), a “good code” is one that captures the qualitative richness of the phenomena. Open coding can be used to label segments of data within the text. Words, lines, sentences or paragraphs are highlighted and labelled correspondingly to summarise the researcher’s interpretation of the data (Silverman, 2011). Indexing text in this way helps organise and reduce large amounts of text into more manageable units (Attride-Stirling, 2001; Bryman & Burgess, 1999) that are then used to develop the foundations of the analysis (Braun & Clarke, 2012). Coding also depends on whether the themes are “data-driven”, where the analyst explores the data and allows for patterns to emerge, or “theory-driven” in which the researcher is looking for particular themes that support previous research or frameworks. Nevertheless, analysts are advised to “dig deep” below the surface data to uncover the “hidden meaning” (latent codes) behind the semantic content (Braun & Clarke, 2012).

Searching for themes

In step three, the analysis starts to take shape as the broad list of codes are sorted into more specific themes. Themes are not hidden among the data, waiting to be found, and then suddenly appearing in the data upon the arrival of the researcher (DeSantis and Ugarriza, 2000). Rather, using analytical judgement, the researcher takes part in an active process of “sculpting” themes from the raw data (Braun & Clarke, 2012). Seemingly ‘meaningless’ codes are then “put back together”, collated and combined to form overarching themes or subthemes that share a unifying feature like pieces of a jigsaw (Braun & Clarke, 2006). Although each overarching theme can

contain subthemes, all main themes must fit together so that they can unite the large body of text and extract the most salient and important themes (Attride-Stirling, 2001). There are no right or wrong ways of doing this, only that a theme is typified by its significance to the research question (Braun & Clarke, 2006). Mind Maps and tables can be used during this stage to help formulate a coherent picture and link themes and subthemes together. This visual representation helps when reviewing themes in the next stage of the process.

Reviewing themes

At step four, themes are refined and altered recursively in relation to the codes and complete dataset. This is particularly important when working with large datasets, as it acts as a "quality check" for the initial themes. Braun and Clarke (2012, p.65) suggest a number of key questions that should be asked when reviewing themes:

- Is this a theme?
- If it is a theme, what is the quality of this theme?
- What are the boundaries of this theme?
- Are there enough (meaningful) data to support this theme?
- Are the data too diverse and wide ranging?

Themes should be distinct, yet broad enough to capture the thoughts of participants from numerous sections of text (Attride-Stirling, 2001). Some themes may not contain enough data to be considered a theme, whilst others might need to be separated into their own distinct themes. The aim of this section is to explore whether each candidate theme works in relation to the data, and that the coded extracts come together to form a coherent pattern (Braun & Clarke, 2012).

There are two levels to this process when reviewing themes. The first involves re-reading the data extracts to confirm that they form a coherent pattern and capture the more significant highlights of the coded data (Braun & Clarke, 2012). If not, the theme should be reconsidered, or whether the data extracts belong there, and the theme reworked or a new one created. In the second stage, the validity of each theme in relation to the whole dataset, and to each other should be considered. As a caveat, Braun and Clarke suggest refraining from continuously reviewing themes, as this can go on "*ad infinitum*". Once satisfied that nothing substantial is being added, it is time to continue to the next stage.

Defining and naming themes

Here the researcher draws on their interpretative analytical skills to produce a definition that is concise and succinct. Giving a name or labelling it with a suitable description that summarises the main focus of the theme helps the researcher state clearly what makes it unique (Braun & Clarke, 2006), and provides the reader with an understanding of what the theme is about (Nowell et al., 2017). An advantage being that different researchers can compare and contrast their findings in the pursuit of new discoveries (DeSantis & Ugarriza, 2000).

Producing the report

Finally step six involves writing the report.

4.13.15 Establishing trustworthiness in qualitative research

Trustworthiness relates to the degree of confidence in the methods used to analyse and interpret the data (Connelly, 2016). Lincoln and Guba, (1985) proposed five main standards for establishing trustworthiness; credibility, transferability, dependability,

confirmability, and later authenticity (Guba & Lincoln, 1994). To achieve credibility, the responder's reality and the researcher's interpretation of it must be congruent (Shenton, 2004). This can be helped if interviews consist of participants of different ages and backgrounds. A sample of key stakeholders (Nurse educators, Pre-registration nursing students, Registered nurses, and service users) were recruited in this study. Each brings with them their own perspectives and observations, contributing to a richer variation of the phenomena being studied (Graneheim & Lundman, 2004). Transferability is concerned with the factors of the study that affect how the knowledge gained can be transferred to other settings, and its applicability to wider populations (Polit & Beck, 2010). As pragmatism has a strong emphasis on transferability, Shannon-Baker (2016, p.331) states it "*can revise previous or create new disciplinary theories based in particular context but still generalise to others".* The goal is to provide a rich descriptive account of the research context so that the story resonates with and can be replicated by others (Connelly, 2016). The nature of dependability refers to the stability of the data overtime (Cope, 2014). An audit trail, and reflective journal, documenting each stage of the procedure in detail can help to achieve this (Nowell et al., 2017). Confirmability is concerned with ensuring that the findings are drawn directly from participants, and not the researchers own perspective (Connelly, 2004). Providing a rationale for theory, methodology, and analysis throughout the study shows clearly how and why such decisions were made (Nowell et al., 2017). The authenticity of the research is supported by the range of different realities from which the stories are conveyed. Appropriate selection of participants helps address this (Connelly, 2004).

4.13.16 Phase two: Quantitative methods

Compared to qualitative methods, quantitative methods employ systematic data collection techniques for the purpose of generating objective, numerical, and specific explanations of social reality (Black, 1999). Some of the techniques available to researchers in the social sciences are; systematic structured observations, checklists and rating scales, questionnaires, self-monitoring reports, simulations, routine records, unobtrusive measures and tests (Allen-Meres & Lane, 1990).

4.13.17 Rationale for Quantitative Data collection

When using qualitative methods, the assessment of an individual is dependent on the subjective qualitative interpretation of another with no actual means of knowing for sure. Although useful for capturing the significant features of human experience and the development of universal models and theories, they are limited in their ability to generalise and can be replicated in further studies. This raises the question of "*how can one be sure that they, or another are compassionate*?" A way to address this is the use of quantitative methods. Quantitative methods are used to explore a research question by attending to the distinct and measurable aspects of a topic of interest (Field, 2013). An advantage of reducing information into numerical data is that statistical analyses can be conducted, significant differences observed, and hypotheses tested (Martin & Thompson, 2000). Therefore, quantitative measures are a useful tool that can be administered quickly and effectively to highlight differences within and between populations, and changes over time.

Questionnaires are a means of gathering reliable and valid data from a representative sample of respondents (McColl et al., 2001). They can range from open-ended questions and checklists, to rating scales and are used to collect data on factors such

as personality traits, attitudes, attributes and behaviours, as well as demographic information including marital status, age and gender (Allen-Meres & Lane, 1990; Tashakkori & Teddlie, 1998). Similarly, self-monitoring reports require respondents to provide details of thoughts feelings or behaviours in relation to their experience or surroundings (Allen-Meres & Lane, 1990). For example, if someone is feeling stressed at work, they might respond to questions that relate to their working environment, or the people they work with, to help identify possible causal factors behind their stress. Participants respond to a set of structured, closed-ended questions in the form of numerical rating scales, such as 4 or 5 point Likert scales (Johnson & Turner, 2003). This can indicate varying degrees of experience and level of stress, which can be compared against an individual's previous score, or those of colleagues.

4.13.18 Sample for quantitative analysis

Convenience sampling is a non-randomised method of sampling in which a researcher who wants to investigate phenomena relating to a particular group. As the scale was being developed to assess nursing student compassion strengths, a convenience sample of nursing students was used. Although convenience sampling increases the likelihood of sampling bias, a larger sample size can help prevent this from happening. To produce a more reliable scale, it is recommended that sample sizes range from 200 to over 1000 but no less than 50 (Streiner & Kottner, 2014).

Participant samples for Confirmatory Factor Analysis (CFA) is a contentious issue, with some scholars recommending that the appropriate size should be consist of a "participant to variable ratio" from 5:1 to 20:1, whilst others suggest a minimum of 50 for simple models, and 400 plus for more complex scales (Furr, 2011). However,

Mundfrom et al (2005) suggest that there is no absolute figure when deciding on sample size.

4.13.19 Quantitative data analysis

In any psychological research involving quantifiable data, statistics are the primary method of analysis (Bryman & Cramer, 2012). Empirically, this involves looking at the data to check for trends, and to make sure that data fit a statistical model (Field, 2013). Data in this study will be analysed using methods that assess the relationship between factors, differences and demographics.

4.13.20 Scale development methods

When developing tools for measuring psychological phenomena, advanced statistical methods are used that include the psychometric analysis of data. The following methods were applied when developing the scale.

4.13.21 Item discrimination

Item discrimination is a way of obtaining discrimination indices and distinguishing between high and low performers on a test by separating the high scoring group and low scoring group on each item (Zubairi & Kassim, 2016). This method is used to identify restrictions in range with scales that allow for a range of responses (Streiner, 1993).

4.13.22 Endorsement frequency

Endorsement frequency examines the item distribution and indicates the popularity of that item (Streiner et al., 2014). High scoring items of more than 90% or 95% in either direction should be excluded from the scale (Streiner, 1993). Reasons being that, unbalanced or highly skewed items provide little information, are more likely to

correlate weakly with other items and the scale overall. However, in certain populations high endorsement rates can be expected and, in such cases, it is useful to retain these items (Clark & Watson, 1995). Items with endorsement rates between 0.2 and 0.80 are considered acceptable (Streiner et al., 2014).

4.13.23 Internal consistency

Cronbach's alpha (1951) is the most commonly used measure for assessing a scale's internal consistency. A scale's internal consistency is dependent on the degree to which all items measure the same attribute or construct being measured (Connelly, 2011; Streiner, 1993; Streiner 2003). Statistically, correlations measure the difference between items on the scale in that scores on one item will predict corresponding scores on similar items (Connelly, 2011). Scores range from 0.00 to 1.00 (Cronbach, 1951). It is suggested that researchers should steer clear from scores below 0.70, as they indicate that items might not be measuring the same thing. Scores of 0.70-0.80 are regarded as satisfactory, and 0.90 and above as high (Connelly, 2011; Streiner, 1993). However, Streiner (2003) warns that high alpha scores do not always guarantee internal consistency as alphas increase the more items there are in the scale. High alphas of 0.95 should be avoided as α is only an "*optimistic*" estimate of a scales reliability and high scores may point to a redundancy in items rather than internal consistency (Streiner, 1993, p.143). Moreover, when a test has more than one construct and is used to measure whether or not a scale is unidimensional, reporting on the questions for the overall test will only increase the value of alpha. It is therefore more beneficial to assess each subscale's alpha independently (Tavakol et al., 2011). As the number of items in a scale can influence alpha scores, with more items leading to an increase in alpha (Streiner et al, 2014; Schmitt, 1996; Lance et al., 2006), short

tests with a reliability of 0.50, or 0.60 are considered acceptable (Kehoe, 1995; Pasta & Suhr, 2004).

4.13.24 Item-total correlation

Item-total correlation is a method used to check the homogeneity of items on a scale. Ideally, for a reliable scale each individual item should correlate with the total (DeVellis, 2017). Items that correlate below 0.30 are not considered a representation of the latent construct being measured, and those above 0.70 a restatement of a similar item. In both instances' items should be discarded (Streiner, 2015), and only items that are between, included in the scale.

4.13.25 Convergent and discriminant validity

Convergent validity is concerned with the relationship between measures that are theoretically similar, while discriminant validity looks at the absence of correlation between them (DeVellis, 2017). It is recommended that correlations should not be as high as 0.70, as they would effectively be measuring the exact same construct, or below 0.30 to not show any relationship at all (Streiner et al., 2015).

4.13.26 Test-retest

Test-retest reliability measures the consistency of scores on a scale over time (Pasta & Suhr, 2004). A scale with strong reliability should have scores that remain stable over a consistent period, and thus provide a true reflection of the individual attributes being measured. The values for test-retest reliability coefficients are considered marginal at 0.60, acceptable at 0.70, and high at 0.80 or above (Streiner, 1993). Streiner also suggests that a time period that extends beyond two weeks between the initial test and the retest reduces the chance of people recalling their previous

answers. A shorter period of around one week for longer scales is recommended, as participants may struggle to remember responses from scales with 100 items. As the scale had 80 items, the time between test and retest was one week.

4.13.27 Confirmatory Factor Analysis

The rationale for using Confirmatory Factor Analysis (CFA) is that this method is helpful when evaluating the internal structure of the scale, which is an appropriate method of assessing the scale's validity (Furr, 2011). CFA is a type of structural equation modelling that facilitates theory testing, theory comparisons, and development in the context of measurement, of a particular concept (Bryne, 2005). Structural Equation Modelling (SEM) is a confirmatory technique that depicts the observed relationship between the latent factors and the overarching factor of the theoretically hypothesised model (Schreiber et al., 2006). Unlike exploratory factor analysis, CFA is theoretically driven based on the researcher's prior knowledge of the underlying latent construct (Bryne, 2005). Specifically, CFA is concerned with and statistically examines the relationship between observable variables (scale items) and unobservable latent variables (factors). This enables the researcher to examine the consistency of the sample data with an *a priori* factor structure for its probable rather than causal inference (Kline, 2015). A hypothesised model is used to estimate a sample covariance matrix with an observed covariance matrix, with the aim of reducing the difference between the two matrices (Schreiber et al., 2006).

CFA is presented schematically using pictorial symbols, with ellipses representing unobservable latent factors, rectangles expressing observed variables, single headed arrows the impact one variable has on another, and double headed arrows demonstrating covariance between variables (Bryne, 2005).

To prevent violations of multivariate normality that can affect the goodness – of – fit, certain statistical assumptions must be met. There are three requirements to achieve multivariate normality: (1) the univariate distributions should be normal, (2) joint distributions of variable combinations must also be normal, and (3) the bivariate scatter plots are linear and homoscedastic (Bryne, 2005).

To test the hypothesised CFA model that analysis will be conducted in AMOS software using the following methods (Bryne, 2005; Plucker, 2003):

4.13.28 Estimating the model

This involves selecting the specific items and factors that load onto a particular factor (Plucker, 2003). The items identified in the development of the scale were used to specify and create the hypothesis for the eight factor model. Latent factors are not measured directly, instead indicators are determined by regressing them onto factors and assumed by the relationship that exists between them (Bryne, 2005). Non-zero values were assigned to one indicator regression loading of 1.0 for each of the factors. Not only does this help identify the model, it minimizes the number of estimated parameters (Schreiber et al., 2006), determines the latent factors scaling and the theoretical weight of the items (Bryne, 2005).

4.13.29 Evaluating model fit

The responses to each item are measured by the model fit index, for their correspondence with the proposed measurement model. A good fit indicates that the observed data matches the hypothesised model, whereas a poor fit indicates that the model is inconsistent with the data (Furr, 2011). To assess the model fit, several indices must be considered. Recommended benchmarks for reporting each fit, are dependent on which are chosen by the researcher (Plucker, 2003). As they are

considered the most reported indices of good fit, in addition to the model chi-square, RMSEA, SRMR, TLI, and CFI were used in this study (Prudon, 2015).

Model Chi – square (χ^2) – is one of the most commonly used indices to indicate the degree of mis-fit for the model. When the chi-square is large and significant then there is a mis-fit. However, when it is small and non-significant the model is supported. Considerable sample sizes are needed for a CFA to be robust. Yet this creates a paradox in that a large sample also creates large and significant chi-squared values. As such this method has been criticised for its susceptibility to type 1 and type 2 errors. Therefore, other more robust statistical fit indices, described below, are required for additional analysis of model fit (Furr, 2011).

Absolute fit indices

Root Mean Square Error of Approximation (RMSEA)

Regarded as one of the most informative indices, RMSEA demonstrates how well the model fits the chosen population's covariance. It can also be used to calculate the confidence interval around its value (Hooper et al., 2008). As a guide, RMSEA a cut-off point of .05 to .10 is recommended (Hu & Bentler, 1999; Plucker 2003).

Standardised Square Root Mean Square Residual (SRMR)

SRMR is considered the most direct way to measure inconsistency between the hypothesised model and sample (Hooper et al., 2008). SRMR, calculates the index by squaring the residuals in the residual correlation matrix, then the sum of this is divided by the number of residuals (Prudon, 2015). A cut-off value closer to .08 is suggested (Hu & Bentler, 1999).

Incremental fit indices

Comparative Fit Index (CFI)

The CFI assess the model fit by comparing the proposed model with a null, or baseline model. Information from both is used to construct indices and determine if the null improves the baseline in explaining common variance among the indicators (Hoyle, 2000). Hu and Bentler, (1999) consider values of .90 or higher as acceptable for a good fit.

Tucker-Lewis Index (TLI)

The TLI, or non-normed fit index (NNFI) is a comparative fit index that compares the χ^2 of the implied matrix with the null model. Typically, this assumes that all are uncorrelated (Purdon, 2015). TLI is referred to as non-normed because it assumes values are between <.0 and >1. A cut off-point of between .90 and .95+ is proposed for good fit (Byrne, 2005). If the correlation between variables are high then the TLI value will also be high (Kenny, 2016).

4.13.30 Interpreting estimates

If the fit indices reveal a good fit for the hypothesised model, then the researcher can proceed to examine the parameter estimates. If they consist of strong and significant factor loadings, then the researcher can be satisfied that CFA is complete. If not, the hypothesis must be revised and modifications made to the original model (Furr, 2011).

4.13.31 Post Hoc model fitting

If presented with a poor fit, using modification indices in Amos gives researchers the option to explore parameters in a model to determine which are mis specified and

adjust them to increase the “goodness of fit” (Bryne, 2005). As a rule, Hooper, et al (2008), suggest that low loading items of less than .20 should be removed from the scale.

4.14 Interpretation of the data

In the final stage of the design, integration of data occurs (Tashakkori, Teddlie & Teddlie, 1998). Quantitative data is examined to make predictions and generalisations, whilst qualitative data is explored for larger “sense-making”, and individual interpretation. When using mixed methods to develop an instrument, qualitative and quantitative methods are connected through the development of the survey items (Creswell & Plano-Clark, 2007). So that the results from each method support the interpretation of new knowledge, each part should fit together like pieces of a puzzle. In challenging the contentious issues of integrating mixed methods, Woolley (2009) recommends that the research should produce findings that are greater than the sum of their parts.

Where different methods of analysis are involved when interpreting the data, it is important to mention triangulation. Triangulation is defined as “*the combination of methodologies in the study of the same phenomena”* (Denzin, 1978, p.291). Denzin outlined four types of triangulation: data triangulation (the use of a variety of sources in a study), investigator triangulation (use of several different researchers), theory triangulation (were multiple perspectives and theories are used to interpret the results of a study), and methodological triangulation were multiple methods are used to study a research problem (Johnson et al., 2007). Within this study data from different sources and methods were deemed necessary to establish an overall meaningful understanding of the concept of compassion in nursing, and to determine which survey

items could be used to develop the compassion scale and modules for the online scenario based learning course, therefore data and methodological triangulation were used.

4.15 Ethical considerations

The University of Bolton Research Ethics Committee (UOBREC, 2006) provides guidance to students and staff undertaking research that involves human participants. The guide states that "*all research should be guided by a set of fundamental ethical principles to ensure the protection of human participants*" and are underpinned by the ethical imperatives to DO NO HARM, and to DO GOOD (UoBREC, 2006, p.1). Particular attention must be given when using "*questionnaires, observations and interviews*", as they "*can all be potentially intrusive and provoke anxiety in participants or worse, involve psychological risk*" (UoBREC, 2006). In line with the Data Protection Act (1988), and the Universities Data Protection policy (UoBREC, 2006), participants were provided with a statement that individuals may decline to participate and also will be free to withdraw at any time without giving a reason; and an invitation to ask questions. They were informed that all information would be kept anonymous, confidential, stored in a locked file, and audio recordings destroyed once transcribed. Participants were also told that the findings would be made available to them upon completion of the study.

Further ethical issues that could arise from the study are the sharing of sensitive information during focus groups/interviews, with respect to privacy and anonymity. This was addressed by informing participants that whatever was spoken about in the sessions should not be shared with anyone outside of the room, and that they should not disclose to others who took part. In the final report, participant quotes would not

be identified by their actual name, but given a numerical reference such as Nurse 1, 2, etc. In addition, participating in the filming of the scenarios and the sensitive nature of the stories used to create them, participants were given the option to withdraw from videos being made available in the study. None of the actors were named in each recording to protect anonymity.

4.16 Criticisms of mixed methods

There are a number of criticisms to consider when undertaking mixed methods research.

One of the main arguments against mixed methods research comes from the purist view that quantitative and qualitative methods are incompatible in a single study as both contain different epistemological and ontological origins (Doyle et al., 2009). However, Onwuegbuzie and Leech (2007, p. 376), refute this based on the grounds that “epistemology does not dictate which specific data collection and data analytical methods should be used by researchers”. Adding to this, Morse (2008) argues that methodologies are simply the tools used to acquire knowledge, and as such researchers should depend on a wide range of methods and use whatever they have at their disposal to facilitate understanding. Similarly, Alexander (2006) claims that issues arise when epistemological and methodological purists attempt to deter researchers from using mixed methods. He also adds that it is also unreasonable for one camp to criticise the other, especially when each paradigm has its own assumptions for assessing social and educational research. Furthermore, to simply take the stance of a purist, regardless of which camp the researcher sits on, limits their ability to see the full picture of human experience. As the true essence of research in the social sciences is to understand human beings and the world they live in, one

cannot expect to capture this with a single method. In support of this, Onwuegbuzie and Leech (2005), argue that a “mono-method” approach to enquiry poses the biggest threat to the advancement of the social sciences, and if social science is to be taken seriously, researchers should embrace pragmatism and what they refer to as “methodological pluralism”.

From the perspective of the pragmatist, researchers put themselves at a disadvantage in the pursuit of knowledge when they limit themselves to one approach. Nevertheless, both quantitative and qualitative paradigms represent a unique view into the social world, and as such should be treated as more than simple methods of data collection (Allen-Meres & Lane, 1990). When viewed as separate paradigms, both quantitative and qualitative research methods contain multiple limitations. However, the aim of mixed methods is to utilise the strengths of both quantitative and qualitative research to address the underlying research question. Approaching this pragmatically means that the choice of methods for conducting research should be based on the outcomes of the study the researcher hopes to find, rather than the epistemological paradigms of positivism or constructivism. A pragmatic researcher can therefore utilise the methods they need as opposed to any preconceived bias concerning the dominant paradigm in social science research (Onwuegbuzie & Leech, 2007). As is the case with this study, both methods were essential to uncovering the characteristics of a compassionate nurse, and developing a psychometric instrument and educational tool, to measure and teach compassion.

4.17 Chapter summary

This chapter has argued that the most appropriate methodology to guide this study is mixed methods research. A sequential exploratory scale design underlined by the

philosophical framework of pragmatism. It has explained in detail why and how this approach fits into the specific aims and purposes of the study, as well as a rationale for each phase of the process. The subsequent chapters will focus on the themes generated from the interview data and development of the psychometric scale, and then the online learning course.

Chapter 5. A qualitative study to identify the characteristics of a compassionate nurse and how they can be taught to nursing students.

"*First learn the meaning of what you say, and then speak*" — Epictetus

5.1 Introduction

The systematic literature review chapter found that compassion in nursing can be grouped into a series of characteristics, and the methods for teaching compassion in nursing are limited. This chapter begins with the aims of the study. It then outlines the methods involved in the design of the studies, followed by information on participant recruitment and study procedure. It then attends to the methods applied in the qualitative content analysis, and findings from the data. Information on the use of thematic analysis to analyse the data is also given and the results for each focus group and interview presented separately. An overview of the results and rich discussion of the themes is as well as the compassion strengths model are provided.

5.2 Conceptualisation, purpose and aims of the studies

The purpose of these studies was to validate a conceptual model of compassion in nursing based on the eleven characteristics of a compassionate nurse that were identified in the systematic literature review.

1. The first aim of the study was to understand and confirm the qualities of a compassionate nurse based on the findings of previous research, from several key stakeholder groups.
2. The second aim was to identify how these qualities could be taught to nursing students.

In keeping with the aims of the study, two questions from the systematic literature review were asked to participants during the focus groups and interviews. They were:

1. *What are the characteristics of a compassionate nurse?*
2. *How can these characteristics be taught to nursing students?*

While it seems, there is no golden rule for the number of questions during interviews, the rationale for including only two was to follow on from the systematic review and explore responses to these questions with actual participants. Both questions were open ended but framed in such a way that they provided a clearly defined goal that could guide data collection. Thus, they invited exploration and discovery into the qualitative research (Agee, 2009). The questions also drew on my own tentative theory that compassion consists of a set of characteristics. While more questions may have led to a richer data set, the purpose of the interviews was to explore these specific questions to guide the other elements of the study.

5.3 Methods

5.3.1 Data collection and procedure

This study used focus groups and semi-structured one to one interviews as the main sources of data collection. In both the focus groups and the interviews, participants were asked the same two research questions. All focus groups and interviews were conducted at the participant's convenience in various locations at the university. The times of the focus groups ranged from 20 to 80 minutes, and interviews 30 to 60 minutes. In total, there were four focus groups and five one to one interviews. Prior to

starting each session, participants were given an informed consent form outlining the purpose of the study.

5.3.2 Participants

Participants were recruited using purposive sampling from September 2016 to July 2017. Purposive sampling is a method of non-probability sampling where the researcher collects data from a population because they are typical of the sample the research seeks to understand (Etikan et al., 2016). Overall, 34 key stakeholders' including nurse educators, registered nurses, district nurses, nursing students in the first and second years of a Pre-Registration adult nursing degree, and service users took part in this study. Initially, this study used focus groups to collect data. The first group included nurse educators (n=7), the second registered nurses (n=5), the third district nurses (n=7), and the fourth pre-registered nursing students (n=10). However, due to differences in availability, five (n=5) one to one individual interview sessions were conducted with service users. Inclusion criteria were to have had professional experience of working in a clinical setting, and in the case of service users, having recently been a patient or a member of a service user group in the last five years and being in a state of health well enough to be interviewed for over 30 minutes.

5.3.3 Ethical approval

Ethical approval was granted by the Ethics Committee of the Psychology Department at the University of Bolton in line with the British Psychological Society's Guidelines for Human Research (BPS, 2018).

5.4 Situating the researcher/reflexivity

Reflexivity takes into account how the researcher can affect the social world they are studying. When undertaking qualitative research, the researcher's interpretative lens, preconceptions and underlying biases can unintentionally affect what they are trying to study (Maykut & Morehouse, 1994). There are a number of steps researchers can take to improve reflexivity, such as reflective journaling, and field notes. Philippi and Lauderdale (2018), recommend taking field notes after the interviews so as not to distract from what participants are saying. This style of reflexive journaling also supports the trustworthiness of the study (Lincoln & Guba, 1985).

This approach helped me reflect on the content of the interviews, be critical of certain issues, especially my position and personal views on the topic of compassion, my delivery of the interviews and the response of participants, in addition to the identification of initial key themes that had emerged during interviews. For example, prior to commencing my PhD, I had spent several years exploring and publishing articles on the impact self-compassion, compassion fatigue, burnout and wellbeing had on compassionate care. This gave me some insight into the reported factors that affect healthcare staff and students' ability to demonstrate compassion in practice. Having also worked for a mental health charity, I was cognizant of the immense pressures' healthcare providers are under to provide effective standards of care. During this time, I also became aware of the report into the failings that occurred at Mid-Staffordshire hospital trusts and became interested in the subsequent drive to develop ways of teaching compassion to nursing students. More importantly, in a review of the literature I found insufficient evidence for a "bottom-up" approach to understanding compassion and how it is taught to nursing students.

I was aware throughout the study how these insights might affect my interpretation of the data and how I acted in relation to the research findings, whilst also recognising how combing this with what participants contributed to the research, collaboratively we could generate new knowledge. I reflected on this during regular discussions in supervision, and my own personal journaling throughout the study. As a researcher with several publications in this area, this helped me to clarify some of my own misconceptions, making me humbler in my approach to the view's others bring to the research topic.

In relation to reflexivity, it was felt worthy to note my position on impartiality here. Quite often when conducting research, the researcher belongs to the community being researched. Having a background in psychology and without the experience of being a nurse, plus a limited knowledge of working and training in the NHS, was a concern for me. An "outsider" looking into the population, can be considered a drawback. As an "insider", the researcher can easily build rapport and explore the complexity of the subject's world, if they are known to one another beforehand. A disadvantage of this being, the context of the research can become "too familiar" for the researcher and limit a full analysis of the data. In any sense, both can prove problematic, or beneficial for the researcher, as they ultimately influence how the research is conducted, analysed, interpreted and understood (Hockey, 1993).

As the first and only full-time PhD student in the nursing team, I was deemed a member of the nursing community. During the research process, I considered myself to be a witness, unaffected by the policies of the discipline, or by the nursing role, who could observe compassion in nursing whilst remaining impartial to any conflicting predisposed beliefs from practice. Indeed, participants did not seem to view my not being a nurse as an impediment to the research (Dwyer& Buckley, 2009). Rather, I

was someone they knew and trusted enough to share with me what it was like to be in their world. This helped me learn from them and further develop my understanding of compassion in nursing. Being in this position meant that I was not too much of an insider to be influenced by my own biases or accept things as truth, nor too far outside the group not to appreciate or understand the complexity of their experiences (Hellawell, 2006). Thus, I could reflect on this from my own point of view, while also putting myself in the position of the participants to imagine what it would be like working within the healthcare environment.

Relating this to pragmatism, especially if one considers this in relation to use of knowledge from various sources, despite not being a nurse, I am still someone who has valuable insights who can contribute to compassion in nursing. This is mainly through my own research and experiences as a mental health worker, and someone who has previous first-hand experience as a patient. This coupled with the data gathered from participants arguably helped generate an interesting and resourceful variety of information that could further our understanding of compassion.

As the principle investigator I arranged and organised all the interviews, recruited all the participants, collected and analysed all the data.

5.5 Data analysis

Two different methods were used to analyse the data. This approach is referred to as analytical pluralism and defined as "*the combination of multiple methods of qualitative data analysis within the same study*" (Clarke et al., 2015, p.182). Reasons for this approach is that a single data set can provide a number of different aspects of phenomena, depending on the questions asked of it (Willing, 2013), and that these differences can be complimentary rather than mutually exclusive forms of knowledge.

Analytical pluralism is similar to triangulation methods as it attempts to view data from a number of different perspectives to add texture to the interpretation of them (Frost, 2009). It is also suggested that analysing the data in this way has the capacity to provide a richer, more varied understanding of phenomena, which is open to multiple possibilities for interpretation (Clarke et al., 2015). By its very definition, analytical pluralism also lends itself to a pragmatic approach to research (Spiers & Riley, 2019).

One method was deductive, as in the directed content analysis. While the thematic analysis method was inductive as it was not based on a predetermined framework. Collecting data from a wide range of sources meant that the scope of experiences reported by the participants was robust and suitable enough for both methods. A potential limitation of this, is explaining how multiple analyses can be complimentary to one another (Clarke et al., 2015). In this study, the findings from the content analysis would be combined with the thematic analysis to explore how the characteristics of a compassionate nurse could be taught to nursing students, thus making them complimentary. This approach allowed me to explore the data with two different mind sets, allowing for analytical pluralism.

A further limitation of this is that with a directed content analysis, the researcher is explicitly looking for specific criteria that meet a predetermined framework. Whereas with thematic analysis, new information emerges from the data during the process of investigation. Thus, by engaging in reflexivity, I was aware of my role in constructing data and resisted being overly complicit in the development of the compassion strengths model. Equally, I was conscious of how my presence as a known researcher in compassion, could have influenced the choices of participants.

5.5.1 What are the characteristics of compassionate nurse?

To address question one, using the findings from Durkin et al (2018), a directed content analysis was employed to capture the views of participants and their experience of a compassionate nurse. Directed content analysis is described as a deductive approach where data is coded based on previous research or theory (Hsieh & Shannon, 2005). Key concepts are identified as initial coding categories. Each category is then given an operational definition to assist in the identification of similar concepts that can be used to validate or add themes to an existing theory or framework (Elo & Kyngas, 2007). A preliminary *a priori* code book based on the characteristics of a compassionate nurse was used in this study (Table 8).

Table 8. Initial *a priori* codebook based on the characteristics of a compassionate nurse (Durkin et al., 2018)

Characteristic	Description
Character	Examples of sympathy, respect, love, honesty, and other such virtues.
Connecting to and knowing the patient	Examples of nurses' connecting to the patient on a deeper level.
Awareness of needs/suffering	Examples where a nurse was aware of the patient's needs, or what they were suffering from
Empathy	Examples of when empathy towards the patient was shown, or reference to experiencing the patient's perspective.
Communication	Examples of verbal communication, and of listening to the patient with compassion.
Body language	Examples of how body language, such as a smile or open posture conveyed compassion.
Involving patients	Examples of when nurses had included the patient in their care.
Having time for patients	Examples of nurses having time for and spending a few moments with patients.
Small acts	Demonstrating small acts that had the biggest impact on patients.
Emotional strength	Evidence of when emotional strength was necessary, due to the demands, or nature of the role.
Professional competence	Examples of the importance of clinical competency in compassionate care.

The three phase qualitative content analysis process outlined by Elo and Kyngas (2008) was applied when analysing the manuscripts.

In the *preparation stage*, so that specific categories could be formulated, data were analysed from the first section of the transcript, guided by the first research question.

During the *organisation phase*, a deductive approach was undertaken with a specific homogeneous sample of key nursing stakeholders. The initial codebook was used as guidance for the analysis process. Themes were not ordered in any particular way other than how they emerged from the literature. As the emphasis in this stage was to develop analytical as opposed to descriptive codes, data were explored for the manifest and latent content behind each theme.

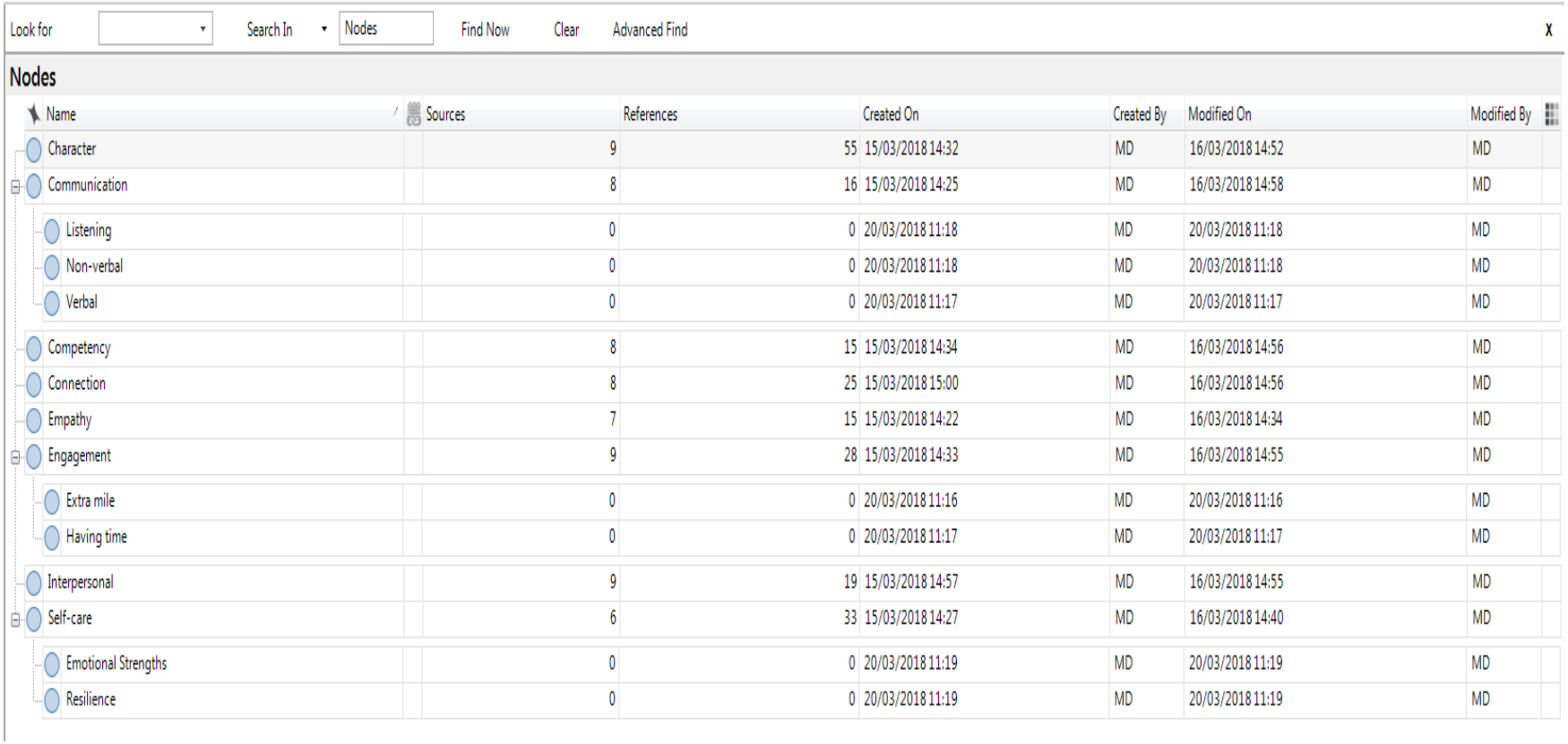


Figure 9. Screenshot of organisation of codes using NVivo.

The *reporting phase* is addressed later in the chapter.

5.5.2 How can these characteristics be taught to nursing students?

For question two, thematic analysis was used to analyse the same dataset. The purpose being to capture the deeper meaning behind the concept of compassion and how it can be taught in nursing from a wide range of stakeholder perspectives. Data can be analysed systematically using a coding and analysis process to extract themes in relation to the research question. The guideline set by Braun and Clarke (2006) were used to analyses the data.

To *familiarise myself with the data,* and complete this stage, I fully immersed myself in the data, listening to and transcribing each interview and focus group. I then read and re-read each transcript several times and made notes around potential themes. This active style of reading the data helped identify certain meanings and patterns that emerged from the content as a result of the research questions (Clarke & Braun, 2014).

To *generate initial codes,* interesting features (semantic and latent) of the text were highlighted then given a relevant code. This helped me to form the basis for developing repeated patterns and themes in the third step of the process. Data were searched with the specific research question in mind (how can compassion be taught), but with flexibility to allow additional codes to emerge that were not directly related to the question. Thus, coding of the data was partly “theory-driven”, and also “data-driven”. Certain aspects of the data were coded more than once as some text fell into multiple categories. In total, 73 initial codes emerged from the data (See figure 10).

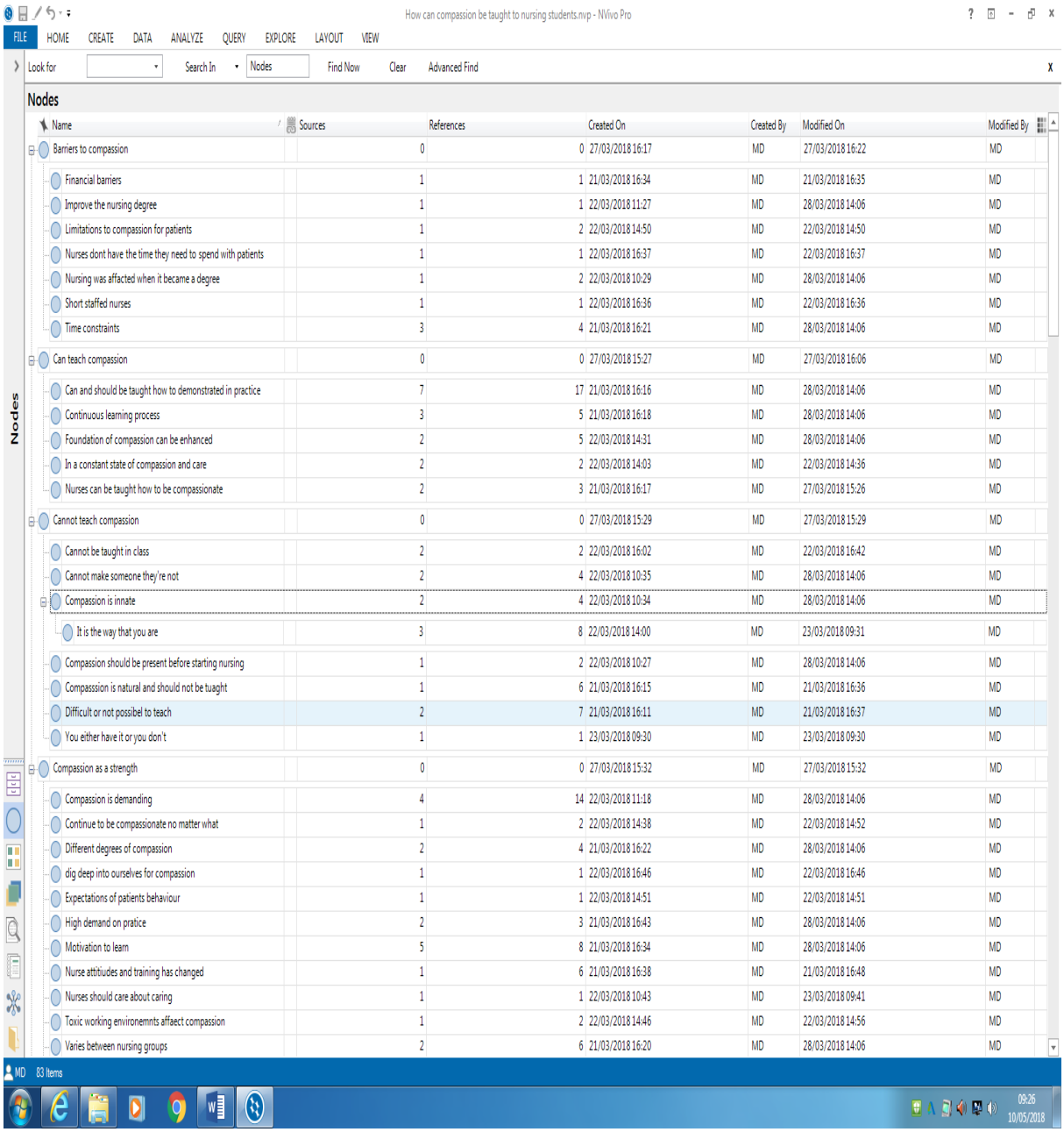
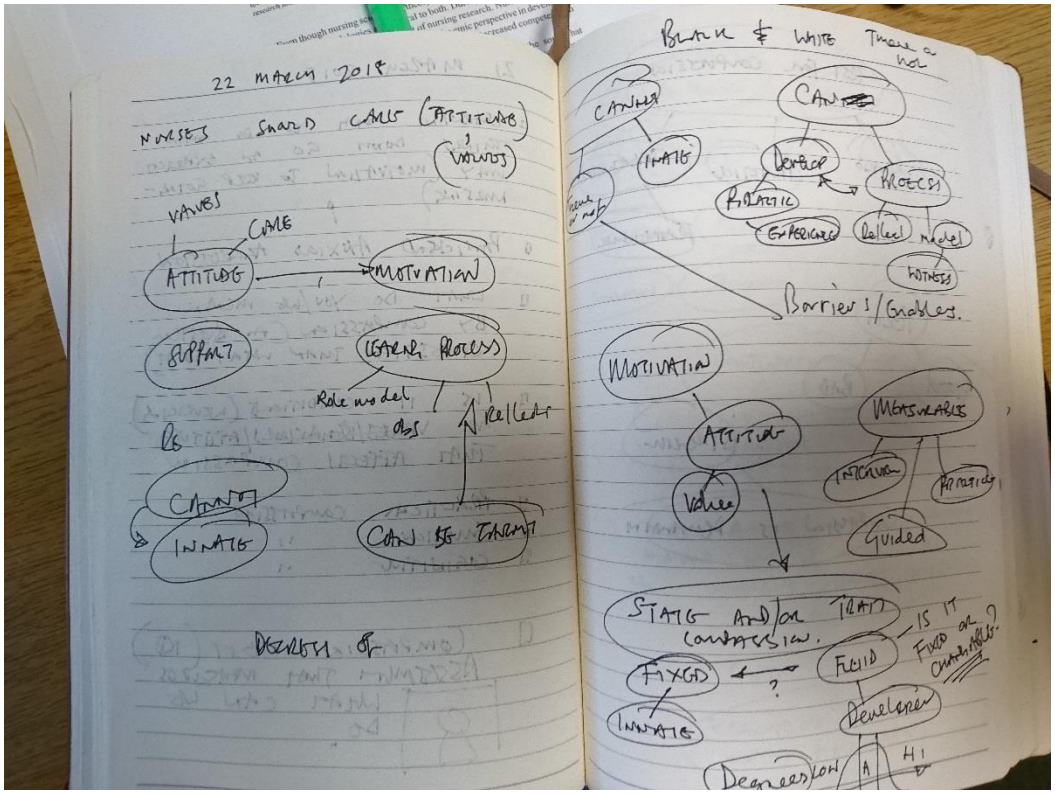


Figure 10. Screenshot of initial codes developed using NVivo

In *searching for themes,* all codes were collated into potential themes. I analysed the relevant codes and organised them into several identified themes that represented a pattern across the data set. Mind maps and tables were used to draw a visual representation of the relationships between themes (Fig.11). Initial codes were organised into different levels of candidate (main) themes, and sub-themes. Themes

that were considered either significant or not, based on their perceived importance by participants, and frequency they occurred in the transcript.



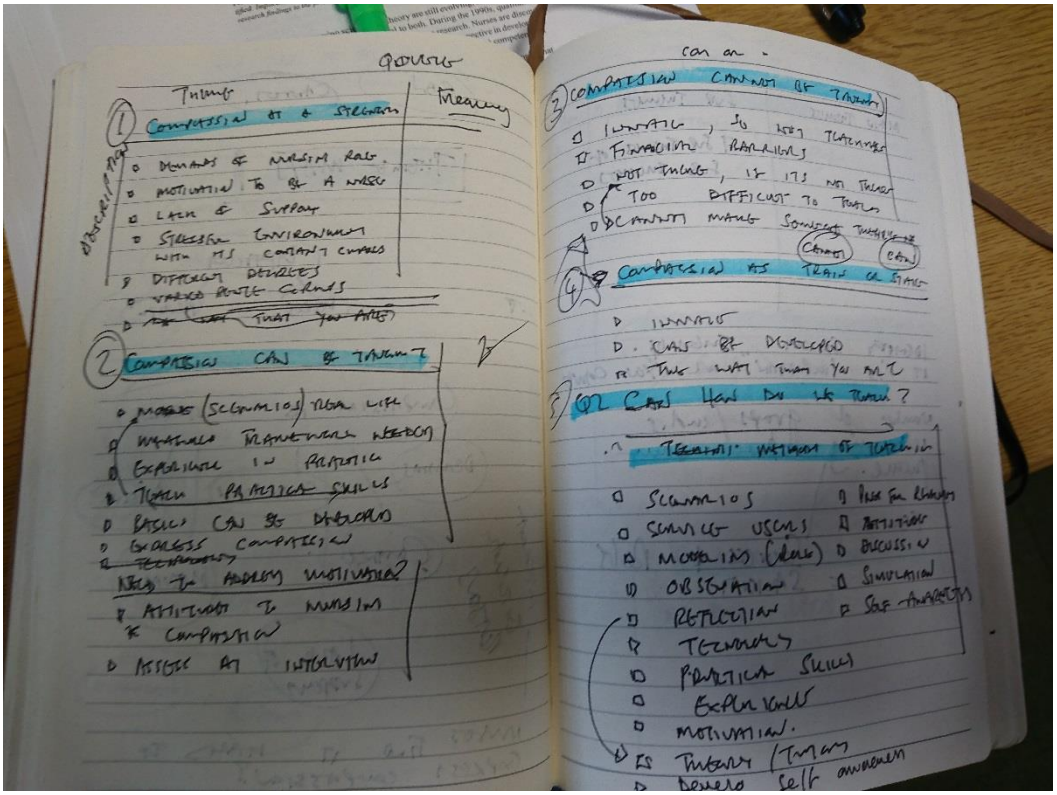


Figure 11. Initial draft tables and mind maps for representation of codes across themes

The first level of *reviewing the themes* involved reading the coded data several times to determine that a coherent pattern had emerged. If a coherent pattern emerged from the data, I then moved onto the second level analysis. However, if the codes did not fit, I had to infer whether this was a result of the codes or the theme itself. Subsequently, five main themes emerged from the analysis. At the second level, the validity of the themes in relation to the data and their meaning were considered for "accurate representation". To achieve this, I read throughout the entire data set again using Braun and Clarke's guiding questions (is this a theme? if it is a theme, what is the quality of the theme? what are the boundaries of this theme? are there enough meaningful data to support this theme? and are the data too diverse and wide ranging?), to ensure that the codes fit into the relevant themes. The themes and sub-themes not only provided a valid representation of the story for what is needed to teach nursing students about compassion, they also captured the latent beliefs, thoughts and feelings associated with being a compassionate nurse.

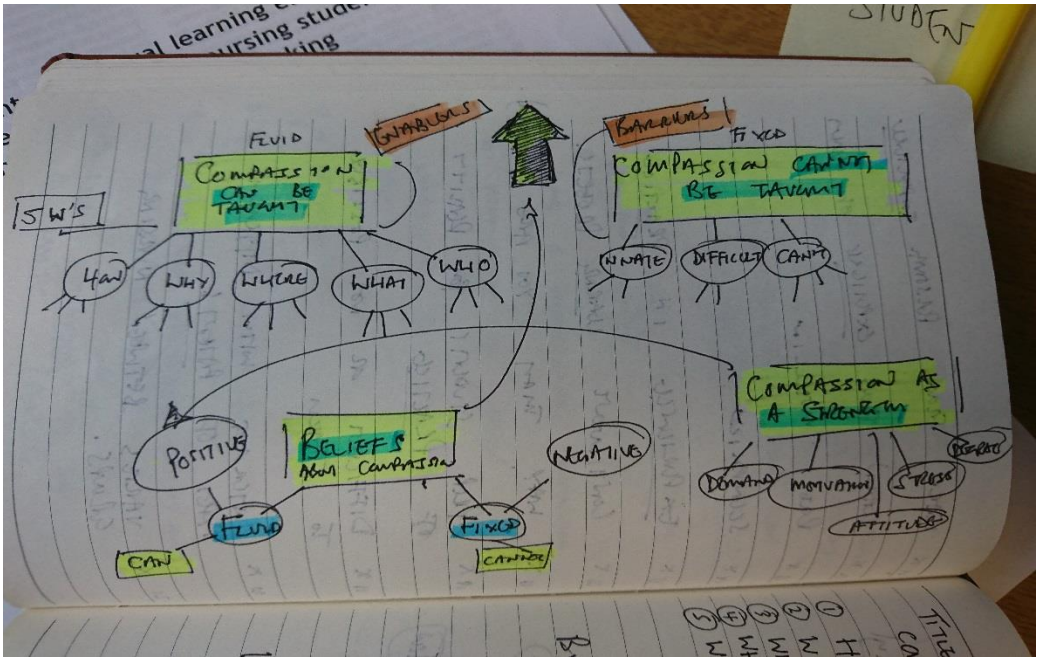


Figure 12. Revised draft version of mind map for the initial candidate themes.

For *Defining and naming themes*, the aim is "*to clearly define what your themes are what they are not*" (Braun & Clarke, 2006, p, 92). To achieve this, I gave each theme considerable thought in an attempt to capture the essence of the theme in relation to the research question. Thus, five main themes were named alongside their subsequent supporting sub-themes, seen below in the results section.

The following section *reports on the findings* of this analysis.

To aid with the coding in both analyses, NVivo software was used.

5.6 Results

5.7 Results from the directed content analysis: what are the characteristics of a compassion nurse?

Table 9. Themes based on the characteristics of a compassionate nurse reported by participants.

Theme	% of reported theme across sample	Indicators for theme	Explanation of theme
Character	26.4	-Kindness -Care -Honesty -Humour -Respect	Refers to the nurse's character and virtue
Self-Care	15.8	-Emotional strength -Resilience -Looking after self -Self-compassion -Meditation -Exercise	Mentions the need for and examples of when emotional strengths help, plus why resilience is important due to the nature of the job. Concern for self.
Connection	13.4	-Connecting to and knowing the patient -Awareness of needs/suffering	Getting to know more about patients on a personal level. Recognising their needs and suffering
Empathy	12.0	-Perspective of patient -Being in their shoes -Feeling the patients suffering	Talking about how empathy helps understand what patients are going through
Interpersonal Skills	9.1	-Involving patient and their families -Colleagues -Knowledge of clinical terms	Skills used to relate and connect to family members, colleagues and all involved in the care of the patient. In addition, the ability to translate medical terms and inform what is going on throughout the hospital procedure.
Communication	7.7	-Verbal -Body language -Listening	Discusses the many ways of communicating to and with patients
Competence	7.2	-Professional competence -Skills to do the clinical work	Showing clinical nursing skills. Confident in ability to deliver, in a way that makes patient feel assured about their care.
Engagement	7.2	-Having time for patients -Small acts -Going the extra mile	Sharing example of when nurses have spent time with patients or gone above and beyond their regular duties.

5.7.1 Character

Character was mentioned throughout the transcripts most as a characteristic of a compassionate nurse. Participants felt there was an obvious relationship between a nurse's character and compassion, described as the expression of (among others) kindness, openness, humour, openness, and honesty:

> "A compassionate nurse is also an honest nurse. For example, when you go before a nurse and say I've got this and I've got that, and they say "you know what, I've never heard of that before, but we'll work our way through it together" (Service user).

5.7.2 Self-care

The second most talked about characteristic was self-care. This characteristic related to what nursing students can do to sustain their compassion. Many considered it essential for building resilience and emotional strength, especially when encountering difficult situations in practice that required nurses to be kinder to themselves:

> "There's so many times when you'll see things that challenge you, your compassion. I think that it's really important to support yourself. To be compassionate, you need to be able to do that" (Nurse educator).
>
> "I think we are very good at kidding ourselves. We either put our halo on that day, or we are either beating ourselves up or trying to seeing ourselves in the best possible way. So for me, I think there's something about being kind to yourself rather than focusing on the negative aspects" (Registered nurse)

5.7.3 Connection

Connection was also discussed often during the interviews. This was highlighted as an important characteristic because, rather than just another body, patients had a past, future, stories, hopes and dreams. This was particularly pertinent when staff did not do this:

> "On my ward, the nurse did not even speak to the patients about their background. You know these 80 year olds that had lived through the war. It was just a case of here's your medication, I'll see you at 12 o'clock. It was wrong" (First year nursing student).

5.7.4 Empathy

Empathy was another essential characteristic for a compassionate nurse to have. It was felt that nurses needed empathy to identify with the patient's situation and respond appropriately. Resonating with their patients' emotions and being attentive to their needs was paramount to providing compassionate care:

> "Empathy and understanding to some extent. You can't understand someone entirely, but you do need some awareness of a person's feelings and emotions" (Nurse educator).

5.7.5 Interpersonal Skills

Although some would argue the similarities between them, interpersonal skills in this study described the ways nurses utilised their communication and personal skills to help alleviate any worries patients or their families might have about their stay or clinical condition. This was discussed as being relevant to compassion because it showed a degree of professionalism, either when nurses did not understand or were unsure about how to respond to a patient concern:

> "You know if you've got some questions, they'll try and reassure you. Though sometimes they will defer to the doctor and say, ask the doctor about that when you see them" (Service user).

5.7.6 Communication

Communication was associated with the expression of both verbal and non-verbal interaction between nurse and patient, through tone of voice, body language/posture,

eye contact and effective listening. This was an important indicator for compassion as it conveyed understanding towards the patient's needs and suffering.

> "I think it [compassion] goes off the way you talk to people, the tone of your voice, and that you are a good listener, that you listen to people as well as talking to people" (Registered nurse).

5.7.7 Competence

From the perspectives of the participants, competency represented an understanding of the specialised knowledge and evidence based care that is required to do the job proficiently. This revealed a clear relationship between clinical competence and a compassionate nursing:

> "To be competent with everything that you do. If you're not sure of what to do then go and ask a senior member of staff who does know what they are doing, don't try doing anything that you are not competent in doing" (Second year nursing student).

5.7.8 Engagement

Engagement was referred to having time for patients, going the extra mile and doing the little things for patients that meant so much for them. These small but effective acts of compassion that went beyond the regular call of duty were considered central to improving patient wellbeing, and the characteristics of a compassionate nurse:

> "I drove around the town centre once trying to find pink Cameo soap for a patient and I was worried that I couldn't find it, it meant that much to her. I went everywhere. It was quite hard to get, but yeah I got it, in a little shop in a side street" (District nurse).

5.8 Results from the thematic analysis: how can these characteristics be taught to nursing students?

In the second analysis of the data using thematic analysis, five key themes emerged separate to those found in the content analysis.

The five key themes that emerged from the data were:

1. Beliefs about teaching compassion are either fixed or fluid
2. Motivation to be a nurse and learn about compassionate care
3. The 5 W's needed to facilitate the teaching of compassion to nursing students
4. Barriers to learning about and demonstrating compassion in practice
5. Compassion requires strength to demonstrate.

There were also a number of subthemes identified that are presented in table 10 below.

Table 10. Outline of the main themes and subthemes identified in the stakeholder interviews

Main theme	Subtheme
1. Beliefs about teaching compassion are either fixed or fluid	
2. Motivation to be a nurse and learn about compassionate care	
3. The 5 W's needed to facilitate the teaching of compassion to nursing students	I. Why they should learn about compassion II. What can be taught? III. How students can learn about compassion IV. From whom they can learn about compassion V. Where they can learn about compassion
4. Barriers to learning about and demonstrating compassion in practice	I. Educational barriers II. Workplace barriers
5. Compassion requires strength to demonstrate.	I. Demands on nurses to be compassionate II. Compassion can be stressful

5.8.1 Theme 1. Beliefs about teaching compassion are fixed or fluid

Throughout the interviews, participants commented on whether or not they believed compassion could or should be taught. This centred around two competing perspectives that seemed either fixed or fluid, with those against explaining that compassion occurred naturally and to even try and teach it would be fruitless. As one participant commented:

> "You are born to be a nurse [and thus compassionate]. Because you can give them tools to make them be able to show it [compassion] or be able to expand on that, but if it isn't there, it isn't there" (Registered nurse).

This introduced a distinction that implied that students without it were considered unworthy of even attempting to teach them about compassionate. One participant gave the impression that it challenged innate virtue, and that trying to teach compassion was akin to forcing someone to behave against their true nature:

> "That's like saying someone should be a happy person, or someone should be this, or should be that. You can't make somebody someone they're not" (District nurse).

However, this negative interpretation was counterbalanced by an opposing more fluid view put forward by other participants. There was a general perception that compassion could be taught, and was achievable by building upon the foundations of the characteristics of a compassionate nurse:

> "I'm definitely compassionate, and I'm a good listener, good communicator. But you're never "good enough". You always can learn how to do things better. So yeah sitting and discussing ways around what we think about communication, we can learn, we can advance on those qualities and skills that we have" (Second year nursing student).

In support of this, district nurses' spoke about how a recent training course had challenged them to "re-think" their knowledge of communication. They commented on how despite their previous understanding, the course had taught them something new, acknowledging that developing compassion was a continuous learning process regardless of experience:

> "We went on a course just last week and even though the things we've known for years, we've still learnt on that. It's a learning curve isn't it from being a student nurse and you qualify, it's a learning field, you are learning all the time everyday even though you might have been qualified 30 years" (District nurse).

5.8.2 Theme 2. Motivation to be a nurse and to learn about compassionate care

Another important theme was the motivation to be a nurse, and to learn about compassionate care. Participants commented on how both intrinsic and extrinsic factors contributed to why someone would choose to become a nurse, but that care should always be the main reason:

> "I have seen it first-hand. Some nursing students think it's a job, it pays the bills, or because there will always be a job, that's it. Whereas, I've seen other nurses who are absolutely amazing, and they are in it for the patients and the families, they're not in it for the money. You've got to want to do it, it's not just a job that anyone could do" (Second year nursing student).

This point was emphasised when one participant stated:

> "If you're coming into nursing then they should care, you should give a dam. Because that is what compassion is about" (District nurse).

An apathetic approach to nursing was considered detrimental to the recruitment process for qualified nurses. Viewing the role as just a job took away the personal desire to become a nurse and learn or understanding about the essence of nursing and compassionate care. Consequently, some indicated that job interviews would then become more of a tick box exercise:

> "I don't think you'd get a nurse coming here, a newly qualified nurse and not being able to answer these questions like you want her to answer them. She'd say about being ethical, being caring, it's probably all textbook stuff isn't it, so stuff that she probably learnt and written in assignments" (Registered nurse).

Interestingly, some had observed these behaviours with nurses already working in practice for a long time:

> “But you see plenty of examples of nurses that don’t have compassion. So, what’s made them go into the course, what’s made them do the nursing twenty odd years ago for them to still be that uncompassionate person who’s only there to tick the boxes and do the job” (Second year nursing student).

5.8.3 Theme 3. The 5 W’s needed to help facilitate the teaching of compassion to nursing students.

Throughout the interviews a significant theme emerged containing five subthemes of why, what, how, from whom and where needed for teaching compassion to nursing students.

Why they should learn about compassion

The first addressed the importance of why they should learn about compassion, both from the course designer’s perspective and the students. Learning about compassion was highlighted as helping students look beyond and be less critical about the way certain patient’s behaved. This underlined how some patients felt misunderstood or wrongly judged by nurses:

> “It’s like when you see people and they are very angry, and you think why they are angry; they’ve only just walked through the door. But you don’t know the baggage that’s brought them anger that morning when they’ve come in. Instead of reacting to the anger, if you stop and think about it then you wouldn’t feel as angry towards that person. Because you’d think, they might be in a mental health situation, what’s gone on in that’s person’s life, what have they suffered” (Service user).

This held relevance to the characteristic of connection, in that nursing students could connect with and learn how to treat patients as people and not just their illness or condition:

> “I think they come out when they see us doing that, and actually dealing with the person as a human instead of a leg ulcer. Then they understand how to do that [be compassionate] themselves” (District nurse).

What can be taught?

Participants spoke about what can be taught, and what was needed to teach about compassion. Firstly, they focused particularly on teaching practical skills. In explaining this, some suggested it was necessary to incorporate the practical skills alongside theory so that they could learn how to demonstrate compassion:

> "You need both. I think you need a theoretical side of it, and you need a practical side of it [compassion]" (Second year nursing student).

One participant felt that nursing students needed encouragement to help them recognise and develop the skills of a compassionate nurse:

> "You can teach strategies and we can teach the theory. I don't know if it is about teaching skills. I think it is about supporting them to recognise and develop those skills" (Nurse Educator).

Some suggested creating modules to nurture these skills as possible ways to teach compassion:

> "Time could be spent doing modules or courses that will help develop these skills" (District nurse).

Surprisingly, communication and empathy were the only two skills mentioned across all groups. As was emphasised in the previous analysis, the following quote illustrates it is not only communication that matters to the patient, but the way in which nurses express their compassion towards them:

> "Because you hear from different people the language that triggers them and the language that comforts them. Because one of my triggers from any health practitioner is, "I understand what you are going through". No, you don't, don't tell me that. The most correct question, any nurse can ask a patient is "can you tell me what you are going through?" (Service user).

Secondly, participants highlighted the need for a clear definition of compassion in nursing, plus a framework and measure that could be used to asses and teach about compassion. There was a strong consensus that compassion needed to be clearly defined before it could be taught to nursing students, which was viewed as helping prepare them for practice:

> "You can go into the job thinking I'm great at compassion. I know what it is, but realistically you don't understand it yourself. So, in your head you think, "I can do this", but you don't understand what it means to be compassionate or how difficult it can be at times. If you have a patient who may be viewed as difficult and because you are not empathetic you don't understand or know how to communicate that, then there's a massive problem there" (Second year nursing student).

Service users felt that students needed an explicit definition of compassion to prevent problems that arise in practice when adopting a "trial and error" approach to care:

> "There's a huge difference when you are teaching something like compassion that there are some things that have to be pointed out to them, and then explored, rather than explored and perhaps reach the wrong conclusion" (Service user).

Others indicated the need for a framework and measure to help when recruiting and training nursing students towards becoming compassionate practitioners:

> "Are they truly compassionate and how do you measure compassion in order to get a good framework, in order for someone to be compassionate enough to recruit? At the interview process there should be some sort of test then shouldn't there, a personality test. They need to develop one that sees how much compassion you've got" (Nurse educator*).*

How students can learn about compassion.

Understanding how nursing students can learn about compassion was another important subtheme. This featured references to observation, learning from role models, real-life scenarios, clinical simulations, and reflection exercises. Participants

recognised that role modelling and mentoring others in practice could be useful in promoting compassion:

> "Because often you'll see how somebody does something and you'll think, "Oh that was really good I quite like the way they handled that situation or the terms they used". Or even their body language. And then you think, "I could do that" (Registered nurse).

They also suggested that nursing students could learn from watching videos of someone demonstrating compassion:

> "Certainly, I can remember watching videos of Carl Rogers, and actually thinking WOW, that is exactly how I want to be as a therapist. You would teach them using similar techniques. Teach them through good modelling, good observation of someone demonstrating compassion" (Service user).

Indeed, simulating a real life interaction between nurse and patient was a recurring theme throughout the interviews for how students could acquire awareness of compassion, and prepare them for the demands of practice:

> "Looking at scenarios and how they might be able to deal with that situation if in that situation. I think that would be a really good idea because it would make them think, and then as time goes on, if they do come across a certain situation, they can act on it" (District nurse).

Many also recommended adding reflective learning to this:

> "As a practitioner you're taught in your training about reflective practice, but you are doing that on a daily basis in an informal way. How would I have managed that situation differently if it was to arise again, what was good about it, what could have improved" (Registered nurse).

From whom they can learn about compassion.

Nursing involves interacting with many people. As such participants described how nursing students could learn about compassion through a blend of personal experience, fellow students, mentors, patients, enthusiastic, supportive tutors, and

patients. One of the nurse educators explained how they encouraged students to learn about compassion from their own life experiences:

> "I don't teach compassion per se, but I have been involved in working very intensely with students where we've done a lot of work around experiencing and thinking about our own life experiences at quite a deep level" (Nurse Educator).

Some felt that students could learn from each other and registered nurses, by getting together as a group to discuss the meaning of compassionate practice:

> "If you are in a support group with other nurses, other student nurses, you can maybe learn from some of the other things they actually say as to what constitutes good compassionate care" (Service user).

For nursing students, it was important to learn from someone who was passionate about teaching compassion. Passion in this sense meant that the teacher was not only knowledgeable, but enthusiastic about the subject and compassion's intrinsic value, so much that it permeated into the classroom and extended to the students' practice:

> "It's not just teaching; it's having the lecturers who are passionate about you performing compassion well. Because you can have a lecturer, just standing there doing a PowerPoint presentation, and they've not actually thought about it, it's not coming from within. And you can tell that sat in a lecture theatre" (Second year nursing student).

They also felt visibly more supported emotionally by staff at the university, with one educator commenting that this was important for enhancing the student's compassion:

> "They have people here [at the university]. When they feel very vulnerable about something they get supported. Everywhere in life is busy but it's nice to feel supported as well, because that helps them to be more compassionate and caring" (Nurse educator).

Participants described how interacting with a wide range of patients/service users during training could introduce students to different conditions, and how to treat them compassionately:

> “I think more and more interaction between patients and students should happen when they are in training. Because then they are learning one on one with all kinds of patients. Someone who has diabetes, someone who has cancer, someone who has a headache, someone’s got fibromyalgia, those kinds of things. So, anybody who comes to meet them they have that drummed in their brain, that general thing that’s expected, that empathy and that compassion” (Service user).

Where they can learn about compassion.

It was largely felt that the university and hospital setting were the two locations considered beneficial to the student’s learning experience. This indicated that theoretical education and practice were both integral for the development of nursing students’ compassion. Overall, participants emphasised that to be a fully cognizant compassionate practitioner, students must apply what they learn in practice and vice versa:

> “You can talk about the theories of compassion, but a lot of compassion comes from practice and from the role” (Nurse educator).

> “When they [nursing students] come back to being taught they’ve got their practical experience along with their educational experience” (Service user).

> “That’s where you learnt your people skills, your communication skills isn’t it. You were actually on the wards, and that’s how you build up your compassion and your empathy” (Registered nurse).

5.8.4 Theme 4. Barriers to learning about and demonstrating compassion in practice.

The fourth theme identified a range of barriers that participants felt could be detrimental to nursing students' learning and demonstration of compassion in practice. Two central aspects of this were educational, and workplace barriers.

Educational barriers.

Educational barriers were seen as having an impact on the way student nurses learned about compassion. This was mainly about how nursing had gone from being a vocational role to a degree. Participants also commented on the financial repercussions since the government replaced the bursary with a loan, and wider implications this had at attracting students without the character of a compassionate nurse. Some questioned the impact that taking away this financial support would have on the types of people enrolling onto nursing courses:

> "If I didn't have a bursary when I was training, I probably wouldn't have done it, just because I wouldn't have been able to afford it. You wonder whether that will have an impact in the sort of, I don't want to say the quality, but certain skills" (Registered nurse).

This negative assumption of nursing attitudes conflicted with those who had experienced a different time when nurses got paid to train, and how some were more interested in the money than becoming a nurse:

> "It came around to when nursing became a degree as well didn't it, came in so then they could get paid for a degree. But really, they weren't bothered about continuing, just the money" (District nurse).

Some implied that the current structure of nursing courses restricted opportunities for developing compassion especially now that nurse education seemed primarily focused on assignments rather than patient care:

> "We trained the old fashioned way where you were taught sit your patient well up in bed, provide tissues, to make sure they got fed. We were taught activities of daily living. Whereas now they are taught to write an essay on the legal position for something or the ethics of something else" (Registered nurse).

Workplace barriers.

A main focal point in the discussions on workplace barriers was that staff did do not always have enough time to demonstrate compassion, which affected their level of engagement with patients. Some participants attributed this to staff shortages on the wards:

> "When I've been in hospital, they've [nurses] been wonderful but they are still so busy, they've not got time to spend with each individual person like they would probably like themselves. If you've got the time, it's great, you can do all these things. But when you haven't got time to, you are short staffed then, it's very hard to be all things to all people. So, in them respects they are still kind and compassionate, but they haven't got the minutes to spend with patients" (Service user).

Paradoxically, others remarked how a longer time spent with patients increased compassion for them:

> "I think it [time] almost gives you more compassion, because you actually get to know the person" (District nurse).

Some felt that this was dependent on the role, and where the nurse was working. This was viewed as having a massive impact on how the nurse was perceived:

> "It depends the kind of nurse you are as well. Sometimes people think that A and E nurse, MAU (Medical Assessment Unit) nurse, even ICU nurses to a point are not, or don't have much compassion and empathy when actually they do. It's just they are not in a situation often where they can show it because they are in very fast pace moving area. And sometimes people think those kinds of nurses are a bit hard faced and everything, when you actually get to know

them as people and spend more time with them they're not, it's just the actual job and the situation at the time" (Registered nurse).

5.8.5 Theme 5. Compassion requires strength to demonstrate.

Similar to those who stressed the significance of self-care in nursing, this theme identified how participants felt that compassion takes a great deal of strength to demonstrate. Primarily, this centred on two subthemes: the demands on nurses to be compassionate, and that showing compassion can be stressful.

Demands on nurses to be compassionate.

Participants expressed how difficult it was at times to demonstrate compassion due to the demands on practice at the organisational level. One participant described how the pressures of the role sometime prevented nurses from being compassionate:

> "I fundamentally believe that most nurses, not all, are compassionate, they are just in a situation where either they can't show it or they don't know how to, it's bloody hard" (District nurse).

This was viewed as being unhelpful to nursing students especially when some working environments were seen as perpetuating feelings of dread, or staff members' feeling unhappy with their working conditions. As one commented, this required a positive frame of mind from the student:

> "It comes back to enjoying what you do. I used to work with a patient. This patient would spit in your face, and you have to perform the care. If you don't have compassion you can't do it, you will walk out. And if you don't enjoy your job, if you go into your job every day and its, "oh I'm going back to that same old, everyone's hating each other, complaining about each other" and the nurse is saying "oh I hate this job" you're going to start feeling like that" (Second year nursing student).

One service user lauded over how even when faced with the loss of a patient, nurses remained professional and compassionate:

> "Sometimes you think, how they deal with this, somebody passed away. They get attached, they experience that, but still they retain that professional caring demeanour, naturally" (Service user).

Compassion can be stressful.

The repercussion of these demands tended to be stress and burnout. As one of the participants noted:

> "Some of them [nursing students] start off in the job being compassionate, then they burn out because of the stress of the job. So, they start hating the role and because there's lots of pressure on nurses now" (Second year student Nurse).

Some felt that this pressure was brought on by the increasing number of responsibilities nursing students had to contend with during training:

> "You see that happens [burnout], they've got their other commitments. For the qualified nurses who are on the register, they have their work life and their home life. But our students have got their work life, their home life, and then the placement life" (Nurse educator).

This was acknowledged by the fact that under such pressures, nurses and nursing students cannot be compassionate all of the time:

> "You can be fantastic on paper, but when you come to the actual real life situation you can go to pieces, and people can't be 100% compassionate all the time" (Service user).

5.9 Discussion

5.9.1 Directed content analysis: what are the characteristics of a compassionate nurse?

Initial findings confirmed the previously identified eleven themes and concepts associated with the characteristics of a compassionate nurse. Further analysis of the data recognised the need to code certain items into new categories, bringing the overall number of characteristics to eight. For instance, ‘small acts’, and ‘having time’ were re-coded together as engagement, while connecting and getting to know the patient was grouped with awareness of suffering to form connection.

The theme of engagement was chosen based on the belief that it summarised all the other factors into an umbrella term. This was predicated on the commitment nurses show towards their patients when demonstrating compassionate care. Considering that some view interpersonal skills and communication as being very similar, the fact they are separate in this study could be a limitation. Arguably, this could lead to confusion around these terms. Still, the rationale behind the separation in this study was that interpersonal skills refers to the ways in which nurses utilise their communication skills in different contexts. Verbal communication and body language were also combined to create the new code of communication. Emotional strengths were themed as self-care to represent the multiple ways in which nurses can develop their emotional strengths through self-care. Involving patients was recoded to interpersonal skills as this includes the ability to involve the patient their family and other colleagues in the caring process. Professional competence was re-coded as competence. This helped to generate categories and indicators for the final codebook.

5.9.2 Thematic analysis: how can these qualities be taught to nursing students

In relation to how compassion can be taught, the findings provide new insights into the methods educators can adopt when developing educational programmes for compassionate care. There was however a certain level of ambiguity among participants as to whether it can be taught. Whilst some did think it possible to teach or learn about compassionate care, those who felt it was innate held a different opinion. In expressing their thoughts, they alluded to the difficulty many see when attempting to teach what is not there and trying to improve on baseline attributes of compassion. In contrast others regarded compassion as a continuous learning process without a definite end state, in which the motivation to be a nurse and learn about compassion was a guiding factor. Educational and workplace barriers and development of emotional strengths were additional features considered important for the learning and teaching of compassion to nursing students.

5.10 Compassion Strengths model

Based on the findings of the study, especially the characteristics and theme of compassion requiring strength, a model of compassion strengths began to emerge. Although compassion is a core element of nursing care, some argue that its underlying behaviours have not yet been fully realised in nurse education (Hewison et al., 2018). Wilkes and Wallis (1998) propose that compassion can be actualised through communication, competence, providing comfort, commitment, having concern for patients, consciousness, confidence and courage. In support of this, Walker et al (2016) suggest that compassion becomes easier to teach when it is broken down into manageable segments. As was highlighted during the interviews, establishing what compassion looks like could help nurses and nursing students understand what is

expected of them in practice. Considering that this study and others like it view compassion as consisting of a set of values, behaviours and character traits that require strength to demonstrate, a compassion strengths model is proposed.

Positive Psychology utilises a strengths based approach to the positive human qualities that attend to the flourishing instead of the suffering of individuals (Seligman & Csikszentmihalyi, 2000). Rather than focusing on the negative elements of human nature such as despair, fear and anxiety, positive psychology promotes qualities such as hope, love, compassion, and that which makes life worthwhile (Gillham & Seligman, 1999). Individuals can measure themselves on traits such as hope, leadership, love, and kindness using the Values In Action (VIA) Survey. Although, compassion is not a strength in its own right it does fall under the umbrella of kindness and is viewed as the emotion that drives altruistic behaviour in response to suffering (Cassell, 1999).

Moreover, individual character strengths reflect a person's behaviour, thoughts and feelings, existing on a spectrum that can be measured for differences (Park et al., 2004). Taking inspiration from this, the current study developed a model, scale and online course that could help identify, measure and teach the characteristics of a compassionate nurse referring to them as compassion strengths.

According to Von Dietze and Orb (2000), there is a need to survey the specific nursing behaviours that patients perceive as compassionate. As has been mentioned in earlier chapters, nurses are often criticised for not showing or even possessing compassion without consideration of the environments that shape how they demonstrate compassion. However, these claims only add to the negative image of a whole profession and nurses' ability to be compassionate. With this in mind, it makes sense to think of compassion in nursing from the perspective of a strengths based model.

5.10.1 The Eight Compassion Strengths

5.10.1.1 Character

Character is concerned with the virtues and behaviours people exhibit with others. Positive psychology seeks to help individuals identify their own unique set of character strengths and provide the conditions that cultivate their growth (Linkins et al., 2015). A strong desire to care for others, being cooperative, reliable and tolerant are just some of the personal qualities that drive individuals to enter into nursing (Eley et al., 2010). Being truthful, and other personal characteristics including but not limited to care, flexibility, and respect for self and others, contribute to the ideal of a “good nurse” who does “the right thing” (Smith & Godfrey, 2002), and above all acts compassionately (Begley, 2010). Indeed, some nurses report that their compassionate behaviour is determined by their own individual values and characteristics (Nijboer & Van der Cingel, 2019). The moral aspect of this combines attentiveness, vulnerability with the courage to act on one’s principles when facing the unpredictable. In doing so, nurses overcome the barriers to providing compassionate care (Lindh et al., 2009).

The fact that this was the most mentioned characteristic during the interviews, suggests that how a nurse presents herself to patients and their families is just as important as the care they receive. It was evident from the interviews that character was the most important characteristic of a compassionate nurse. This was particularly salient for service users in the groups, suggesting that the way nurses express their virtues towards patients’ is important for how they perceive care. The value of character in nursing is key to what Johnson (2008) regards as a global issue, where traditional nursing values such as compassion have been replaced with simply “getting the job done”. Consistent with a return to what Nightingale proposed, the results also

emphasise the importance of developing a compassionate character as well as the clinical skills needed in nursing (Bradshaw, 2011).

5.10.1.2 Self-Care

Self-care refers to the way in which an individual looks after their own wellbeing. In some instances, a decline in empathy and compassion is often accounted for by the experience of compassion fatigue and burnout among nurses. Everyday exposure to the suffering of others, especially in stressful working conditions, can leave some nurses feeling vulnerable and exhausted as a result of the work they do (Ward et al., 2012). Nursing is not an easy task, and as some have suggested requires nurses to engage in self-care activities that support them through their emotional and psychological expenditures, to help build resilience and prevent the erosion of care (De Vries & Timmins, 2016). Interventions that encourage self-compassion, mindfulness and other spiritual pursuits have shown promising results, with recommendations for them to be implemented into nursing curricula (Duarte et al., 2016; Durkin et al., 2016; Mathad et al., 2017). Indeed, self-compassion helps the individual to recognise their own suffering and motivates them to take action to protect themselves (Gilbert, 2009; Neff, 2003). Other approaches to self-care that reduce stress and burnout include physical, emotional, cognitive/mental, spiritual, and social strategies. Among nursing students, the most effective of these include spending time with family and friends, prayer, yoga, physical exercise, affirmations and hobbies (Kravits et al., 2010).

This study supports the need to implement self-care into nurse curricula so that nursing students can learn of its benefits and relationship with compassionate care. The need for nurses to look after themselves was also highlighted as a highly sought

after compassionate quality. In this study, several nurse educators and registered nurses related stress and burnout to a lack of self-care, verifying themes found in the thematic analysis linking the demands of practice with nurses' wellbeing. As opposed to simply focusing on self-compassion or mindfulness, they referred to the individual self-care techniques nurses could adopt to build resilience and develop emotional strength. This was consistent with other studies where enhancing courage and tolerance to deal with difficult situations was considered vital for providing compassionate care (Dewar & Nolan 2013; Sinclair et al., 2016a; Lee & Seomun 2016a; Peters, 2006), and preventing nursing students from losing hope in their caring abilities (Jack & Tetley, 2016). Yet, it was also clear that the specific self-care behaviours needed to be made explicit and the suggested strategies for them included in nurse education and training.

5.10.1.3 Connection

Connection is another element of compassion that enhances the nurse patient dynamic. The ability to connect to patients is considered central to compassionate care (Newham et al., 2017), and looked upon as one of the many privileges of being a nurse. It is through connection that nursing students learn about the significance of humanised compassionate care and the fundamental aspects that make it possible (Scammell, 2016). A feature of this is a spiritual dimension of nursing care, which enables nurses to connect with patients in a profound manner (Golberg, 1998). Formulating human connections, helps patients feel validated, and the nurse to be more comfortable with another's experience. Enabling patients to "become known" as an individual with their own unique problems, has a profound healing effect between practitioner and patient (Thorne et al., 2005). When taught about connection, nursing students learn how to honour the quality of life and gain respect for patients in their

care, in addition to becoming more self-aware and competent in their care (De Natale & Klevay, 2013).

Connection was considered an effective method of getting to know patients at a deeper level to gain a better understanding of their needs. It was mainly the service users who emphasised the significance of connection as a sought after characteristic of a compassionate nurse. This resonates with previous studies where connecting with patients using humour, sharing personal stories, and warmth was crucial for seeing them as a person rather than just an illness (Dewar & Nolan, 2013; Kret, 2011; Peters, 2006). By getting to know them on a deeper level, connection was seen as the vehicle that helps nurses understand suffering, and care for patients in ways they want to be cared for (Dewar et al., 2014). Taking time, empathising and using interpersonal communication skills with patients are methods that when combined increase opportunity for connections to evolve. Learning how to become proficient in this was deemed necessary for demonstrating compassion. In many ways this is reminiscent of a humanistic approach to care**.**

5.10.1.4 Empathy

The humanistic psychologist, Carl Rogers described empathy as "*the capability to sense the client's private world as if it were your own*" (Rogers, 1957, p.99). Similarly, Egan (1990) defines empathic listening as "*the ability to enter into and understand the world of another person and to communicate this understanding of them*". Davis (1983) views empathy as a multidimensional construct consisting of perspective taking, fantasy, empathic concern, and personal distress. Empathy is designated to either the cognitive or emotional aspects of thought and feeling, rather than the expressed behaviour one might observe with compassion. In terms of contemporary nursing,

studies show that empathy can be enhanced through various teaching aids that help the student experience the emotional and cognitive perspective of the patient and is a stronger attribute in females (Brunero et al., 2010; Cunico et al., 2012).

All the participants understood that empathy was another characteristic of a compassionate nurse. This was largely expressed among the nursing staff in this study, suggesting that experience had taught them the value of its practice. Without this quality many felt that nurses could not understand the inner states of their patients' and therefore could not be compassionate. Empathy is recognised globally as a significant feature of compassionate care (Van der Cingel, 2011; Lundberg and Boonprasabhai, 2001; Lee & Seomun, 2016a; Bramley & Matiti, 2014; Sinclair et al., 2016a). The current study adds to this by showing that it is an essential feature of nurse education that becomes stronger with practise.

5.10.1.5 Interpersonal skills

Interpersonal skills are an important feature of the Nursing and Midwifery Council (NMC, 2010) Guidelines for Nursing Practice. They include the effective practice of communication, empathy and connection skills to communicate with patients, their families, colleagues and other health professionals (Wysong & Driver, 2009). Interpersonal skills can be categorised into domains of (1) interview skills and collecting data, (2) counselling and delivering information, (3) building rapport, and (4) personal manner (Shen et al., 2014). Peplau's (1991) theory of interpersonal relations emphasises the relevance of interpersonal skills in nursing. As a model for understanding interpersonal relationships, Heron (1976) created a six category intervention analysis, that included three authoritative (prescriptive, informative, confronting), and three facilitative (cathartic, catalytic supportive) categories. In many

cases, nurses generally consider themselves to have catalytic, prescriptive, informative and supportive interpersonal skills (Ashmore & Banks, 2004; Burnard & Morrison, 2005).

Results of this study show how these skills can build on regular course content with use of the online course. Providing compassionate care for patients includes attending to the needs of the family, as well as communicating with other healthcare colleagues. As such this requires the use of interpersonal skills. Working together with and involving patients and their families during the care process is often considered to be an effective expression of compassion (Kneafsey et al., 2015; Bray et al., 2014; Dewar & Nolan, 2013; Peters, 2006; Kret, 2011). The ability to explain clinical symptoms to patients and their families reassures them of what each procedure meant, and what they should expect from care. In this study, the importance of interpersonal skills was mainly discussed in the service user group for making informed choices but were also recognised by registered nurses and nursing students as behaving in an honest and professional manner.

5.10.1.6 Communication

Communication is the way people express themselves through words, body language or listening. As a key element in nursing and one of the six C's it is fundamental to the UK NHS Compassionate Care Strategy (NHS England, 2012). The ability to communicate in a manner that is both professional and personable is encouraged among nursing students (Ward & Benbow, 2016). Techniques for developing communication are usually introduced to nurses in the first or second year of the nursing programme (McCarthy et al., 2008). A limitation of this is that nursing students do not get the opportunity to practice their communication skills with patients prior to

entering the care setting (Xie et al., 2013). Deane and Fain (2016) suggest that students can learn about communication and how to be cognizant of their verbal, nonverbal communication, and use of touch, through Peplau's Interpersonal Relations Theory. Adopting a proactive communication style can help nursing students recognise when they are reacting to or engaging in compassion, which in turn improves the understanding and care demonstrated to patients (Way & Tracy, 2012).

Communication is one of the 6 C's of compassionate care in the UK. Indeed, learning how to communicate with compassion is considered a valuable commodity that can be taught to nurses (Kelley & Kelley, 2013). Despite communication being part of pre-registration nursing curriculum there is very little research into how nursing students can develop their caring, considerate and compassionate communication skills (Apker et al., 2006). Yet in this study it was a distinct component that for participants meant nurses were obligated to make effective use of their listening skills, and not just talk to patients. This included listening with the whole body by demonstrating understanding of patients' experiences, through non-verbal expression, and tone of voice. Similar to previous research, a compassionate nurse was one who listened attentively to patients, especially when attending to sensitive issues, and made good use of "appreciative caring conversations" (Dewar & Nolan, 2013). Service users in particular felt that nursing students could learn how to ask patients the questions that allowed for their story to be told, their suffering validated, and their needs met, without first automatically assuming they knew what was going on.

5.10.1.7 Competence

In the UK, before nurses can become registered, they must meet the standards for competency and must maintain these standards throughout their career (NMC, 2010).

This ensures that registered nurses have the knowledge and skills to effectively complete the clinical duties underpinning their work. It also helps safeguard the patient and protect the nurse from the threat of malpractice (Bradshaw, 1997). These skills range from the cognitive to the integrative and can be taught during professional healthcare education (Danielsen & Cawley, 2007). As certain nations become more ethnically diverse, there is a need to include the cultural competencies required when providing care for patients from multicultural backgrounds (Betancourt et al., 2002). This helps to integrate the cultural needs of patients, and raise nursing students' self-awareness (Campinha-Bacote, 2002). Thus, there is a need to develop interventions that can assess competence skills in nursing students to help them grow into professional nurse practitioners (Bradshaw, 1997; Cowan et al., 2007). Having the knowledge and skills of a competent nurse, is important for the nurse patient relationship (Wiechula et al., 2016). The character and motivation of the nursing student influences their ability to absorb and demonstrate what they have learned in practice. In any case both experience and opportunity are key factors that drive the acquisition of these abilities (Khomeiran et al., 2006).

Competence was identified as a characteristic of a compassionate nurse. Competency involves nurses applying their skills, knowledge and own individual traits to nursing practice (Fukada, 2018). This includes making clinical decisions, sometimes under extreme conditions that affect judgement. Indeed, anxiety has been shown to be a barrier to compassionate practice that affects confidence among nurses and nursing students (Hegney et al., 2014). Echoing previous research, service users felt reassured when a nurse demonstrated clinical proficiency and performed their duties with confidence. They considered it crucial for compassionate care. As in previous studies, the importance of learning about these skills for practice was described as

preparing students for possibilities in real life situations (Tehranineshat et al., 2018), and supports what Cummings and Bennett (2012) refer to as the collaboration between technical knowledge and compassionate care. However, competency was still one of the least mentioned qualities of compassionate nurse, which is incongruent with Herdman's (2004) view that clinical skills are being valued over care and compassion.

5.10.1.8 Engagement

In this model, engagement refers to the active participation in patient care by going the extra mile or providing the little things that matter most. It is described as the nurse, always being available, friendly, warm and cheerful, gentle and nothing being too much trouble for them (Kralik at al., 1997). Engagement can have a powerful impact on the effectiveness and empowerment of nurses (Spence Laschinger et al., 2009). Indeed, going the extra mile helps to improve the systems of care and improve patient outcomes (Raper, 2014). Engagement also relies on the subjective response of the nurse and is associated with the emotional labour attached to caring (Henderson, 2001), that can either motivate or demotivate the individual to act (Keyko et al., 2016). Despite some nursing students ranking the little things such as fetching a glass of water as the least important for care (Khademian & Vizeshfar, 2008), patients feel that sometime these things are what matter most (Hung et al., 2017). Being cared for by a nurse who engages with the patient and attends to the little things like fluffing up a pillow or making them a cup of tea, provides more than just physical care. These acts of compassion have the power to nurture psychological comfort and promote recovery (Kralik et al., 1997).

All the participants considered engagement as central to providing compassionate care. In this study, engagement involved doing the little things that make a big difference to patients, having time for them and going the extra mile. This supports the research literature showing how making a cup of tea, taking the patient to the toilet, or holding their hand is reassuring enough to reduce suffering, and a powerful expression of compassion (Bramley & Matiti, 2014; Hung et al., 2017; Peters, 2006). In this study, nurses reported feeling a sense of compassion satisfaction as a result of them engaging in activities that went above and beyond their regular duties, showing that the benefits matter to staff as well as patients. Some consider these small but significant acts as elements of the art of nursing that though simple, basic or secondary to the science of nursing, have the biggest impact on patients (Hunter et al., 2017; Olshansky, 2007). To further validate the model, and develop the scale and online course content, more research is needed.

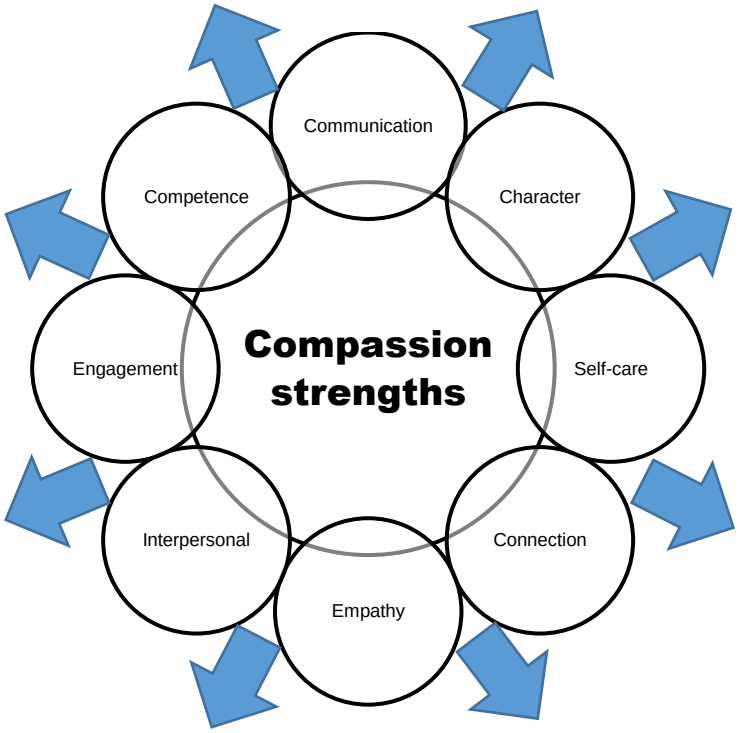


Figure 13. Compassion strengths model.

5.11 Chapter summary

This chapter has shown that compassion consists of a multifaceted set of qualities that contribute to both the art and science of nursing. These findings can be used to develop empirically supported curricula for teaching compassion. Understanding what motivates nursing students to be compassionate and learn about nursing is important in helping them develop as a nurse practitioner, as are the environments they work in. Furthermore, introducing self-care training into undergraduate nurse education can help prepare them for the demands of practice and protect them from stress. Although this study provides evidence for the qualities of a compassionate nurse, there is still little to support whether they can actually be measured or taught and the potential long-term impact they might have on nurse education. Further investigation is required to explore this. Overall, the dual analysis offers a multi-layered and complex understand of the characteristics of a compassionate nurse and how these can be taught to nursing students.

The results presented in this chapter will now help to formulate the next steps in the development of the questionnaire, and online learning course, which will eventually contribute to the individual elements of the proposed META model.

Chapter 6. Development and Validation of the Bolton Compassion Strengths Indicators (BCSIs)

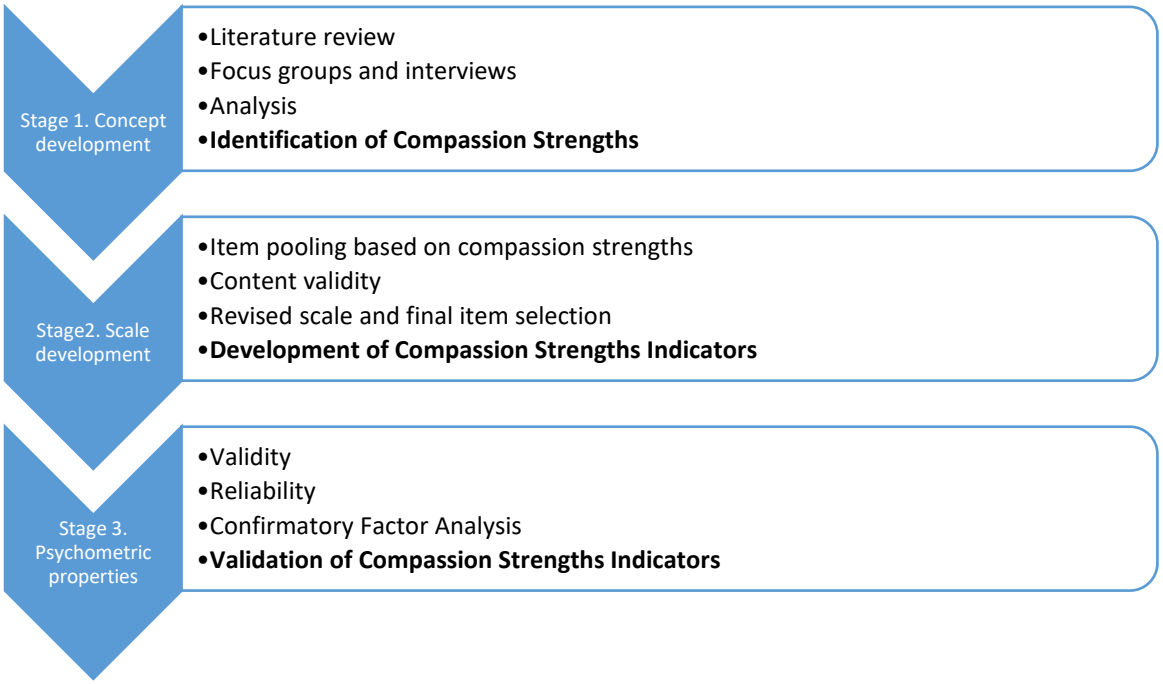
"*If you cannot measure it, you cannot improve it*" – Lord Kelvin

6.1 Introduction

Using the compassion strengths model factors to inform the design of the measure, this chapter reports on a series of studies conducted in the development and validation of the Bolton Compassion Strengths Indicators (BCSIs). First, it begins with the rationale for measuring compassion in nursing. Then it explores other general measures of compassion before detailing the development and validation process that went into the design of the BCSIs.

6.4 The scale development process

Table 11. Development process for the Compassion Strengths Indicator



Psychometric scales are instruments used to measure theoretical constructs such as compassion, that otherwise could not be measured directly with conventional means. Scales should provide consistent responses over time (reliability) and reflect the concept they were created to measure (validity) (Connelly, 2011). This study incorporated elements of classic item analysis and confirmatory factor analysis. The following methods used to develop the compassion strengths indicator are consistent with the guidelines for evaluating scales set out by Streiner (1993). In stage one (concept development) data were collected from a literature review, focus groups and one to one interviews with nurses and services users to identify the characteristics of a compassionate nurse (later referred to as strengths). In stage two (scale development), themes and items were generated based on data collected at stage one, content was validated, and a scale devised to create the Bolton Compassion Strengths Indicator (BCSI). Finally, the scale was validated in studies with nursing students at stage three (psychometric analysis). Confirmatory Factor Analysis (CFA) and Structural Equation Modelling were also conducted to provide additional support for the eight factor model of compassion strengths.

6.5 Construct and context

In the initial development stages, knowing exactly what it is that is being measured helps address issues of face and content validity (Loewenthal & Lewis, 2001). This also provides a rationale for developing the scale (Streiner & Kottner, 2014). The rationale for developing the BCSI is that no UK scale currently measures compassion in nursing, and none that considers compassion as a strength. The overall purpose of the following studies was to develop a self-report compassion strengths scale that would measure compassion in nurses on a continuum that was consistent with the characteristics of a compassionate nurse.

6.6 Response format and initial item pool

When developing any psychometric scale, potentially useful items are grouped together for analysis (Furr, 2011; Streiner, 1993). In line with pragmatism, these items usually come from various sources such as, existing scales, expert observations, research or theory, and the personal reports of patients (Streiner, 1993). Items can also be created *de novo or* developed by combining items from other scales (Streiner & Kottner, 2014), whilst interviews and focus groups are another great source (Loewenthal & Lewis, 2001). The focus groups helped identify the eight themes relating to the characteristics of a compassionate nurse. The themes confirmed those found with previous studies identified in the literature review. In addition, comments collected from participants during the interviews provided further inspiration for the items. An additional feature of the BCSI is that it included items that reflected the motivation to be compassionate and alleviate suffering (Gilbert, 2009; Goetz et al., 2010).

Further items were generated from other standardised questionnaires relating to each subtheme. Potential limitations to this approach are that the scale items might not be relevant to the current sample of nurses. Equally, the items were collated from interviews and focus groups taken from one study, with a purposive sample, at a University in the north of England, and therefore may not be representative of all nurses. Nevertheless, the measures chosen were valid and reliable with some used globally with a varied range of populations, thus indicative of their generalisability. Moreover, the development and future dissemination of the scale with nurses beyond this study, could help validate it and each element further.

The NHS Emotional Intelligence Questionnaire was used for items relating to self-care, empathy and engagement. Although this scale is not a validated psychometric measure, it is a recommended measure for assessing emotional intelligence. In addition, the Connor-Davidson Resilience Scale (CD-RISC -10) (Connor & Davidson, 2003), and the Self-Compassion Scale (Neff, 2003) helped to generate additional items for the self-care subscale. For example, the item "*when there are no clear solutions to my problems sometimes fate or god can help*", was taken from the CD-RISC, an internationally recognised measure of resilience, as a means of capturing the spiritual element of self-care. The scale developers noted that "*the role of faith and a belief in benevolent intervention (''good luck'') were likely important factors in the survival of the expedition, suggesting a spiritual component to resilience*" (Conner-Davidson, 2003, p. 77). A negative score on this item, might reflect the need to allow the locus of control to be given to something beyond the self and have some faith that things will work out. However, as is the norm in all psychometric scales, this would need to be considered in relation to the overall score produced by the other items in the subscale. Furthermore, The Work and Meaning Inventory (WAMI) (Steger, 2012), plus items from the Compassion Satisfaction subscale of the Professional Quality of Life Scale (ProQOL) (Stamm, 2011) were used to create the Engagement subscale. The aim of the engagement subscale was to reflect the commitment to compassion and the rewards nurses gain by doing the little things for patients. Thus, the items generated from other scales as well as the inclusion of statements such as "*I feel a sense of purpose when I go the extra mile for patients*" helped capture this. The Human Connection Scale (Mack et al, 2009), which is used to measure connection between oncologists and patients, was used to source items for the connection subscale.

Finally, a measure of nurse's competence across Europe (Cowen et al., 2007) inspired several items on the competence subscale.

As each of the themes identified were considered characteristics of a compassionate nurse, it was theorised that when combined they would explain a single overarching factor for nurses' compassion strengths. An initial 340 items were created based on this theoretical assumption, consisting of 35 *interpersonal* items, 80 *competence* items, 28 *communication* items, 66 *self-care* items, 30 *connection* items, 36 *engagement* items, 28 *character* items, and 37 *empathy* items. The number of items chosen to be included can affect the final scale. Scales with very few items can produce a low reliability coefficient alpha, whilst too many items may put people off completing the scale. If the aim of the scale is to have several subscales, Loewenthal and Lewis (2001) recommend keeping the number of items as short as possible. However, in the initial stages DeVellis (2017) suggests that it is common to start with three or four times the number of items than the final scale. The anticipated length of the final scale was 80 items, meaning 340 was just over four times the recommended number.

6.7 Comprehension

Each item was written in a language that reflected the natural communication style of nurses. Although the aim was to include items that would warrant fewer socially desirable responses, Loewenthal and Lewis (2001) argue that this is not always possible, as respondents do not always like to admit if they lack a trait or experience something such as anxiety. To address this, items were written with the intention of reflecting an honest account of respondent's experience to the behaviours pertaining to each subscale. A panel of experts to check for face validity later assessed included

items. In addition, each item was written as succinctly as possible, without “double-barrelled” questions, and with few “double negatives”, to prevent unnecessary confusion when responding (Clark & Watson, 1995; DeVellis, 2017). Negatively worded items were included alongside positive items. This helped reduce the likelihood that participants would endorse items by agreeing with them all, and controlled for response, acquiescence, affirmation or agreement biases that could have compromised the scale’s psychometric quality (DeVellis, 2017). Although balanced scale items restrict “*Yea saying”,* they can also limit the scales ability to identify large differences (Furr, 2015; Streiner et al., 2014). Studies suggest that negatively worded items can be misleading and have an adverse effect on the validity and reliability of the scale (DiStefano & Motl, 2009; Greenberger et al., 2003; Jozsa & Morgan, 2017; Muris & Petrocchi, 2016; Roszkowski & Soven, 2010). The initial scale included three reverse scored items for each subscale giving twenty four reversed items in total for the scale overall.

6.8 Content validity of the BCSI items

To establish the content validity of the compassion strengths indicator two colleagues from psychology and nursing analysed the remaining items. Both read through a list of potential questions and made suggestions for which items reflected each theme/strength best, while indicating which to exclude. A number of items were left out of the original pool at this stage because it was felt that they did not capture the essence of their respective subthemes. Several questions were generated to help guide this process:

- Do the items represent the dimension?
- Are they clear and understandable?

- Should the item be on a different dimension?
- Suggestions for additional statements

For example, in the original list of questions for Connection, the question "*I often take time to listen to patients' concerns*?" was moved to the communication list. While some seemed fitting for compassion, the question "*I often reflect on my work and impact I am having on patient lives*" did not reflect its assigned theme of Character. After some discussion, it was difficult to assign it to one of the other themes and it was therefore excluded. Based on their professional decision, 148 items excluded from the initial scale left a final pool of 192 items. There were 26 *interpersonal* items, 36 *competence* items, 24 *communication* items, 37 *self-care* items, 16 *connection* items, 22 *engagement* items, 16 *character* items, and 15 *empathy* items.

6.9 Response format

The response format for the BCSI was developed using a 6 item Likert type scoring scale. Reponses ranged from 1 Definitely not like me, 2 Generally not like me, 3 Slightly not like me, 4 Slightly like me, 5 Generally like me, to 6 Definitely like me. Studies show that measures with Likert scales of six points perform better on tests of reliability and discriminate better than those with five (Chomeya, 2010). The benefits of providing participants with a larger number of options are that they allow for a wider range of responses. This helps reveal subtle differences in scores among respondents. Conversely, having so many response options increases the likelihood of random error occurring, as respondents will sometimes try to over interpret slight differences in responses (DeVellis, 2017). In addition, the response format did not include the option to give a "no opinion", or "don't know" response, as they are viewed more as indicators of low motivation rather than the expression of uncertainty over a

response (Furr, 2015). Although some object to this method, it can help influence participants' decisions when answering a particular item (Clark & Watson, 1995). Indeed, restricting responses in this way can encourage a balanced range of scores (Clark & Watson, 1995).

6.10 Validation of the BCSIs

The purpose of these studies was to identify the strongest and best performing items for each of the eight constructs relating to compassion strengths. The remaining 193 items were given to a group of nursing students for final analysis.

6.10.1 Procedure for all studies

For all studies an email was sent to the head of the Nursing School seeking permission to access the students during teaching sessions. Additional emails sent to course tutors informed them of the study along with the request of suitable times for the researcher to come and collect data from students. As the nursing degree course was provided through three separate NHS Trusts (Bolton Trust, Central Manchester Healthcare Trust, Lancashire Trust) classes were held in different locations around the North West. Times and dates were agreed with the tutors prior to the researcher attending each separate class to ask students to participate in the study. Participants were given a brief talk about the study and aims of the research. They were told that participation was voluntary and that they could refuse to take part at any time without question or consequence. In addition, participants were informed that data would be kept anonymous and stored in accordance with the Data Protection Act (1998) until it would be disposed of in a secure manner. A participant information sheet and informed consent form was provided explaining the purpose of the study and further detailed information regarding participation.

6.10.2 Ethics for all studies

The School of Education and Psychology Ethics Committee at the University of Bolton in line with the British Psychological Society's guidelines for human research (BPS, 2018) gave ethical permission to conduct the studies.

6.11 Study 1: Endorsement frequency and item discrimination

6.11.1 Participants

The initial sample consisted of 151 nursing students enrolled on a three year, pre-registration adult nursing course at the University of Bolton. Participants were aged 19 to 54 of age (M=29, SD=8.3). The sample consisted of (n=135) female nursing students and (n=13) males, with (n=3) who did not identify their gender. There were 94 (62.2%) in their first year, 48 (31.8%) in their second, and 8 (5.3%) in the final year of study, and 1(.7%) who did not complete the question. Number of hours on placement ranged from 100 in the first year to 1663 in the third year of study (m=633). The ethnic groups consisted of, 77 (51%) White British, 31 (20.5%) African, 8 (5.3%) Asian British, 8 (5.3%) Indian Sikh, 4 (2.6%) Pakistani, and 23 (15.3%) who did not provide their ethnic background. There were 74 (49%) in a relationship and 60 (39.7%) single, with 17 (11.3%) who did not give a response.

6.11.2 Results

6.11.3 Endorsement frequency

After examining for endorsement frequency, a further 93 items were removed, leaving 10 *self-care*, 10 *communication*, 19 *competence*, 10 *engagement*, 10 *character*, 10 *empathy*, 10 *connection*, and 10 *interpersonal*, for each subscale, and 89 overall. All

items ranged in the acceptable criteria of below 90% and 95%, or less than 5 % set out by Streiner (1993).

6.11.4 Item discrimination

Item discrimination analysis was conducted to differentiate between high and low responders of the scale items using the Item Discrimination Index. The Item Discrimination Index is achieved by subtracting the high scoring group (Ui) on an item with the low scoring group (Li), then dividing them by the total number of people in both groups (ni), expressed below in the index formula (Streiner et al, 2015).

$$di = \frac{Ui - Li}{ni},$$

Based on the Item Discrimination Index formula and the following guidelines, items were evaluated on their discrimination indices (Ebel & Frisbie, 1991). As can be seen in table 12, a higher discrimination index indicates that the item discriminates better between high and low tests scorers (Mitra et al, 2009; Zubairi & Kassim, 2016).

Table 12. Guidelines for item discrimination evaluation (Ebel & Frisbie, 1991)

Index of Discrimination	Item Evaluation
0.40 and above	Very good items
0.30 to 0.39	Reasonably good but still subject to improvement
0.20 to 0,29	Marginal items needs improvement
Below 0.19	Poor item that needs revising or rejected completely

When analysed for item discrimination, items removed at the previous stage also fell into this category. So that an equal number of items could be achieved for each subscale, certain items were purposely left in the pool. This is accountable to the close

relationship between endorsement frequency and item discrimination (Streiner et al, 2014), plus the need to include specific items that are expected of certain populations (Clark & Watson, 1995). However, item discrimination for the competence subscale identified 9 items that were subsequently removed. In doing so, the desired final number of 80 (10 per subscale) items for this scale was attained.

6.12 Study 2: Reliability

The final 80-item scale was assessed for reliability. To prevent participants becoming knowledgeable about which of the items were measuring a particular subscale, items were added in intervals of three. Three items from each subscale were reversed scored.

6.12.1 Participants

Two hundred and nineteen (n=219) nursing students enrolled on a three year, pre-registration adult nursing course at the University of Bolton participated in the study. The age of participants ranged (M=29, SD=8.4) from a minimum age of 18 and a maximum of 54. The sample consisted of (n=196) female nursing students and (n=23) males. There were 104 (47.5%) in their first year, 89 (40.6%) in their second, and 26 (11.9%) in the final year of study. Number of hours on placement ranged from 0 in the first year to 1775 in the third year of study (m=669). The ethnic background was 136 (62.1%) White British, 58 (26.5%) African, 13 (5.9%) Asian, 5 (2.3) mixed race and 7 (3.2%) who did not provide their ethnic background. There were 99 (45.2%) in a relationship, 113 (51.6%) single, and 7 (3.2%) who did not provide a response.

6.12.2 Results

6.12.3 Internal consistency

Each subscale contained six items with alpha coefficients of 0.50 and above, which was acceptable for this scale. In addition, the item-total correlations were also in the satisfactory range of higher than .03 (Field, 2013). The negatively worded items from each subscale had an adverse effect on reliability. This resulted in the removal of all but one of the three reverse scored items from each subscale. Only one reversed item on the connection subscale remained. This item was included because without it, reliability dropped to unacceptable levels. To improve reliability a further nine items were dropped, leaving 48 items. Internal consistency for each subscale was satisfactory for most subscales and the overall scale.

The highest scoring subscales were Connection and Empathy, with Self-Care and Competence the lowest. As Connection and Empathy are familiar constructs in nursing populations, one can expect high scores on such factors. Equally, as Self-Care practices are often overlooked in nursing, it makes sense that nursing students would score so low on this factor. Likewise, as all the sample were nursing students with only a relatively small number who could have amassed enough placement hours to feel competent could explain why this factor scored low. This provides further support for the validity of the scale as a reliable measure of compassion.

6.13 Study 3: Test-retest reliability

6.13.1 Participants

To assess the test-retest reliability of the compassion strengths indicator, (n=51) second year nursing students took part in the study.

6.13.2 Procedure

Participants were approached during lectures at time one and asked to complete the questionnaire before returning a week later to repeat the process at time two.

6.13.3 Results

The test-retest reliability coefficient for total compassion strengths was high (0.86). The self-care (0.87) and character (0.81) subscales were also high. Empathy (0.78) and engagement (0.79) were in the acceptable range, while interpersonal (0.67), communication (0.66), competence (0.60), marginal. Connection was the only poor performing subscale (0.55). However, as it was on the cusp, it was acceptable for inclusion (Table 13).

Further t-tests verified any changes in scores between test administration times. There were no significant differences for the subscale Character ($t(49) = 2.1$, p =1,000). Empathy ($t(49) = 2.3$, p=.349), Connection ($t(49) = 2.8$, p=.619), and Communication ($t(50 = 2.7$, p=.479), also remained constant. There were however significant differences in Total Compassion Strengths Scores ($t(42) = 13.8$, p = .015), Competence ($t(50) = 3.6$, p=.001), Interpersonal skills ($t(48) = 2.9$, p=.003), and measures of Engagement ($t(49) = 2.5$, p=.023) between times.

Table 13. Descriptive statistics, Cronbach Alpha Coefficients and test-retest results for the 8 factors and total score for the BCSI.

Indicator	No. of items	M	SD	Minimum	Maximum	Cronbach's alpha (α)	Test-Retest
Self-care	6	26.1	5.1	8	36	0.67	0.87
Character	6	33.7	2.6	14	36	0.68	0.81
Empathy	6	33.4	3.1	14	36	0.78	0.78
Connection	6	34.1	3.1	16	36	0.74	0.54
Interpersonal	6	31.2	3.1	10	36	0.78	0.67
Engagement	6	32.4	3.1	14	36	0.64	0.79
Competence	6	30.0	4.8	6	36	0.80	0.60
Communication	6	32.0	3.0	19	36	0.55	0.66
Total	48	253.2	21.5	130	288	0.85	0.86

6.14 Study 4: Confirmatory Factor Analysis

Confirmatory Factor Analysis (CFA) was performed on the 48 item scale in Amos with a sample of 354 nursing students to examine for model fit. As recommended, the χ^2/df ratio, root mean square error of approximation (RMSEA) and two-sided 90% confidence intervals, the comparative fit index (CFI), and Tucker-Lewis index (TLI) were used to evaluate the goodness of fit for each model (Kline, 2005). A model was considered acceptable if the χ^2/df was < 4, CFI and TLI values were greater than 0.90, and the RMSEA was between 0.00 and 0.06 with confidence intervals between 0.00 and 0.08 (Hu & Bentler, 1999).

6.14.1 Results

6.14.2 Compassion Strengths Indicators

After finalising items for the respective constructs, using maximum likelihood estimation confirmatory factor analysis was carried out on each one separately to confirm model fit. After assessing each separate scale, CFA revealed eight individual indicators of compassion strengths that were theoretically and statistically valid.

Modification indices suggested adding error covariances between several items. In line with recommended research, this was limited to those that were theoretically justifiable and shared similarities in style or content (Hermida, 2015). All had exceptionally well fitting models as indicated below (Table 14).

For the factor of character, modification indices showed a covariance between the error terms e1 and e 6. Connecting these terms resulted in an improved model fit with excellent fit indices for chi-squared χ^2/df = .92, TLI 1.000, CFI 1.000, RMSEA .000 80% CI [.00 -.07], and SRMR .029.

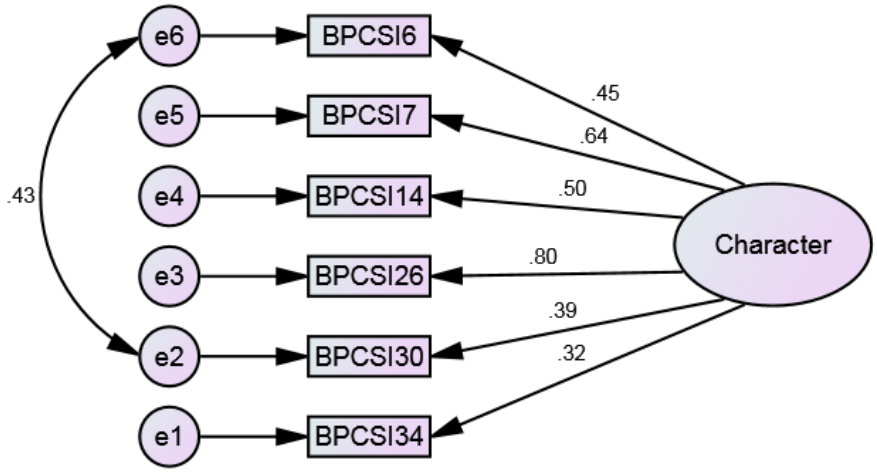


Figure 14. Character model

Self-care also required a slight modification to improve model fit. After connecting error terms 1 and 4 the model had excellent fit values of χ^2/df = .54, TLI 1.032, CFI 1.000, RMSEA .000 95% CI [.00 -.04], and SRMR .023.

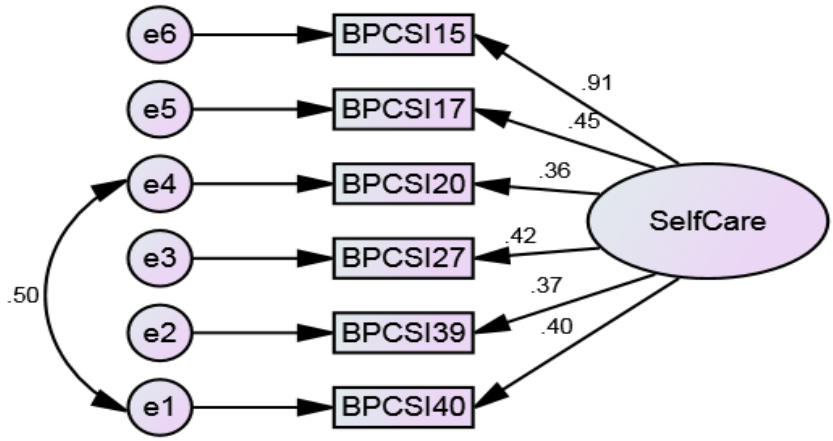


Figure 15. Self-care model

Connection was checked and found high covariance with error terms e1 and e5. After modification of this model values were very good, χ^2/df = 1.23, TLI .990, CFI .995, RMSEA .033 62% CI [.00 -.09], and SRMR .035.

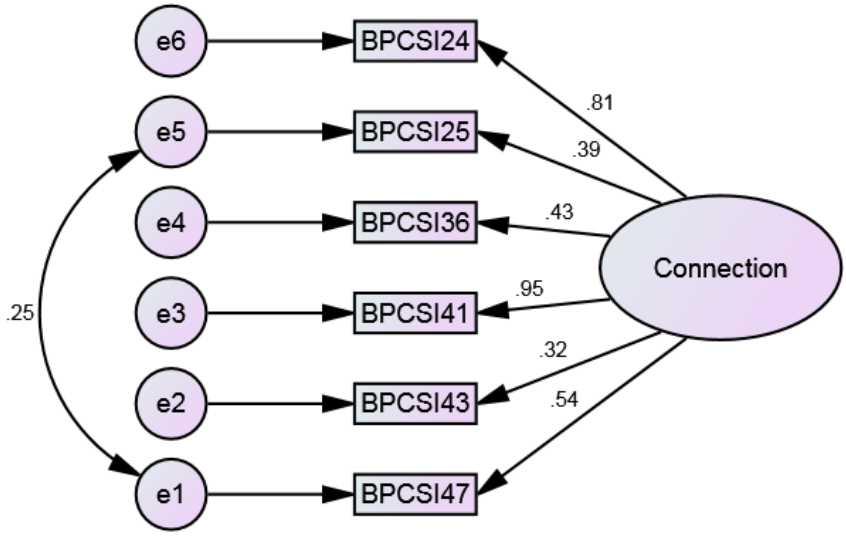


Figure 16. Connection model

Interpersonal skills showed excellent model fit, with values of χ^2/df = 1.46, TLI .979, CFI .997, RMSEA .046 50% CI [.00 -.09], and SRMR .035.

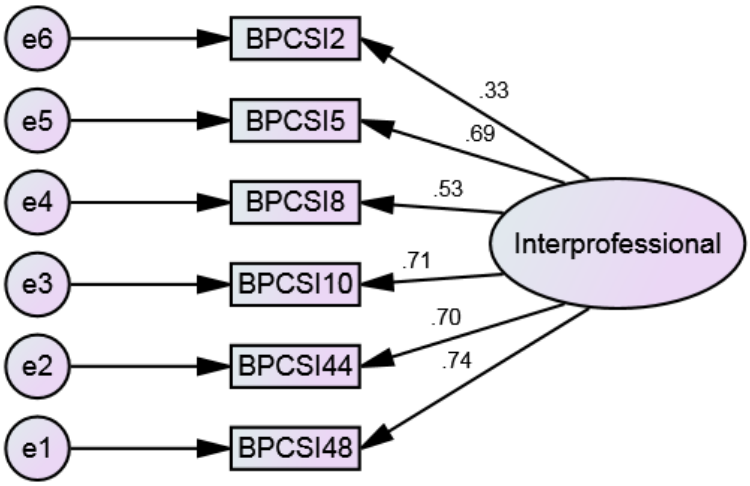


Figure 17. Interpersonal model

The modification indices showed covariance between e1 and e2, e2 and e5, plus e4 and e5 for engagement, which when merged together improved the model, $\chi^2/df = .45$, TLI 1.044, CFI 1.000, RMSEA .000 94% CI [.00 -.05], and SRMR .019.

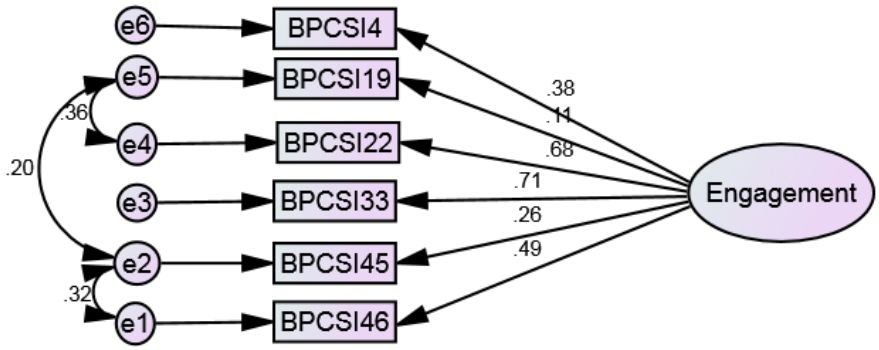


Figure 18. Engagement model

The values for the competence model showed a very good fit, $\chi^2/df = 1.70$, TLI .969, CFI .982, RMSEA .057 36% CI [.00 -.10], and SRMR .034.

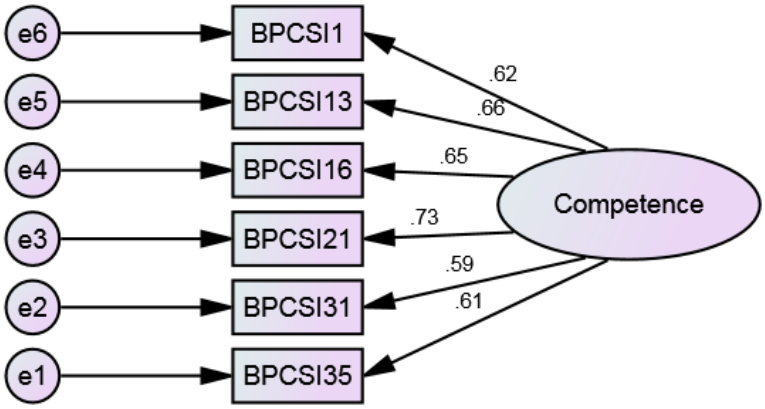


Figure 19. Competence model

For the communication model error terms e2, e4, e5, and e6 were connected. The mode had fit indices that met the recommended criteria, $\chi^2/df = 1.47$, TLI .937, CFI .975, RMSEA .047 47% CI [.00 -.10], and SRMR .039.

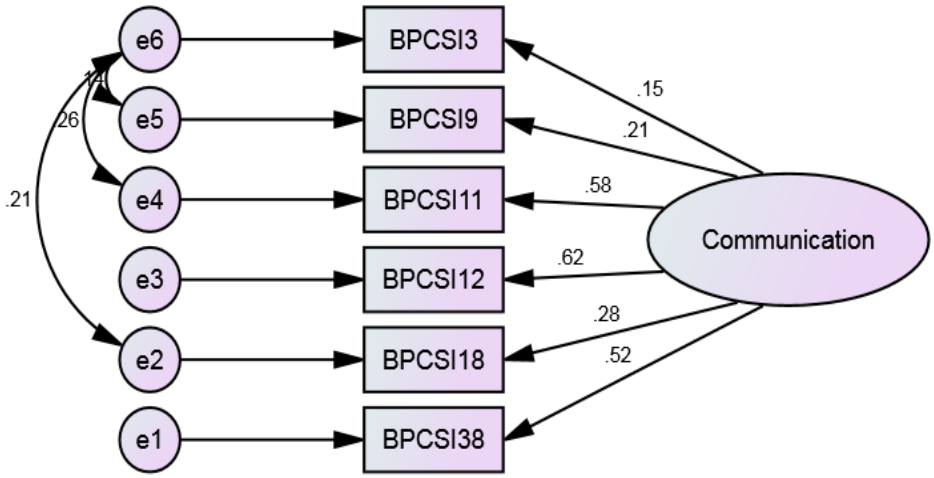


Figure 20. Communication model

Finally, the empathy mode had very good values at $\chi^2/df = 1.65$, TLI .965, CFI .979, RMSEA .055 38% CI [.00 -.10], and SRMR .035.

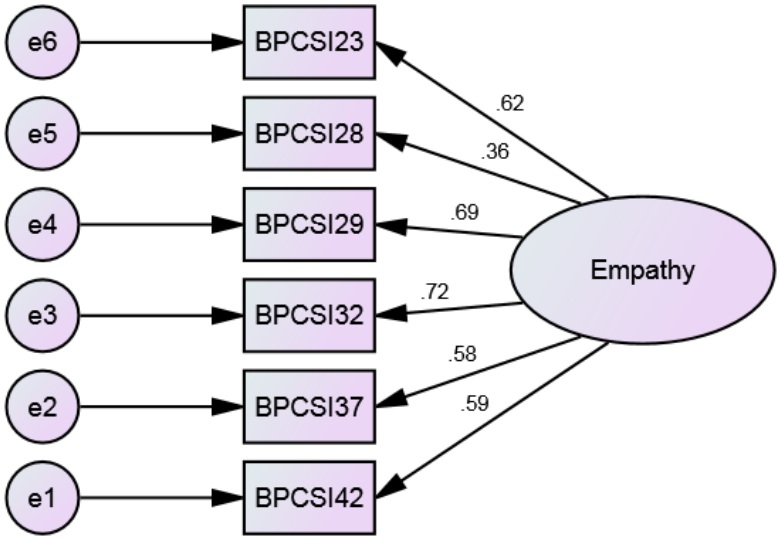


Figure 21. Empathy model

Table 14. Model fit for each separate compassion strength indicators

Indicator	No. of items	χ^2/df	P value	TLI	CFI	RMSEA	90% CI	SRMR
Character	6	.92	.824	1.032	1.000	.000	.00 -.07	.023
Self-care	6	.54	.491	1.000	1.000	.000	.00-.04	.029
Connection	6	1.23	.274	.990	.995	.033	.00 -.09	.035
Interpersonal	6	1.46	.155	.979	.997	.046	.00 -.09	.035
Engagement	6	.45	.840	1.044	1.000	.000	.00 -.05	.019
Competence	6	1.70	.082	.969	.982	.057	.00 -.10	.034
Communication	6	1.47	.183	.937	.975	.047	.00 -.10	.039
Empathy	6	1.65	.094	.965	.979	.055	.00 -.10	.035

Note: χ^2/df = Chi-square/Degree of freedom, TLI = Tucker – Lewis index, CFI = Comparative fit index, RMSEA = Root mean square error of approximation, CI= Confidence interval, SRMR = Standardised root mean square residual.

The factor loadings for each item on the compassion strengths indicators are presented in Table 15 below.

Table 15. Factor loadings of the compassion strengths indicators

	Factor loading
Character (6 items)	
Honesty is an important quality for a *nurse* to have	.45
I try to be as open as possible with patients	.64
I stick to my promises when I agree to help patients	.50
Patients would describe me as showing warmth	.80
Trust is an important part of the caring relationship	.39
I have respect for my patients needs	.32
Self-care (6 items)	
I believe in myself no matter what	.91
I feel in control of my life	.45
When I'm feeling burned out I sooth myself with comforting words	.36
I am confident about the future	.42
My life experiences have prepared me to deal with whatever comes my way	.37
When there are no clear solutions to my problems sometimes fate or God can help	.40
Connection (6 items)	
I enjoy speaking to patients and finding out how they are doing	.81
Respecting the patient is just as important as the care they receive	.39
I feel I am approachable to patients	.43
I take time out to listen to patients' concerns	.95
I do not see each patient as a whole person	.32
I pay close attention to what my patients are saying	.54
Interpersonal (6 items)	
I encourage caregivers to be supportive	.33
I explain symptoms and what they mean to help alleviate any worries patients may have	.69
I develop a shared decision when making a treatment plan	.53
I often take time out to ask patients about the state of their health	.71
I ask patients to discuss any matters about their stay in hospital	.70
I ask patients if they have any problems following what the doctor has recommended	.74
Engagement (6 items)	
I am gentle in my approach to patients	.38
I find people to be the most interesting thing in life	.11
Working with patients energises me	.68
Despite the challenges I gain pleasure from caring for patients	.71
I feel a sense of joy from meeting new people and finding out more about them	.26
Being a nurse serves a greater purpose	.49

Competence (6 items)	
I evaluate care effectively	.62
Where appropriate, I adapt my *nursing* practice to meet unpredictable circumstances	.66
I carry out an effective discharge plan	.65
I prepare patients appropriately for diagnostic procedures	.73
I am able to accurately assess the effectiveness of preventative health advice to meet the patients' needs	.59
I provide relevant and current health information to patients in a way that they understand, and which gives them the option to choose	.61
Communication (6 items)	
I am aware of whether or not a patient's interpretation of something is the same as mine	.15
I like to make small talk with patients at every opportunity	.21
I listen to the complete message before making a judgment about the speaker	.58
Listening helps me understand the speaker's intentions	.62
When patients start talking, I do not interrupt them	.28
I listen to what others have to say when they are talking	.52
Empathy (6 items)	
The ability to imagine myself in another's situation contributes to providing quality healthcare	.62
I believe that empathy is important for the therapeutic relationship between *nurse* and patient	.36
My ability to understand how patients and their families are feeling helps me care for them	.69
I can make my patients feel better when I understand their feelings	.72
I believe that the ability to view things from the patient's perspective can lead to better care	.58
I think that the best way to take care of a patient is to try and understand what they are going through	.59

6.14.3 Model fit for proposed compassion strengths model

After testing for individual model fit it is important to assess the final model with all indicators together for good fit. Good model fit is shown when results match the theoretical constructs using the various fit indices. Further confirmatory factor analysis using maximum likelihood estimation for overall model fit resulted in two models. For model one eight factors were created and six corresponding items that loaded onto each factor. The chi-square was significant indicating poor fit. However, this is an adverse outcome of having large samples (Bentler & Bonett, 1980). Goodness of fit

indices indicated that the model had marginal values of TLI .791, CFI .810. The RMSEA value was .047, 90% [CI .044-.051], which is less than the recommended .08 showing good model fit, and SRMR .061. Although RMSEA and SRMR were acceptable, values lower than .90 for TLI and CFI suggest a need to re-specify the model with post-hoc fitting (Schreiber et al., 2006; Hu & Bentler, 1999; Lance et al., 2006). Multiple items loaded onto various factors that although could be theoretically justified with covariance, were above the recommended minimum number of adjustments deemed statistically plausible for modification. As a result several items and one factor were eliminated from the model, resulting in a 7 factors 19 item model with excellent fit of χ^2/df = 1.79, TLI = .953, CFI = .964, and very good values for RMSEA = .047 [CI = 0.47-.044], and SRMR = .041 (Hu & Bentler, 1999). This can be seen in Table 16.

Table 16. Confirmatory Factor Analysis for the overall models

Model	Factors	No. of items	χ^2/df	P value	TLI	CFI	RMSEA	90% CI	SRMR
1	8	48	1.79	.001	.791	.810	.047	.047-.044	.061
2	7	19	1.26	.023	.953	.964	.027	.011-.039	.041

Note: χ^2/df = Chi-square/Degree of freedom, TLI = Tucker – Lewis index, CFI = Comparative fit index, RMSEA = Root mean square error of approximation, SRMR = Standardised root mean square residual.

6.16 Regression analysis

Multiple linear regression analyses were conducted to determine which indicators predicted overall compassion strengths, empathy, wellbeing, compassion satisfaction, secondary traumatic stress, and burnout. Six analyses were conducted. Predictor variables were the compassion strengths indicators. Backwards regression was used with all predictor variables inputted into the model together and those that did not make a significant contribution removed.

6.16.1 Measures

6.16.1.1 Bolton Compassion Strengths Indicator (BCSI) 48 and 19 item version

The first scale consisted of 8 factors and 48 items, while the second had 19 items and 5 factors. Participants are asked to respond to statements related to specific areas of compassion in nursing on a scale of 1 "*definitely not like me*" to 6 "*definitely like me*". Example of items include "*I feel in control of my life*" (Self-Care), "*I try to be as open as possible with patients*" (Character), "*The ability to imagine myself in another's situation contributes to providing quality healthcare*" (Empathy), "*I take time out to listen to patients' concerns*" (Connection), "*I explain symptoms and what they mean to help alleviate any worries patients may have*" (Interpersonal), "*I am gentle in my approach to patients*" (Engagement), "*I effectively evaluate care"* (Competence), and "*Listening helps me understand the speaker's intentions*"(Communication).

6.16.1.2 Professional Quality of Life (ProQOL) Scale (Stamm, 2009)

The ProQOL Scale consists of 30-items that quantify positive and negative facets of working with trauma. The scale has 3 subscales of compassion satisfaction, compassion fatigue/secondary traumatic stress, and burnout. Responses relate to the

preceding 30 days, with the participant responding to items ranging from 1 (never) to 5 (very often). An example question is; “I feel connected to others”.

6.16.1.3 Toronto Empathy Questionnaire (Spreng et al, 2009)

The Toronto Empathy Questionnaire is a 16-item scale consisting of 8 positively worded and 8 negatively worded items. An example includes “*I enjoy making other people feel better*”. Participants are asked to rate themselves on a scale rating from 0 “rarely” to 4 “always”.

6.16.1.4 Short Warwick Edinburgh Mental Well-being Scale (sWEMWBS) (Tennant et al, 2009)

The *sWEMWBS* is a short version of the original 14-item *WEMWBS*, which consists of 7-items that measure perceptions of wellbeing over the previous fortnight. An example question is; *I’ve been feeling optimistic about the future*. Participants respond on a Likert scale ranging from 1 (none of the time) to 5 (all of the time).

6.16.2 Regression 1. Predictors of Compassion Strengths

The model predicted 87% of the variance (R^2 =. 87) and was significant, F (8, 218) = 173.518, p= .001. Results indicated that self-care was the strongest predictor of compassion strengths (.256) (See table 17).

Table 17. Predictor variables of compassion strengths

	B	S.E	*β*	Sig	95%CI
Constant	13.936	8.030		.084	-1.893-29.765
Self-care	1.085	.115	.256	.001	.858-1.313
Character	1.160	.336	.143	.001	.498-1.822
Empathy	.710	.269	.103	.009	.181-1.239
Connection	.947	.214	.139	.001	.524-1.369
Interpersonal	1.284	.238	.256	.001	.816-1.753
Engagement	.704	.250	.102	.005	.210-1.198
Competency	.853	.201	.190	.001	.456-1.250
Communication	.907	.238	.126	.001	.439-1.375

6.16.3 Regression 2. Predictors of wellbeing

The model predicted 33% of the variance (R^2=.330) and was significant, F (2, 198) = 48.193, p=.001. The results, presented in table 18, suggest that self-care and communication were predictive of wellbeing, with self-care the strongest predictor.

Table 18. Predictors of wellbeing.

	B	S.E	*β*	Sig	95%CI
Constant	7.491	3.0		.016	1.43-13.5
Self-care	.489	.054	.539	.001	.383-.596
Communication	.199	.092	.127	.033	.016-.381

6.16.4 Regression 3. Predictors of compassion satisfaction

The model predicted 47% of the variance (R^2=.469) and was significant, F (3, 183) = 52.997, p=.001. Results indicated that people with higher overall compassion strengths, and those who engaged with patients, such as going the extra mile, were

more likely to experience compassion satisfaction, whilst connection was associated with less (see table 19).

Table 19. Predictors of compassion satisfaction

	B	S.E	*β*	Sig	95%CI
Constant	7.058	3.6		.057	-.200-14.3
Compassion strengths	.118	.024	.491	.001	.071-.165
Engagement	.514	.144	.312	.001	.230-.799
Connection	-.275	.112	-.166	.015	-.496--.055

6.16.5 Regression 4. Predictors of burnout

The model predicted 25.4% of the variance (R^2=.254) and was significant, F (2, 188) = 31.639, p=.001. As displayed in table 20, participants with greater self-care and interpersonal skills had lower scores for burnout.

Table 20. Predictors of burnout.

	B	S.E	*β*	Sig	95%CI
Constant	35.337	2.5		.001	30.4-40.2
Self-care	-.417	.058	-.466	.001	-.531--.304
Interpersonal	-.143	.072	-.127	.049	-.285--.001

6.16.6 Regression 5. Predictors of secondary traumatic stress

The model predicted 7.9% of the variance (R^2=.089) and was significant, F (2, 188) = 9.10, p=.001. Results presented in table 21, suggest participants with a compassionate character had lower scores on secondary traumatic stress, while those with higher engagement experienced more.

Table 21. Predictors of secondary traumatic stress.

	B	S.E	*β*	Sig	95%CI
Constant	33.243	6.1		.001	21.1-46.3
Character	-.905	.21	-.359	.001	-1.33--.475
Engagement	.555	.172	.279	.001	.216-.895

6.16.7 Regression 6. Predictors of Toronto empathy

The model predicted 27.4% (R^2=.274) and was significant, F (4, 190) = 17.559, p=.001. Results indicate that higher engagement and empathy predicted higher scores on the Toronto empathy questionnaire. However, connection was associated with a reduction in scores, as can be seen in table 22.

Table 22. Predictors of Toronto empathy

	B	S.E	*β*	Sig	95%CI
Constant	39.1	4.9		.001	29.4-48.8
Engagement	.534	.152	.294	.001	.235-.883
Empathy	.473	.165	.261	.005	.148-.798
Connection	-.336	.147	-.174	.024	-.626—0.45

6.17 Study 5: Convergent and discriminant validity of the BCSIs

It was important to verify the relationship of each scale with other similar constructs such as empathy, compassion satisfaction, burnout, secondary traumatic stress and wellbeing. It was predicted that The Compassion Strengths Indicator would correlate with the ProQOL, Toronto Empathy Questionnaire, and short Warwick Edinburgh Mental Wellbeing Scale.

6.17.1 Gender differences

Research suggests that women score higher on measures of empathy than men. Indeed, females in general tend to exhibit more emotional traits like empathy and compassion than males (Davis, 1987; Eisenberg &Lennon, 1983; Gleichgerrcht & Decety, 2013; Toussaint & Webb, 2005). Studies also show that in comparison, female nurses have a greater capacity for empathy than males (Becker & Sands, 1988; Ferri et al., 2015; Ouzouni & Nakakis, 2012). Based on this assumption, it was predicted that female participants would score higher on Overall Compassion and the Empathy subscale.

6.17.2 Results

6.17.2.1 Professional Quality of Life

As predicted total scores on the 48-item BCSI correlated moderately and positively with the compassion satisfaction subscale, yet negatively with burnout. There was also a negative relationship with secondary traumatic stress, but this was non-significant. As was expected, all subscale scores on the BCSI correlated positively with compassion satisfaction, and apart from connection, negatively with burnout. Only character and communication shared a significant and negative relationship with secondary traumatic stress. This suggests that those with greater compassion strengths experience less burnout, more compassion satisfaction, wellbeing, and empathy (See table 23).

6.17.2.2 Toronto Empathy Questionnaire

Similarly, there was a positive correlation between the total BCSI and TEQ. Furthermore, aside from self-care all other subscales shared a significant and positive

relationship to empathy. This indicates that an individual's compassion strengths are very similar to the construct of empathy.

6.17.2.3 Short Warwick and Edinburgh Mental Wellbeing Scale

As expected, total BCSI and subscales correlated with mental wellbeing. Although positive, connection was the only non-significant factor. These results indicate a relationship between developing compassion strengths and improved wellbeing.

Table 23. Correlations between the Compassion Strength Indicators and other measures.

	ProQOL-CS	ProQOL-STS	ProQOL-Burnout	TEQ	sWEMWS
CompStrengths	.638**	-.102	-.343**	.453**	.339**
Self-care	.267**	.004	-.449**	.133	.560**
Character	.559**	-.188**	-.233**	.388**	.229**
Empathy	.491**	-.050	-.201**	.419**	.276**
Connection	.249**	-.041	-.023	.150*	.073
Interpersonal	.517**	-.113	-.213**	.361**	.139*
Engagement	.610**	.051	-.244**	.431**	189**
Competence	.529**	-.128	-.206**	.348**	.196**
Communication	.430**	-.186**	-.192**	.384**	.224**

**p=<.001, *p=<.010 (two-tailed)

Surprisingly, convergent and discriminant validity for the 19 item scale did not follow predicted patterns. The total score was non-significant, negatively correlated with empathy, compassion satisfaction, empathy and positive with burnout and secondary traumatic stress. Based on this result all other studies were conducted with the overall 48 item and individual Compassion Strengths Indicators.

6.17.2.4 Gender differences

Contrary to previous research, there were no significant differences between male and female participants on measures of empathy and total compassion strengths. Although, females did score slightly higher than males on both the Toronto Empathy Questionnaire and the BCSI Empathy subscale, males reported higher scores overall for Total Compassion Strengths.

6.17.3 Construct validity

Pearson correlation coefficients assessed the construct validity of the BCSIs (Table 24). There was high correlations between each of the factors and total scores, self-care (r=.482, p=<.001), character (r=.835, p=<.001), empathy (r=.783, p=<.001), connection (r=.585, p=<.001), interpersonal skills (r=.843, p=<.001), engagement (r=.781, p=<.001), competence (r=.805, p=<.001), communication (r=.703, p=<.001). This suggests these factors are measuring an overall concept of compassion. Subscales are scored by totalling the individual item responses for that factor with higher scores indicating a strength in that area. A total compassion strengths score is obtained by adding together scores from each subscale.

Table 24. Construct validity of BCSI

	1	2	3	4	5	6	7	8	9
1. Self-care	1								
2. Character	.251**	1							
3. Empathy	.257**	.690**	1						
4. Connection	.028	.515**	.564**	1					
5. Interpersonal	.185**	.645*	.558**	.420**	1				
6. Engagement	.333**	.644**	.604**	.385**	.602**	1			
7. Competence	.214**	.609**	.482**	.339**	.817**	.546**	1		
8. Communication	.150*	.592**	.526**	.403**	.525**	.494**	.527**	1	
9. Strengths Total	.482**	.835**	.783**	.585**	.843**	.781**	.805**	.703**	1

**p=<.001 *<.010 (two-tailed)

6.18 Chapter Summary

The aim of this study was to develop and validate a set of measurable indicators for compassion strengths. Overall, the results provide support for the psychometric properties of the BCSIs. Results from each study provide evidence for the construct validity of the BCSIs as a reliable measure of compassion, as well as validity for the eight characteristics of a compassionate nurse identified in previous studies (Durkin et al., 2018). In support of validity, the scale was developed based on the views of key stakeholders in nursing. Initial items were assessed for face validity, endorsement frequency and item discrimination. Additional feedback from a team of experts in the field of nursing provided support for the initial content validity of the scale. In evaluating the scales reliability, use of Cronbach's alpha suggested that each subscale and overall compassion strength score had good reliability. Despite the multidimensional compassion strengths model only meeting two of the accepted values for goodness-of-fit, assessing the subscales as several unidimensional models of compassion indicators, revealed that each performed better this way. In addition, Structural

Equation Modelling showed that each predicted compassion strengths overall, with self-care the strongest predictor. Regression analysis supported the validity and reliability of the Compassion Strength Indicators. Results from the test-retest demonstrated that there were significant changes in scores on the BCSI overtime apart from character, empathy and communication.

The fact that there was no significant difference on the factors character, empathy and communication may be because they are strong nursing attributes that remain stable over time. The significant increase in scores for total compassion strength competence, interpersonal skills, and of engagement suggested improvements in these areas. The student's involvement in clinical practice or the content of the lectures between scale administration times could be reasons for this. As student's progress through their studies, the likelihood that they will become more competent also increases.

The decision to make this a strengths based model was based on the idea that compassion is not simply something that one either does or does not have. Moreover, as was alluded to in the interviews and focus groups, when considering the demanding environments nurses work in, and the contextual factors that can affected compassion, a strengths model seems highly appropriate. If an individual were to measure themselves and score themselves low, this would indicate that they might need to work on this area to build their strengths, rather than their overall compassion. To suggest that someone is lacking in compassion seems vague and unhelpful, especially if this person is expected to improve their abilities. Knowing that one has strengths in a particular area of compassion, may help them focus their attention in the areas that need more work. Alternatively, low scores could indicate that the person is affected by a work related or personal issue that while transient in nature, is affecting their ability

to perform to their best. The thinking behind this is that the indicators would serve to assist in identifying strengths, but also areas that could be improved, as well as the wider contextual issues that might hinder compassion from flourishing.

A limitation of this could be that those scoring low on the scale could be singled out for not being compassionate based on a solitary measure at one single point in time. However, it is the intention of the scale to be used to track changes over time and identify factors that might improve or reduce compassion in nursing students.

During this process, I became “savvy” to the fact that even though they were at the beginning of their studies, some of the participants had given themselves high scores on all items. I was aware that my presence could have influenced them to provide these scores to look favourable to me as a researcher. Equally, I thought this could also indicate the pressure students feel under to be compassionate, so much so that they would present themselves in a positive light. Notwithstanding this, I questioned my judgement of them based on the little knowledge of their pasts, and how they may have previous healthcare experience to draw on where they had demonstrated compassion. This challenged my initial assumptions that prior to starting the course, all students would have very little experience of compassion and would therefore score low overall on the scale.

Similarly, during the validation process, students raised concerns over the idea of love as a guiding factor in compassion. Some of the participants felt uncomfortable with the concept of love, and as a result of this and the psychometric processes followed, it was included but did not make it into the final scale. After discussing this with participants and reflecting on how the concept of love can have multiple meanings, I was cognizant of, as was the case in this study, it is often associated with romantic

love. This made me think about the importance of including an understanding of the difference in nursing programmes to inform students and educate them to be more comfortable with a love for mankind as a guide to their compassion.

6.19 The META model

This chapter has also provided an overview of the *Measure* section of the META model. Nurses and nursing students can use the BCSIs to discover where their strengths lie, and which elements need to be developed. The following chapter discusses the online learning course that accompanies the scale to help nurses build and *Try out* their compassion strengths.

Chapter 7. Development and Evaluation of the Compassion Strengths Builder Online Nurse Education (CSBONE)

"*Happiness is a skill, emotional balance is a skill, compassion and altruism are skills, and like any skill they need to be developed. That's what education is about"* - Matthieu Ricard

7.1 Introduction

This chapter begins with an exploration of the current research aimed at teaching compassion to nurses and nursing students. A detailed account of the development stages of the CSBONE are discussed. It then reports on the findings of three studies that evaluated the effectiveness of the CSBONE and BCSI at measuring and assisting nursing students in their understanding and demonstration of compassion in practice.

7.4 Articulate

Articulate is a content creation software package to build online learning courses. It lets developers create interactive educational packages that include the option to add images or video recordings without the need for a professional web developer. Articulate Storyline was used to create the CSBONE package. Storyline uses a similar design interface as when creating PowerPoint, such as slide templates and themes. Among its many features, it allows for the creation of interactive videos that can be uploaded onto the slides to transmit real-life scenarios to leaners. Another helpful feature is hotspots. Hotspots can be placed in specific points to help learners explore and identify parts of the image. Designers can either use the built in character images, or upload their own photographs (Articulate, 2013).

7.6 The development of the Compassion Strengths Builder Online Nurse Education (CSBONE)

Percy and Richardson (2018, p. 204), state that "*nurse education needs to equip nurses with the skills to cope with the environment but also instil the traditionally accepted strengths of what makes a nurse*". Using the eight compassion strengths as a foundation, an online modular learning course was created to assist nursing students in their understanding and demonstration of compassion as a strength.

7.7 Pedagogy of online learning

It has often been assumed that learning is influenced by individual learning styles (Cassidy, 2004). Based on the idea of multiple intelligences, learners have different characteristics that direct their approaches to learning. However, a number of recent articles have challenged the theory behind individual learning styles, finding no evidence that individuals have a distinct style of learning (Pashler et al., 2008; Roher & Pashler, 2012). Rather, individual learning styles relate to how a person likes to learn and not how they learn best. Nevertheless, there are a number of learning theories associated with the design and use of online learning interventions that must be considered.

7.8 Learning theories associated with online nurse education

Learning theories originate mainly from psychology and educational theory. Where psychology explains how people behave, education describes the learning process and how people make sense of the world. According to Sandera et al (2013), the four main learning theories associated with online learning environments in nurse education are, behavioural, constructionist, social interaction, and problem-based learning (PBL) theory. Behavioural theory comes from the early work of behaviourism,

where learning occurs as a result of the connection between stimulus and response and was influenced by Ivan Pavlov's classic conditioning (1849-1936) before being introduced into education by Edward Thorndike (1874-1849). Following this, B.F Skinner (1904-1990), worked on what came to be known as operant conditioning, where desirable behaviours are rewarded, and undesirable ones ignored or punished. Larger bits of information associated with the behaviour are usually provided by the teacher in small bitesize chunks for the students to learn then presented back to be assessed for correction, before moving on to the next (Sandera et al., 2013).

While in traditional learning, knowledge is transferred to the learner, constructivist theory, is based on the epistemology that learners gain new information by constructing meaning from the world around them. Thinking about what the new information means to them relative to existing schemas that they hold informs the learning process. This way learning becomes an active process of action, reflection, and the application of new knowledge with current information (Boghossian, 2006). Pragmatically, the learner becomes an active participant in their own individual learning journey, making sense of and gaining new knowledge with each subjective experience.

Alternatively, learning can be increased when it is done with others through social interaction. Social interaction relies on a process of thinking about new knowledge, but in collaboration with others rather than individually to achieve an academic goal. This stems from the work of Vygotsky (1978), who believed this to be a requirement for development and learning. Through what Vygotsky referred to as the Zone of Proximal Development (ZPD), the learner solves problems and reaches their intellectual goals with the guidance of a more experienced teacher (Bentham, 2002). Studies show that, students who engaged in collective learning with others, and in social interaction with

instructors, outperform and experience a greater learner satisfaction on problem based tasks compared to those who do not (Jung et al., 2002; So & Brush, 2008).

Problem-based learning (PBL), was developed in the 1970's as a general model to assist medical students' and involves the presentation of real-life problems from practice that the leaner must solve as their learning goal (Kilroy, 2004). To stimulate an understanding of newly acquired knowledge information that the student is already aware of is put into a realistic context. This helps foster appropriate behaviour in practice, bridges the theory/practice gap and provides the skills for life-long learning in health and social care. First, students work together collaboratively to identify the problem and what they can do as individuals to solve it. Then, through self-directed learning, students can explore the problem independently, before returning to the group to reflect on what they have found and applying this knowledge to provide a solution (Hmelo-Silver, 2004).

Constructivists theorise that learning is guided by the students and as such they develop the learning objectives, and is applicable to online education (Legg et al., 2006). As nursing relies on the educator instructing students and rewarding them on accomplishment of specific behaviours, such as with clinical simulation skills behaviourist theory is arguably the more dominant approach in nurse education (Larew et al., 2006). When combined they create what is called guided constructivism (O'Neil, 2013a). Likewise, Aliakbari et al (2015) recommend that nurse educators should incorporate the many theories available to them. Therefore, a guided constructivism approach was critical in the development of this online tool as it contains elements of both behaviourist, in that the researcher developed the content, and constructionist theory, due to the process of knowledge construction of the content, underpinning the overall objective of the intervention Furthermore, as shown

above, in PBL, the aim is for students to apply the knowledge they have acquired from the content and apply it to real life situations. Thus, this course also included aspects of problem based learning.

It is also worth noting here the importance of non-formal and tacit knowledge in professional work and its relevance for the explicit demonstration of compassionate care. Quite often knowledge about concepts such as compassion are thought of as being implicit in a nurse's natural behaviour, or formed by lived experience, and the meaning treated as being universally understood. However, as Eraut, (2000) points out, while there certainly is some truth in this claim, under cognitively difficult circumstances, the ability to demonstrate the actions associated with this knowledge can become stretched. For example, when presented with new information, such as in the form of a patient presenting with issues unfamiliar to the nursing student, adaptions to the learning processes are required to resituate present knowledge into a new context. Another example of this can be seen in those who overtly make the claim that they are a compassionate person, but have very little, if any, experience of what that means in a care setting. Arguably then, before such knowledge becomes implicit, during the early stages of their training nursing students must engage in learning, where deliberate goals are set for learning opportunities, decisions made, problems solved and experiences reflected on with situational and contextual knowledge, to form a fully coherent understanding of the actions of the concept in question.

Although not specifically related to online learning, Benner's (1982) work on skills development is relevant for the purpose of the study. Here skill development is considered a process from novice to expert in the acquisition of nursing competency. Nurses transition from a novice where they begin with little or no experience of

situations or the concrete tasks they are expected to perform in practice. To introduce them to these tasks they are taught about them in a situational experience, such as measuring blood pressure. Next, the advanced beginner is someone who has enough real life experience of actual situations to recognise meaningful aspect and recurring patterns in clinical practice to support patient care. After this, the next stage is where the nurse can be considered competent. This usually takes up to three years and is characterised by feelings of mastery, the ability to cope with the many demands of practice and patient care. If the nurse moves forward from this stage, with practice they can become proficient, in that experience teaches the nurse to perceive situations as wholes and what to expect in typical events. Taking this further the nurse becomes an expert. At this stage, with a vast history of experience, the expert nurse no longer relies on guidelines to address the situation with appropriate action. Rather they have become more attuned to the situation and intuitively know what to do.

Based on these same principles it could be argued that the same pattern could be applied to compassion in nursing given a model to guide this could be established. For example, novice nurses who consider themselves compassionate, may not possess the relevant experience of demonstrating it with patients. Thus, a visual scenario may be a way of introducing the novice nurse to such situations that call for compassion. For those who wish to understand it more fully, a conceptual framework can act as guide for their learning. Taking this further, once the basic principles have been learned the nurse can apply these to real life situations, and adapt their knowledge to the situation at hand, until eventually reaching a level of competency where compassion is applied intuitively to patient care situations.

Similarly, the theory of deliberate practice is a framework for developing focused practice to improve a particular skill. It has been described as the repetition of a

number of common skill processes that experts engage in to achieve high levels of performance. In studying the training of expert chess payers and musicians Ericsson et al., (1993) noted that they were motivated to attend to the task, that the task should consider the pre-existing knowledge of the learner so that it can be understood, the learner should receive immediate feedback of their performance, and that the individual should repeatedly perform the same or similar tasks. While some can achieve a high level of skill autonomously with continued experience in practice, some will at some stage in their career begin to doubt their ability to perform the task (Ericsson, 2008). Deliberate practice can pose many benefits for simulated learning in nursing because clinical skills require nurses to be improve and increase their knowledge and understanding of skills (Clapper & Kardong-Edgren, 2012). It has been found to lead to a positive student learning experience among healthcare workers developing their interprofessional communication competency (Yeh et al (2019).

According to Gonzalez et al., (2017. p12) "*ideally, nursing students should be given appropriate pre-reading, videos, and other materials before class. A baseline skill test is then given; this could be both a brief written examination for knowledge, so that students arrive with some prerequisite knowledge and/or a baseline psychomotor skill examination scored with a checklist or rubric (faculty should expect these results to be poor, and this is normal). This same baseline examination is used again at the end of the educational intervention as the final mastery learning examination".* Thus, critical reflection can prompt the learner to think about how well they can perform the task at hand. This along with the measure of compassion provides feedback that can trigger them to explore ways in which they can improve in this area. After this, the learner can immerse themselves in the practice experience both in real life and simulated practice, repeating the behaviour until it becomes second nature.

Arguably, this could be used to develop and upgrade compassion skills in nursing students. Although elements of deliberate practice, such as reflection and use of story, have been applied to one previous study into compassion (Adamson & Dewar, 2015), research on this seems scarce in online learning.

7.9 Elements of design in virtual learning environments

When creating learning environments, it is the role of the designer to provide, safe, supportive environments that are motivating for the learner. In nurse education Xu (2016), suggests that content should include literature, videos, and other useful resources, if learning is to be effective. They must also include behaviours that are clearly stated, measurable, and engage nursing students in the learning process via interaction and meaningful learning. A set by step guide for designing online learning was used to develop the BCSBONE (O'Neil, 2013b).

7.9.1 The target population

In the first step, the design must consider the target audience and at what level the content will be presented. For instance, first year undergraduate nursing students would need a different course structure to Registered Nurses. They may also have little experience with online learning. A structured approach and the possibility of a grade for participation are recommended. Language was also at an understandable level for undergraduate nursing students. Consideration was given to the process in which the learner progresses through the learning experience, and if that it would be either self-paced, or administered to a group.

7.9.2 The purpose

The purpose and objectives of the online learning activity were stated clearly from the outset, describing what was expected of the learner. This was stated in the Introduction to the Compassion Strengths Developer module. It included what was expected of them when using the tool and what they should expect to learn. A similar description of the learning outcomes was added at the beginning of each module. An overview of the course was given in the introduction module and included definitions of compassion, the difference between compassion and similar concepts plus why compassion was important for nursing.

7.9.3 Course organisation

The course organisation was guided by the question "*what is the best way to present the content for the learners to learn*?" (O'Neil, 2013, p.77). Although there is no right or wrong way of answering this, a clear rationale when making decisions helped with the design process. It was created so that learners could find it easy to navigate through, and the design structured in a way that content built on from previous course content. The course was designed specifically for self-learning using appropriate language and not too technical navigational procedures.

Content

Content was "chunked" into logically flowing units so that learners could understand what they were learning and why. Content included eight modules based on the compassion strengths. Each module contained the following format, described in the compassion strength example for self-care below. After the initial background stages, good and bad examples of each strength were presented using images produced in a clinical simulation suite. Rather than display examples of good or bad self-care, the

symptoms of compassion fatigue and burnout were shown using interactive images with nursing staff. The final page contains a link to a selection of resources associated with each strength. The first slide on the module has the headline "*What is self-care*"? Background information for what is meant by self-care is presented in bullet format. In the next slide, "*The different types of self-care*" presents a number of activates ranging from physical to the spiritual for the learner to become accustomed with. Next, reasons "*Why self-care is important for nursing*" based on current research are summarised. The next shows an *example* slide of the symptoms of burnout and compassion fatigue. Following this, "*The link between and self-care and compassion*" identifies the main elements from the literature to explain the link. An example of this shown in figure 23.

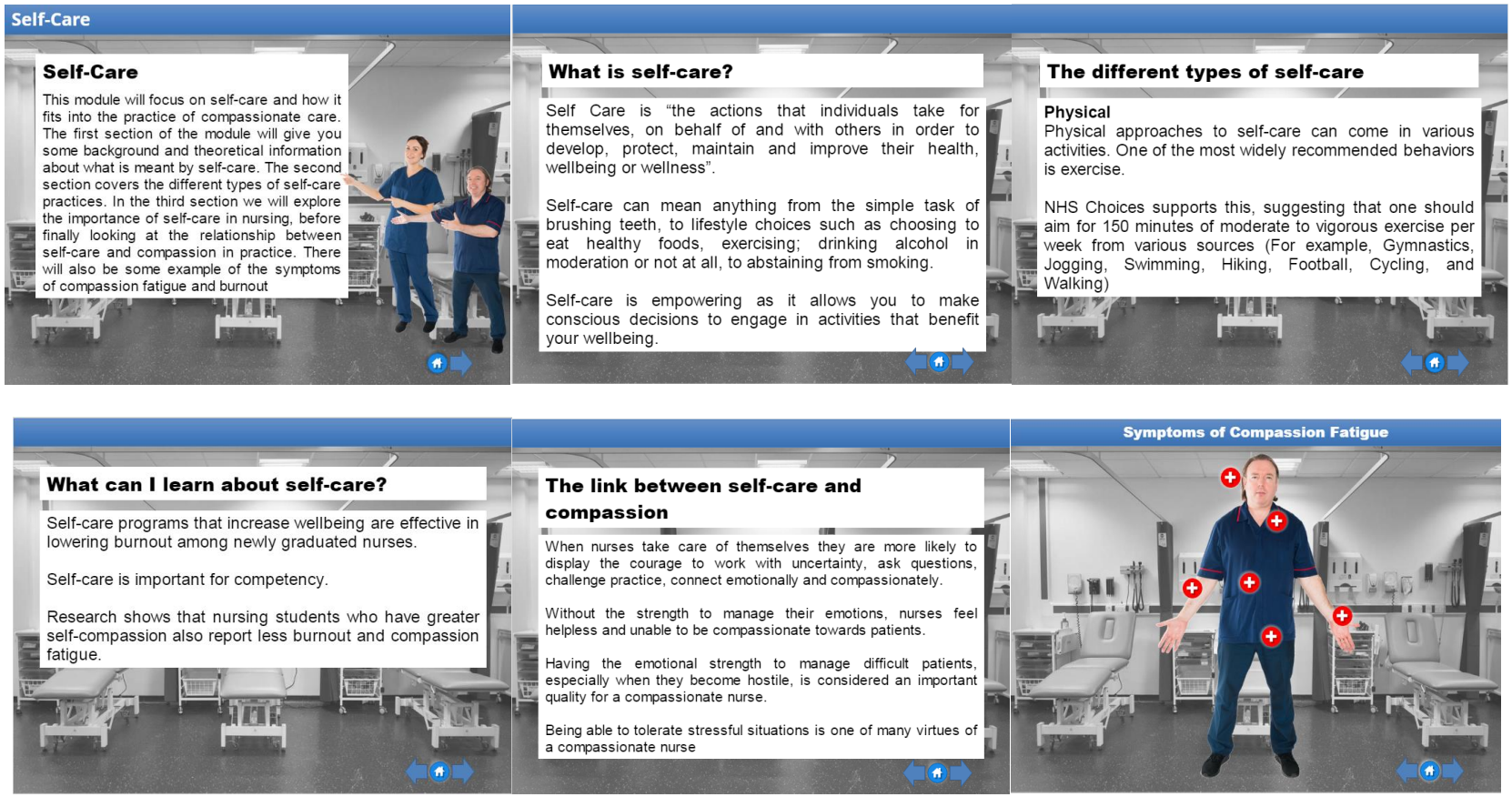


Figure 22. Screenshots of self-care module in Articulate

Design

The design of the course helps to structure how the content will be delivered. This stage involved the navigation and design of the learning environment, including links to the menu and navigation portals that guide learners to the relevant materials. During the design stage each module was presented in titled blocks, situated in the centre of the home page.

Activities

Activities support the learner as they progress through the content material, and contained examples of real-world experiences, that were used in conjunction with active learning strategies. Scenarios were developed based on real life stories from the field of nursing. Nurse educators provided case-study accounts of their experiences in practice. As the online tool also included eight video recorded scenarios, a separate section with the related content was created. In a similar format, learners were presented with a background to the scenario slide that had in its information about the patient, the scenario itself, and a slide with six reflective questions.

Multimedia

Multimedia presentations provide learners with the opportunity to learn using alternative methods to text only approaches. To engage nursing students in the learning process, and help them understand compassion in practice, reflective activities were added at the end of each video and at intervals throughout the point of view (POV) scenario. In this study, all written content was audio recorded and added into the programme to assist those who prefer audio presentations.

7.9.4 Navigation

As a rule of thumb, a three-click rule to get the learner to where you want them to go is recommended. This helps control the flow of information being presented and took the form of an image, graphic or text. Placing the navigation tools consistently in the same location on each page helped with this process. Right and left, *navigation* arrows and a "*home*" symbol were placed in the bottom right corner of the page and a return to main page symbol on the left.

7.9.5 Page layout

To remain consistent throughout the programme, each page contained the same layout, colour, background, fonts, text, and navigation cues. It was presented in a professional manner that reflected the organisation, with little clutter, yet slick enough for learners to use. The page layout, was kept to a similar consistent style, included a university logo, images of two staff members, and a black and white photo of the clinical simulation suite as a background. This added depth to the content and created a realistic feel to the course.

7.9.6 Interaction

Synchronous interaction refers to collective participation with others in the online learning environment. Participants were given the option to communicate with the developer, each other and staff through Moodle. Due to the design of the intervention being aimed at self-learning, interacting was reserved for emails and additional content information on the Moodle site that hosted the Articulate package.

A successfully designed online learning course should include active learning that makes good use of the supporting literature (O'Neil, 2013a). The results of the

thematic analysis and other research helped to guide the responses to the above questions and fulfil the design requirements for the CSBONE. Included in the design was reference to the literature on compassion in nursing. The aim of this being that it would support the claim for each of the strengths outlined in the modules, and help students make the connection to compassion. Once these questions had been answered, the focus shifted to the next stage of the production phase of the design using the Articulate e-learning software package.

7.10 Production phase

A course design model developed by Margaret Chambers was used to guide the production phase of the CSBONE. Phase one focused on the initial development of the intervention, while phase two attended to the early development and testing of the product, and phase three the launch and pilot of the final product (O'Neil, 2013).

7.10.1 Phase one:

Mapping

Mapping helps identify the *goals*, *issues*, and *constraints* associated with the product. The *goal* of this study was to create an online interactive course using the VLE in Articulate Storyline, to assist nursing students in their understanding and demonstration of compassionate care. In the initial stages, potential *issues* and *constraints* considered prior to the design were, student accessibility to the final design, motivation for students to engage in the programme, and the time frame between the development and course launch with the new intake of nursing students.

Architecture

At stage one, the initial brief should be reconceptualised and restricted into modules. Designs were drawn out and each module mapped out before creating the final design outlined earlier in this chapter.

Prototype

Designing a sample module helps to illustrate the design and what the final programme will look like. A sample module was designed in greater detail than in the previous stage.

7.10.2 Phase two:

Early development

In the early development stages, key elements, modules and educational objects were designed that would be used to test students later in the programme.

Studies show that nursing students learn about the needs of patients by simulated exposure to their suffering. This can help develop their communication, interpersonal and competency skills, and prepare them for practice (Jung et al., 2017). Through scenario based learning, nursing students come to understand the many challenges patients encounter and how this affects nursing practice (Johnson et al., 2013). McConville and Lane (2006) found that on-line video clips helped nursing students manage difficult situations, such as breaking bad news, and increase their self-efficacy in providing patient care.

Listening to the patient's testimony of nursing care gives rise to the authentic experience of compassionate care (Bradshaw, 2011), and enriches the nurses understanding of the patient's experience (Straughair, 2012). Furthermore, simulated

Point of View interventions have been used to teach nursing students about empathy and the patient experience (Levett-Jones et al., 2017), helping them understand the experience of vulnerable patients (Levett-Jones et al., 2017). Shuster et al., (2011) found that students formed emotional connections to online characters, which helped raise their awareness of what it was like for patients in the real-life clinical setting. Reflection exercises improve the learners understanding by focusing on what occurred in the scenario and how the patient's story affected the nursing student's interpersonal skills, and compassion (Levett-Jones, 2011; Kim & Flaskerud, 2007; Waugh & Donaldson, 2016).

In support of themes found in the thematic analysis, Newham et al (2017) suggest narratives from film can be used to help nurses understand compassion and care. Learning through the observation of others is an element of social learning theory called vicarious learning (Bandura et al., 1963). Studies indicate that vicarious learning can be more effective than traditional hands on learning when students observe their peers in stimulated interactions with patients (Stegmann et al., 2012). As the interview data indicated, making the scenarios as "real" as possible improves the learning experience. In light of this, real-life stories from practice, of interactions between patients and practitioners were compiled to create the scenarios.

7.11 Development of the real-life scenarios and images

To help in the development of the scenarios, emails were sent to staff instructing them to reply with examples of experiences with patients that included either all or some of the eight compassion strengths. The most relevant of these stories were chosen to be recorded into eight nurse/patient scenarios. For this study, eight scenarios were recorded and uploaded into Articulate. Each video was recorded in the clinical

simulation suite at the University of Bolton. The films were recorded and edited with the support of a Masters student in the University's media department. In total fifteen members of staff from the School of Nursing volunteered their time to play the roles of nurse or patient. The researcher acted as director throughout the recordings.

7.11.1 Scenario one – patient with dog bite

The first scenario included a patient who upon attempting to evade the police after being caught stealing mobile phones, was bitten by the police dog and subsequently brought into receive stitches for his wound. When asked by the patient, the nurse refuses to give him pain relief and leaves the room with him screaming in agony. A senior nurse approaches and asks why the nurse refused the patient care, to which the nurse explains that he had his mobile phone stolen previously and felt that the patient should suffer for what he has done. The objective of this scenario was to highlight the importance of the compassion strength, character. In particular, being judgemental, cold, and uncaring towards the patient, and reflecting on reasons why the patient did what he did. The aim here was to help increase empathy and understanding for the patient and raise awareness of how personal bias can affect who receives care and compassion (Fig. 23).

Figure 23. Patient with dog bite

7.11.2 Scenario two – Nurse spending time with patient

Research suggests that nurses do not always have the time they would like to sit and talk to patients compassionately. This video was created to show how this can be achieved within a very short period of time. In the scenario the nurse arrives early before his shift so that he can spend some time with a patient he was unable to see the previous day because he was busy. The clip has examples of the nurse using compassion strengths such as connection, character, engagement, communication and competency. It also shows that a lot can be done to reassure the patient in a short time and challenges the notion that compassion takes a lot of time to demonstrate with patients (Fig. 24).

Figure 24. Nurse spending extra time with patient

7.11.3 Scenario three – Patient being told he will lose his eyesight

This scenario was based on the clinical procedure that occurred when a patient was informed by the specialist that they were about to lose their eyesight, and what support was available to them. Unlike the other scenarios, the nurse in this recording displays a lack of compassion strengths. The idea behind this being that it would test nursing students' observation skills of what was missing, and what they could do differently in a similar interaction. There is a purposeful lack of empathy, connection and dismissive manner about the nurse when listening to the patient and his wife's concerns, worries and fears. This is to raise awareness of how sometimes when breaking bad news, or discussing difficult and life altering conditions, sensitivity to the patients' needs take precedence over other clinical matters in that specific moment (Fig. 25).

Figure 25. Patient being told he will lose his eyesight.

7.11.4 Scenario four – Compassion fatigue/burnout

The fourth scenario aimed to provide a condensed vision of the stressful environments' nurses work in and the impact this can have on compassion. Working in highly traumatic situations especially when short staffed, can come at an emotional cost to the nurse and eventually lead to compassion fatigue and burnout. Understanding what the signs and symptoms are can help to reduce their effect. In this video, the nurse is seeing to a patient in triage. She displays compassionate communication, empathy, connection and character, before she gets called away to an emergency involving a young child who has been in an accident. Unfortunately, the child dies and with little time to process what has happened the nurse is called away to another emergency. Later, the nurse is back in triage with another patient complaining of a headache.

Despite the headache possibly being serious, and due to her being emotionally drained, the nurse dismisses the patient as being drunk and suggest he takes some paracetamol and goes home. It is clear that the strengths she displayed earlier have gone. This acts as a reminder that nurses also need to focus on their own self-care when work impacts on their emotions, and clinical judgement (Fig. 26).

Figure 26. Compassion fatigue/burnout

7.11.5 Scenario five – Patient with cancer (POV)

In this scenario between nurse and patient, a cancer patient comes into palliative care with her family. She fears dying in the hospital and wishes to be cared for at home. The video is filmed in part from the patient's point of view and is accompanied by an audio recording of her thoughts and fears. Similarly, in a later section, the nurse's anxieties of being presented with the patient's concerns for the first time are also added to her POV. The aim of this scenario and the objectives behind the POV, were to provide students with a sense of the fears and worries patients may have, and to show that despite this being a difficult situation, the nurse can with care and compassion validate the patient's feelings, and that it is okay to be worried in such situations. In doing so, they also alleviate their own concerns about any doubts they might have when facing emotionally charged experiences (Fig. 27).

Figure 27. Patient with cancer POV

7.11.6 Scenario six – Homeless IV drug user

In this scenario, a homeless intravenous drug user is on a hospital ward. Whilst he is going to the toilet, one of the nurses preparing his bed comments on how smelly his shoes are and kicks them away in disgust. On returning, the patient tells her that he heard what she said and proceeds to explain that he wears the same shoes so that he does not get robbed of new ones that people donate to him. He then speaks about the difficulties of being homeless and how a series of events led to him losing everything and him ending up in that situation. While one nurse exhibits care and compassion the other who made the comments does not. The purpose of this scenario was to encourage nursing students to be professional, make wiser judgements about patients, and take a step back before thinking about criticising them. Because it is not

always clear how they have ended up as they are, every patient deserves to be treated as a human being with compassion, regardless of why or what brought them to care in the first place (Fig. 28).

Figure 28. Homeless IV drug user

7.11.7 Scenario seven – Patient moved to a private room

Due to a bed shortage, and despite only having a leg injury, the patient in this scenario was placed on a dementia ward. As the conditions on the ward are not conducive to a good night's sleep, the patient is struggling to get the rest she needs to recover. During the morning rounds she politely asks the nurse if it would be possible to move to a separate room. Showing the compassion strengths of communication, connection, empathy and engagement, the nurse shows understanding to the patient's needs, and without making promises says she will speak to her line manager about a possible

move. When in handover, the nurse explains the situation with the other team members. A decision is then made to transfer the patient to another more suitable room. The purpose of this exercise was to showcase the ways in which a patients' request can be managed in a compassionate manner (Fig. 29).

Figure 29. Patient moved to a private room

7.11.8 Scenario eight – Patient with learning difficulties

In this scenario, a patient with learning difficulties is brought into the hospital with her carer prior to her coming back for treatment. Showing the patient around the hospital and introducing her to as many members of staff as possible, helps reassure her about her stay. The nurse adjusts her speaking tone and uses a level of speech that is understandable to the patient, and with the help of visual aids helps explain what will happen when she comes to the hospital. The aim of this video is to show nursing

students how to adjust their compassion strengths, and their level of understanding to suit different patients (Fig. 30).

Figure 30. Patient with learning difficulties

7.12 Field test

It is recommended that the developer first field tests the important elements of the design with colleagues and students. As the videos were considered critical for the learning process, a short study was conducted with three nurse educators and five third year nursing students. This was later published (Durkin et al., 2018) and the findings presented at an international conference in Valencia Spain (See appendix). Overall feedback from participants was positive. Of all the videos, participants felt that the POV was the most powerful at getting the message across about using compassion strengths with patients. They also felt that the scenarios were an

innovative way of helping nursing students understand the patients' needs and how to attend to them with compassion. All agreed that the videos could also help qualified nurses become more aware of compassion strengths in practice.

7.13 Late development

In the late development stage, all the material was completed and added to the online course. For this study, the aforementioned content, example images, resources and recorded scenarios, were added into Articulate then uploaded onto the University Moodle Virtual Learning Environment platform.

7.14 Phase three of the production process:

7.14.1 Institutional launch

In the institutional launch section of the production phase, it is recommended that developers attend to the course listings, promotion and registration to the online learning course. The CSBONE was part of a PhD research project, and as already mentioned earlier in this chapter, the launch of the course was done during lectures with nursing students. Further promotion to encourage participation in the programme was done via email and Moodle.

7.14.2 Pilot course delivery

Teaching the course online with external peer reviewers is suggested for the pilot course delivery. The CSBONE was taught with nursing students who acted as the initial peer reviewers by providing reflective accounts on the efficacy of the course. Additional teaching sessions that include registered nurses could be expanded on in future applications, and the impact evaluated.

7.14.3 Revision

Revision entails modifying and updating the course after the initial launch and pilot. In the case of the CSBONE, the findings of this study helped inform the next stage on the process and continued refinement of the online course.

7.15 Evaluation of a brief compassion strengths intervention using the META model.

The purpose of these studies was to evaluate the effectiveness of the BCSI and CSBONE at helping nursing students in their understanding of, and ability to demonstrate compassion in practice. An objective was to recruit a sample of nursing students from the University of Bolton to participate in the studies. The initial target group was first year pre-registered adult nursing degree students on a care and compassion course at the University of Bolton. An additional group of third year nursing students were recruited for the pilot study (Table 25).

Table 25. Overview of participant sample in the three studies

Group	Number of registered learners	Number of learners who participated online
Pilot	8 (100%)	N/A
First year nurses Feb2018	N=70 (63%)	N=24 (34%)
First year nurses May2018	N=49 (89%)	N=49 (100%)
Total	N=119 (74%)	N=73 (61%)

7.16 Ethics

Ethical approval was granted by the School of Education and Psychology Ethics Committee at the University of Bolton in line with the British Psychological Society's Guidelines for Human Research (BPS, 2016).

7.17 Methods

The Bolton Compassion Strengths Indicators (BCSIs) was used to collect the quantitative data for this study. This scale has 8 factors and 48 items. Nursing students scoring high on each indicator are predicted as having greater overall compassion strengths. Participant response statements are associated with compassion in nursing and are scored on a scale of 1 "*definitely not like me*" to 6 "*definitely like me*". Items include statements such as "*I feel in control of my life*" (Self-Care), "*I try to be as open as possible with patients*" (Character), "*The ability to imagine myself in another's situation contributes to providing quality healthcare*" (Empathy), "*I take time out to listen to patients' concerns*" (Connection), "*I explain symptoms and what they mean to help alleviate any worries patients may have*" (Interpersonal), "*I am gentle in my approach to patients*" (Engagement), "*I effectively evaluate care"* (Competence), and "*Listening helps me understand the speaker's intentions*"(Communication).

The Nursing and Midwifery Council (NMC) Reflective Accounts Form was used to collect feedback from participants (see appendix).

The NMC reflective accounts form is a four item document that nurses and nursing students complete at different stages throughout their practice. They are asked to record five written reflective accounts based on Continued Practice Development (CPD) and/or practice-related feedback, or an experience in practice that relates to the NMC Code. It contains four reflective questions:

1. “What was the nature of CPD activity and/or practice-related feedback and/or event in experience in your practice?”
2. “What did you learn from the CPD activity and/or feedback and/or event or experience in your practice?”
3. “How did you change or improve your practice as a result?”
4. “How is this relevant to the Code?” This includes four themes, (1) prioritise people, (2) practice effectively, (3) preserve safety, and (4) promote professionalism and trust.

As nursing students use this form from the start of training and throughout the rest of their career, making it part of the research would accustom them to the process of reflection using the standard form for UK nurses. The questions were also relevant to evaluate the CSBONE.

7.18 Data analysis

To examine the effects of the course on nursing students’ compassion strengths over time and between groups a number of analyses were performed. Data from both groups were analysed separately using paired samples t-tests. The February group were assessed at pre-assessment and again at follow up. Participants in the May group completed the assessment at three time points, pre-assessment (prior to starting the course), post-assessment (after completing the course), and 5 months later at follow up (upon returning from their first clinical placement). Multivariate ANOVA (MANOVA) was conducted to establish any differences between the groups.

A mixed analysis of variance (ANOVA) was also conducted to test for changes in scores over time across the group, with added Bonferroni corrections to reduce the

chance of type 1 errors occurring. All data met the assumptions to continue with both the MANOVA and ANOVA.

Effect size was measured by partial eta squared (η^2p) within ANOVA and MANOVA, and Cohen's *d* when calculating t-tests. For partial eta squared, values between 0.01 and 0.06 reflect a small effect size, 0.06 to 0.13 a medium effect size, and 0.14 or higher large. For Cohen's *d* an effect sizes of 0.2 is considered small, 0.5 medium, and 0.8 large (Cohen, 1988). Data were analysed using SPSS v. 23 (IBM Corp., USA). In addition, participants were asked to complete an NMC reflective account for how the intervention impacted their clinical practice and submit this at the end of placement.

It was predicted that there would be a significant increase in compassion strengths indicators in the group using the online course.

7.19 Pilot study

A pilot study was conducted with nurse lecturers and third year nursing students to evaluate the content, and effectiveness of the scenarios as tools for developing an understanding of compassion in nursing.

7.19.1 Participants

Emails were sent to nurse lecturers inviting them to take part in the research. They also included a request to approach third year nursing students during lectures for recruitment into the study. A convenience sample of nurse educators (n=3) and nursing students (n=5) in the final year of a three year pre-registration adult nursing degree at the University were recruited for two separate pilot studies.

7.19.2 Procedure

On both occasions, participants were invited to watch the eight patient-nurse scenarios and provide feedback on the content, effectiveness and ability to help nursing students understand and deliver compassion in practice. The following five questions guided the focus groups:

Question 1. Which of the scenarios do you think was the most effective as a way of helping nursing students understand compassion in practice? This can include all if you wish.

Question 2. Do you think that the scenarios would be useful in helping nursing students learn about how compassion is delivered in practice?

Question 3. Did you find it easy or difficult to identify the compassion strengths being displayed in the scenarios?

Question 4. Do you think that these particular scenarios could also be used to train qualified nursing staff about compassion?

Question 5. Any other comments?

7.20 Results

Results from the pilot study identified several overarching themes relating to the online scenarios. An overview in relation to each question is provided below. Thematic analysis revealed the following themes emerging from the data, the real world usefulness of the videos, spotting variations in the quality of compassionate actions, and recognising diversity of compassion through role models.

7.20.1 The real world usefulness of the videos.

The majority of the group voted that the point of view (POV) scenario was the most effective at helping nursing students understand compassion. In general participants said that it stood out as an innovative approach and gave them insight into what patients and nurses experience when presented with life altering experiences and of the importance of compassion:

> "This was really interesting from a learning perspective to understand people's viewpoint of compassion, especially in the [POV] scenario when focusing on what the nurse and patient are thinking" (Participant 3).

They also felt that overall the scenarios helped show compassion from a variety of real life perspectives. This brought home the reality of providing care and the challenges nurses are faced with in practice, suggesting that both students and registered nurses could benefit from watching them:

> "It gives you the patient's perspective as well as the nurse and family member and will certainly help nursing students to see how compassion really matters to patient and family. The variety of scenarios, which are realistic, would be a benefit for qualified staff as well as students" (Participant 2).

7.20.2 Spotting variations in the quality of compassionate strengths

Generally, it was reported that there was evidence of empathy, understanding, competency, engagement and communication in a number of the videos. The mixture of scenarios made it easy to see compassion being demonstrated and to spot where more compassion was needed. For example:

> "It was good to see examples instead of just talking about it [compassion] with some scenario's easy to spot strengths, and others needing closer inspection, but overall it was really good" (Participant 5).

Some suggested that a drawback for spotting the compassion strengths was the length of the scenarios:

> "One was a little too long and repetitive and may reduce focus if utilised in an e-learning package, and some are too short to identify the strengths" (Participant 6).

7.20.3 Recognising diversity of compassion through role models

As the nursing students were in their third year of study, some felt that it was easier to spot the compassion strengths because they had already witnessed both good and bad experiences of compassion being displayed in practice, prompting them to believe that first year students might find it more difficult. However, they also spoke about how crucial it was to understand that not all qualified nurses are compassionate or know how to be due to poor role models, and the variety of scenarios showed different ways in which compassion can be demonstrated. As one participant suggested:

> "It is always useful to have a reminder of the need to show compassion from role modelling" (Participant 1).

7.21 Study two: February 2018 nursing students online only

In the second study, the online learning tool and psychometric questionnaire were tested using a group of nursing students in their first year of studies.

7.21.1 Participants

On February 12th, 2018 the researcher attended a lecture to speak about the research and recruit participants in the third session of a six week Care and Compassion module. Participants in this study were a February cohort of nursing students in the first semester of a three year pre-registration adult nursing degree. Out of a possible 110, a convenience sample of (n=71) volunteered for to take part in the study.

7.21.2 Procedure

The online intervention and supporting materials were uploaded into the University's Care and Compassion module on Moodle. Although some of the topics in the Care and Compassion module were similar to the CSBONE, the researcher explained that the content contained a different approach to learning about compassion in nursing than what could be found in the regular course content. Students were also told that participation in the research was voluntary, and that they could refuse to participate without consequence or question. Due to time constraints imposed on other lecturers wanting to use the lecture hall, the researcher briefly (20 minutes) went through the CSBONE with the group, describing how it worked and the aims of the research project. Participants were then given the BCSI to compete and return to the researcher. This included a copy of the participation information sheet, explaining the purpose of the research, and an informed consent form for them to sign. It was explained to them that the researcher would return to collect the second set of scores at a later date (11 June 2018) after they had completed the online tool and had returned from their first clinical placement.

As there was also the opportunity to be entered into a prize draw for taking part in the study, all participants were asked to provide their full name and university email address. Participants were informed that this would be kept anonymous, and only used by the research for the purpose of the prize draw and to provide a full report on individual compassion scores for those who wished to know more about their results. To prevent temptation from participants to submit their reflections prior to placements, the submission portal for the personal reflective accounts was made available on the University Moodle site during the first week of placement.

7.22 Limitations from study two

A problem occurred near the June deadline, in that of the 70 who volunteered to take part only 3 had submitted a reflective account of the intervention. To understand why there was such a low uptake, a series of feedback session were arranged with the participants. It emerged that because participation in the study was voluntary many of them chose not to. Some of the students also explained how they felt overwhelmed with academic and clinical work, and as a result could not find the time or energy to commit to the online course. They suggested that it would have been more practical to deliver the intervention during class and within their university timetable. With this in mind, a third study was developed to collect additional data and test the effectiveness of the tool.

Nursing courses at the university have different cohorts starting at various times throughout the year (September, February and May). This allowed for access to a group who were in a similar position academically and educationally to the February students.

7.23 Study three: May 2018 nursing students in class intervention

The third study followed a similar process to study two only this time the online content was delivered to take account for the problems that occurred in the February group.

7.23.1 Participants

On June 11th, 2018, the researcher attended another lecture to speak about the research and recruit participants during the second week of a six week Care and Compassion module. Participants in this study were a May cohort of nursing students

in the first semester of a three year pre-registration adult nursing degree. In total (n=49) agreed to participate in the study.

7.23.2 Procedure

In consideration of the problems that occurred in the previous groups, adjustments were made, and the session was delivered in two parts. The first was carried out in a classroom at the university. During the session, the researcher explained the purpose of the study then asked those who wished to take part to first fill out the BCSIs. A copy of the participation information sheet, explaining the purpose of the research, and an informed consent form for them to sign was given along with the scale. As with study two, it was made clear that taking part in the research was voluntary, and if they wished to do so they could to refuse to take part at any time without being pressured to change their mind. Participants were shown how to use the online tool and taken through one of the modules by the researcher as an example. As the classroom has been scheduled especially for this session, a full hour was given to collecting the initial responses to the scale and explaining the purpose of the CSBONE. This also allowed for more time so that participants could ask questions about the research.

In the second part of the study, participants were split into two groups and taken to separate computer rooms to take part in the online intervention. After completing each of the eight compassion strengths modules, participants proceeded to watch the scenarios. Once both groups had finished, they were asked to complete the BCSIs again and asked to write their reflective accounts based on the effectiveness of the intervention during or at the end of their first placement. The researcher also informed them that he would return in October 2018 to collect the third and final BCSIs questionnaire data.

7.24 Quantitative findings

In the February group only 11 completed the questionnaires at post-test. There was also missing data (n=17) at follow up for the May group.

A one way ANOVA of pre-test scores showed that there was no significant difference between groups for overall compassion strengths F (1, 70) = 1.364, p =.247, η^2p = .019, self-care F (1, 70) =3.640, p=,061, η^2p =.050, character F (1, 70) =.023, p=.880, η^2p =.001, empathy F (1, 70) = .444, p = .508, η^2p =.006, connection F (1, 70) = 2.656, p= .108, η^2p= .037, interpersonal skills F (1, 70) = .011, p=.917, η^2p, engagement F (1, 70) = 2.140, p=.148, η^2p=.030, competence F (1, 70) = .155, p=.695, η^2p= .002, and communication F (1, 70) = 1.84, p= .669, η^2p= .003. The lack of significance across groups for the population variable at pre-tests suggest that there were little individual differences between groups for scores on compassion strengths prior to starting the course.

The mixed ANOVA indicated a significant main effect for time F (1.3, 53) =5084, p =.001, η^2p = .992, suggesting that scores in both groups improved over time. The time*group interaction was non-significant.

Results of the 2x2 MANOVA revealed there was a significant difference in compassion strengths indicators based on the participants assigned group F (8, 34) =2.86, p=.015, Wilks Λ=5.98, η^2p =.402. Univariate analysis showed that group had a significant effect on both self-care F (1, 41) =4.45, p=.041, η^2p =.098 and connection scores F (1, 41) =13.49, p=.001, η^2p =.248. Participants in the May group scored higher on self-care (M=28.0, S.D=6.3) than February (M=23.4, S.D=4.3), as well as connection (M=33.7, S.D=2.2) Vs (M=30.7, S.D=2.1). Although non-significant there was a noticeable trend towards increased scores on all other indicators in the May group. This supports the

prediction that taking part in the online course would significantly improve nursing students' compassion strengths (Table 26).

7.24.1 February group

Results of the pairwise t-tests analyses indicated a significant increase in scores for interpersonal skills (M=30.6, S.D=3.1) *t*= - 2.350, *df* = 10, *p*=.041, *d*= .070, and competence (M=31.8, S.D=3.0) *t*= -2.604, *df*=10, *p*=.026, *d*= .074 at post intervention, both had large effect sizes. Scores on all other measures did not meet statistical significance. Given that these factors are taught as part of the curriculum it was expected that there would be an improvement over time.

7.24.2 May group

In the Pairwise T-test, there were significant improvements at post-test for overall compassion strengths scores (M= 258, S.D= 19.7) *t*= -4.935, *df*= 31, *p*= .001, *d*= .87, character (M=34.1, S.D=1.9) *t*= -3.426, *df*=33, p= .002, *d*= .58, connection (M=33.7, S.D=2.2), *t*= -5.511, *df*=32, *p*=.001, *d*=.95, interpersonal (M=32.3, S.D=3.1) *t*= -5.252, *df*=33, *p*=.001, *d*=.90, competence (M=31.2, S.D=3.2) *t*= -4.495, *df*= 33, *p*=.001, *d*= .77, and communication (M=32.2, S.D=2.9) *t*= -2.954, *df*= 45, *p*= .005, *d*= .43. Self-care and connection were both non-significant. Similar results were observed at follow up, but with a significant increase in connection (M=33.7, S.D=2.2) *t*= -5.344, *df*= 33, *p*= .001, *d*= .92. However, this time self-care, engagement and empathy were non-significant. These results indicate that the course was effective at increasing compassion strengths, and suggest participants benefitted more from the intervention when it was delivered in class.

Table 26. Results from the intervention pre and post intervention

	Group													
	February online only (n=11)				May in class intervention (n=34)						Overall (n=45)			
	Pre		Follow up		Pre		Post		Follow up		Pre		Follow up	
Indicator	M	S.D	M	S.D	M	S.D	M	S.D	M	S.D	M	S.D	M	S.D
Self-care	23.7	4.2	23.4	4.3	26.9	5.4	27.5	5.9	28.0	6.3	26.0	5.2	27.0	6.2
Character	33.5	1.9	33.3	2.5	32.0	3.7	33.9	2.1	34.1	1.9	32.3	3.4	34.1	1.9
Empathy	33.5	3.4	33.2	2.4	32.1	3.5	34.1	2.9	33.8	2.3	32.5	3.5	33.6	2.3
Connection	30.1	1.5	30.7	2.1	30.1	2.8	31.0	1.8	33.7	2.2	30.1	2.2	33.0	2.5
Interpersonal	28.0	4.6	30.6	3.1	28.1	5.5	31.6	4.3	32.3	3.1	28.0	5.2	32.0	3.1
Engagement	32.2	2.5	32.5	3.1	31.7	2.8	33.7	2.4	33.0	2.5	32.0	2.7	32.7	2.7
Competence	27.3	3.3	31.8	3.0	27.0	6.3	29.7	5.5	31.2	3.2	27.1	5.7	31.2	3.1
Communication	31.8	1.6	31.6	2.8	30.7	2.9	33.2	2.9	32.4	2.9	31.0	3.6	32.2	2.8
Total	240	14.7	247	15.4	239	23.0	255	18.9	258	19.7	240	21.0	255	19.0

7.25 Overall results from Nursing and Midwifery Council (NMC) reflective accounts

In both groups there were a total of five participants who completed the NMC reflective account. The responses they gave to each question are summarised as:

7.25.1 What did you learn from the CPD activity and/or feedback and/or event or experience in your practice?

The students explained how the course had taught them to first understand what is expected of a nurse when it comes to caring for patients. This included "*taking time to listen, identify those who maybe distressed, introducing themselves to the patient and generally making sure that their stay in hospital was a comfortable one".* They further expressed how their knowledge of compassion had developed as a result of using the course to where they understood that compassion is a skill that can be built upon over time. Mainly, it had taught them that there are many components to compassion that encompasses "*doing the little things, having an open body language and speaking style, as opposed to just being about kindness, self-care, empathy, character and being competent"*. In addition, the reflections following the scenarios gave them time to analyse what they would have done in that situation as well as space to acknowledge their own feelings towards the interaction.

7.25.2 How did you change or improve your practice as a result?

The students' found that the course helped them realise that "*it does not take much to show compassion*". Also, in identifying that no two days are the same in nursing each filled with many challenges, they recognised that it was how they approached and found time to manage them would make them a compassionate nurse in the future. Some also spoke about the necessary importance of looking after the self to give the most compassion to others. They had taken up yoga, started eating healthier and

taking part in exercises that helped them feel good about themselves, feel less stressed and fatigued, and have a more positive compassionate attitude towards patients and their family. Many reflected on how the course had helped them look at their own strengths and weaknesses to plan their development on the eight compassion strengths, as well as being more mindful towards, and seeing things from the patient's point of view.

7.25.3 How is this relevant to the Code?

Here the students wrote about the relevance of the course to all four themes related to the NMC code. The course taught them that compassion is important for *prioritising people*, especially the patient's wellbeing and those who feel daunted by a visit to hospital. It also facilitated a greater awareness of communication skills as tools that allowed them to *practice effectively,* both with patients and colleagues. This effective use of communication helped them to *promote professionalism and trust* when talking to patients and in acting professionally with respect and trust towards them. The course also taught them about the importance of care so as not to cause harm to patients and *preserve safety*.

A major theme that emerged from the feedback was that nursing students had become more self-aware as to what compassion was, and how it entailed the understanding, development and demonstration of the strengths outlined in the course. An outcome of this was that they felt motivated to be compassionate in the future.

7.26 Chapter Summary

The aim of this chapter was to assess the online course in relation to nursing students' compassion strengths. Several studies were conducted to test and validate the online course and Indicators of compassion strengths. Results from the pilot study and comments made by participants, suggest that the video scenarios could be an effective medium for assisting nursing students in the delivery of compassion. This chapter has shown how the online class was most successful when delivered in class when compared to the option of accessing the course freely without guidance from a tutor. There was a noticeable improvement in compassion scores from the group who completed the course in class, suggesting that while the online element was effective it might best be delivered as a blended learning course. The NMC accounts support the long term usefulness of the course on nursing students' ability to demonstrate compassion in practice. However, these results were based on a relatively small sample of nursing students.

7.27 The META model

These developments contribute to all stages of the META model. The scale provides the *Measure* component, while the background content, examples of good and practice, resources of the online tool create the *Explore* element. The scenarios also provide the *Try out* section of the model, and the student reflections from clinical placement show evidence of the *Apply*. The META concept was inspired by leading positive psychologist Ryan Niemiec during a SKYPE lecture on character strengths, as a way of bringing all the elements of the research together into an overarching model for learning. In this lecture Professor Niemiec discussed a model that he had developed to assess individuals for their character strengths. Building on from this

initial idea, the META model was developed based upon the findings from the research found within the systematic review chapter, and the results of the study in chapter 5. In particular, the characteristics of a compassionate nurse helped create the multidimensional compassion strengths model that underpinned the META model. In addition, studies into tools for measuring compassion and the lack of thereof, inspired the measure, and those about teaching, the explore element. The scenarios were developed to inform teaching and practice, thus, the try out element provided a visual learning experience. The apply element was added last as the ultimate goal of the model is for those using it to apply what they have learned to practice. Each element was divided up into its specific purpose. The aims and implication of the model are discussed further in chapter eight.

The overall aim of the META model is to guide the development of compassion strengths, through the measure, exploration, testing and application of skills learned within the framework. As in this study, they can be applied to online learning, however the model can also help steer learning in more formal educational or practice settings. This can be achieved by populating each of the elements with the relevant information so that progress can be made through each stage of the model. It aims to be used as a flexible tool that aids understanding and development in compassion but can also be appropriate to other areas of learning.

7.27.1 Measure

In the first stage of the model students measure themselves on a certain concept or behaviour as in this study, compassion. This gives them and educators a personalised reference point for strengths on the particular concept and a place to develop from. It

can help identify stronger areas or where more development is needed. Students can return here to measure themselves at any point in their education and practice.

In this study, the Measure element was examined by the development and validation of the scale. Studies supported the scale as a measure of compassion strengths.

7.27.2 Explore

The second stage involves the exploration of information relative to the area of development identified in stage one. Here, students can access course content that includes background, the different types, examples of the behaviour, and its relevance to them. With additional resources attached giving tips on how to cultivate these skills, they can explore and learn in a manner personal to them and suitable to their individual learning needs.

In this study, the explore element was surveyed as part of the online course, in which participants could access information about each of the compassion strengths to increase their knowledge and understanding of compassion.

7.27.3 Try out

In the third section, students can test out their understanding of the new knowledge that has been presented to them through a series of video recorded scenarios related to each learning objective. The scenarios act as a test of the newly acquired information presented in the previous section. As the videos are online, students' can use them as practice as many times as they wish in the safety of their own company or with others. The reflective questions after each scenario give students a space to think about what they have seen and reflect on how they would have done things differently.

In addition to exploring the information on compassion in this study participants also tried out what they had learned through a series of scenarios. However, it is possible that nursing students could also *Try out* their compassion in real life situations. The purpose of the patient nurse scenarios was to give students a taster of what could be expected in practice prior to their first placement.

7.27.4 Apply

In the fourth and final stage, students can take what they have learned and apply it to their practice. Reflecting on the impact it has, they can decide to return to either stage to measure or develop further or be satisfied that they have achieved growth in that area and continue to implement it into their behaviour. The apply element in this study was achieved when nursing students went out into clinical practice and applied what they had learned to interactions with patients, which are summarised in the NMC reflections.

Figure 31. The META model

Chapter 8. Discussion and synthesis of findings

"*Compassion is a muscle that gets stronger with use*" – Mahatma Ghandi

8.1 Introduction

This chapter presents an overview and summary of the key findings for each phase in relation to the research literature. The importance of the research and its contributions are also discussed. It then examines the findings in relation to the META and compassion strengths models. The strengths and limitations of the study are presented, along with the implications and suggestions for future research. Finally, a definition of compassion in nursing is presented.

In this study, a pragmatic approach was taken when considering appropriate ways to examine the concerns in current literature regarding an apparent lack of compassion in nursing and if compassion could be taught and measured. A systematic review of the literature and follow up qualitative study revealed that compassion could be grouped into a series of characteristics, and that very little had been done to apply these to teaching or a psychometric scale for compassion. The next step in the research process was to develop and test two models that included a scale and course to cultivate compassion in nursing students. This thesis employed a sequential exploratory design in the creation of a teaching model for compassion in nursing. Accordingly, the research was divided into two phases (1 Qualitative and 2 Quantitative), where findings from the first informed the second. A review in chapter two identified a number of gaps in the literature. Subsequently, a systematic review was conducted to provide a more focused assessment if the literature pertaining to the

characteristics of a compassionate nurse, how this can be taught and measured in nursing students. In terms of the first research question in the systematic review which looked at “the characteristics of a compassionate nurse” the findings from this study seem to build on some of the previous work presented in chapter 3. The findings of this and the initial qualitative study informed the basis of the compassion strengths model, scale and online course that combined formed the META model.

Phase one of this study conceptualised the characteristics of a compassionate nurse from the perspective of key stakeholders (Study 1). The themes identified in the qualitative study and systematic review, helped develop items, factors, and modules for the compassion strengths model, scale and online course. In phase two, classic and exploratory scale development methods were used to validate the 46 item scale (Study 2), whereas with the help of nursing colleagues’, scenarios were created for the online course. Study 3 employing the scale to the online course with nursing students, helped examine the effects of the META model for teaching about compassion. Results indicated that compassion could indeed be taught and measured when the compassion strengths model was used alongside the META model. The model is a self-directed intervention that encourages students to develop their compassion strengths. However, the study showed that this could be increased with help when delivered in the classroom.

8.2 Overview of main findings

The aim of this study was to explore whether compassion could be taught or measured to nursing students. To address the overall and sub-research questions, two models, a scale and online course were created. The implications of reports such as Francis (2013) were the motivation for this thesis. This report highlighted the dangers of poor

care that can occur when patients are treated without compassion. A response to the Francis report was the somewhat prescriptive model of compassionate care dubbed the six C's. While this model had been welcomed in practice and emphasised the importance of compassion in nursing, it provided little in the way for how this could be realised in practice. Furthermore, the 6 C's offer very little to help bridge the gap in education and practice. The findings of this study add to the literature and other similar models for compassionate care, with discussion and examples of how compassion can be actioned in practice with an empirically researched evidence based intervention.

To answer the research question "*can compassion be taught and measured*?" it was important to first explore what compassion was, and how it was taught a measured in nursing. Based on a review of the literature is become apparent that compassion could be grouped into a number of characteristics, and that very few studies had explored how these characteristics could be taught to nursing students. Measures for compassion also seemed sparse. Although other models for compassion exist, the compassion strengths model was created to fulfil the needs of the research into the assessment of the impact of the META model. Subsequently, this study is the first of its kind to conceptualise compassion as a set of actions that are easy to define measure and develop in conjunction with a psychometric scale and online course for nursing students.

I chose to focus on the characteristics of a compassionate nurse after posing the question "what would a compassionate nurse look like if you saw one?" After several discussion with my supervisory team, I decided to explore the characteristics in the literature and with stakeholder groups. My rationale behind this being, that it these characteristics could be identified then they could be taught and measured.

As identified in the systematic literature review, a gap in the literature was that there are very few studies that have explored the characteristics of a compassionate nurse, even fewer that have sought to teach compassion to nursing students, and only a handful of psychometric scales developed to measure compassion. Moreover, none had considered or investigated the effectiveness of taking a strengths based approach to identifying, measuring and teaching compassion in relation to nursing students. This thesis contributes to new knowledge to inform nurse education with a new evidence based approach that is empirically researched to support nurses to become more compassionate. Not only does a compassion strengths approach provide a positive view of compassion in nursing, it also suggests that it can be measured, learned and developed.

The characteristics shared by participants in this study were similar to those found in the literature, indicating that they are examples of a compassionate nurse. Despite positive outcomes, previous interventions had focused mainly on teaching and not on measuring compassion. This thesis has argued there is a need for a measure of compassion that incorporates all the virtues and actions found in a compassionate nurse. The studies within it show that if nursing students can measure compassion in themselves, and with the support of educational programmes, they can learn how to develop their compassion strengths. This forms each section of the META model. Likewise, with the limited number of psychometric scales for compassion in nursing, nursing students have been left without a valid instrument for measuring their compassion. The Bolton Compassion Strength Indicators are valid, reliable and easy to administer measures of compassion. Moreover, the META model contributes to new knowledge as it highlights a novel approach to the teaching and development of compassion in nursing. These findings have major implications for the way

compassion is defined, understood, measured and taught to nurses and nursing students.

8.3 What is compassion in nursing? The Compassion Strengths Model

To address the first research, question this study explored what the characteristics of a compassionate nurse were. Based on the findings from the systematic review and qualitative study, compassion appears to be multidimensional and consists of eight characteristics. Commentary in the interviews, indicated that compassion required strength, therefore a compassion strengths model emerged. This model was employed as the underpinning framework for compassion that would be applied to each subsequent element of the META model.

This study provides evidence for a qualitative conceptualisation of the characteristics of a compassionate nurse from the perspectives of key stakeholders and adds to the literature on this with the inclusion of service users. Although many consider compassion a complex concept (Maxwell, 2017; Von Dietze & Orb, 2000; Van Der Cingel, 2011), the findings show that stakeholders had a distinct understanding of the characteristics involved. The investigation emphasised the importance of a nurse's character, self-care, communication, interpersonal skills, empathy, connection, clinical competence and engagement as being compassionate. Although presented linearly, these themes best describe compassion as a conceptual whole, meaning compassion is not a concept that can be measured by a singular characteristic. Rather, it is multifaceted where all the strengths intersect to create the qualities of a compassionate nurse. Although participants in this study claimed that there seemed a lack of definition or framework, this was not the case as the previous research shows. Rather, the findings suggest that participants were unaware of, or in the case of nurses

and nursing students, that current programmes of education do not discuss or implement these models into their curricula. This highlights a potential wider issue and the need for compassion models to be more explicit, and educational organisations to develop their courses in ways that allow for a platform of open discussion, debate, reflection and thought about the compassion models with students in the classroom.

Working in highly charged situations, with staff who find patients demanding and difficult, suboptimal working conditions, besieged by a negative workplace culture, can lead to negative self-judgement, feelings of burnout, compassion fatigue and reduced wellbeing among nurses and nursing students (Maslach & Jackson, 1984; Yang & Kim, 2012; deZulueta, 2013; Curtis et al., 2012; Christiansen et al., 2015; Durkin et al., 2016). In relation to this, the findings showed that compassion was considered a strength, or indeed required strength to demonstrate. This highlighted the many difficulties that call on nurses' strengths to be compassionate in the face of the increasing demands of education and practice. Working in different pressurised environments meant that some nurses were not always able to show the compassion they would like to patients because of this. The findings indicated that continuously working in this type of milieu would only lead to nurses feeling emotionally drained, burned out and less compassionate. Contrary to this, the study also indicated that a positive approach to compassionate care meant that nurses could find the strength to be compassionate it they looked after their own wellbeing. These findings support the literature in that pressure to perform under stressful conditions, and the extra demands placed on them, can demotivate nurses' compassion (Cole-King & Gilbert, 2011; Tierney et al., 2017).

The Compassion Strengths model supports similar models in that it highlights the importance of relational factors such as communication and connection and

emphasises the need for courageous practitioners who demonstrate strength to engage with action in a way that supports the needs and suffering of patients (Dewar & Nolan, 2013; Sinclair et al., 2016). They align with theories of nursing care such as Watson, that promote values such as empathy, competency, communication and interpersonal skills to foster respect and kindness towards patients (Benner, 1998; Jesse & Alligood, 2002). However, the current model adds to this with a number of other compassion strengths that can be actioned when demonstrating compassionate care. For example, going the extra mile or doing the little things that mean a lot to patients are also highlighted. In addition, self-care is represented in the model as a means to reduce stress and encourage the healthy delivery of compassionate care for nursing students. While the strengths presented in the model are not new to nursing practice, this is the first time they have been presented together as one under the banner of compassion, thus evidencing the novelty of the model.

The compassion strengths model also support previous research in which nurses described compassion as being comprised of a number of components such as empathy, respect, listening, connection and care (Day, 2015), and the fundamental aspects of compassionate care (Firth-Cozens & Cornwell, 2009). Some of the strengths presented in the model can be found in the 6C's framework for compassion in practice. For example, both include competence and communication. While in the 6C's compassion is considered separate to these, the current study and model places them as part of it. Arguably this offers some new insights into how compassion is understood and taught in education and practice, by breaking compassion down into its component parts. The Compassion Strengths model is an innovative approach to compassion in nursing. It is novel in two ways. One is that it was developed using data collected from a number of stakeholder groups, and two, that it considers each

element to be a strength. Like the muscles of the body that can be worked on, but equally can become fatigued over time, or prone to injury due to overuse or lack of experience, so too compassion in nursing. When one feels an imbalance, the whole does not function as it should. Therefore, for nursing students to become proficient in their daily exercise of compassion, like exercise in a gym, guidance and a regular training schedule may help them build on the strengths they already have and make stronger those that need more attention. This approach challenges reports and the media influence that bases a nurse's compassion or lack of, solely on one single action. Viewing compassion as a multifaceted concept has the potential to eradicate the blame culture that surrounds nursing, especially from those who say nurses lack this fundamental human quality (Davidson & Williams, 2009).

The study also provides some tentative evidence that the artistry of care in nursing could be returned to practice when development of the compassion strengths are synthesised and delivered using the META model (Corbin, 2008; Palos, 2014). Arguably, the compassion strengths presented here represent both the art and science of nursing. Where competency can be considered the science, character, empathy, connection, communication, interpersonal skills, engagement and self-care are the art. The most intriguing thing about this is that in this study the elements that reflect the art of nursing were greater than the science. This provides some evidence to support the claim that compassion is the missing link between the art and the science and good quality care in nursing (Van De Cingel, 2014), and adds to the body of knowledge that considers compassion to be multifaceted.

An important feature of the model is that it can act as a framework that guides nurses towards becoming their most compassionate self. The importance of the eight strengths is supported by research that promotes the significance of each individual

factor for demonstrating compassion in nursing. Findings from the research emphasise the importance of each strength and support how they can be taught in relation to the model. As was highlighted in the interviews, a framework that enables nursing students to measure themselves on each of the strengths can help build self-awareness and understanding for what behaviours nurses can develop to become more compassionate. Thus, the Compassion Strengths Model could become the guiding development framework for nursing students' compassionate care.

However, it is worthy to note here that the eight strengths are a product of this study. While supported by research, it is important to ask, did these strengths reach saturation or are there more associated with a compassionate nurse? Other studies may discover either a similar or different set of strengths. Nevertheless, the compassion strengths outlined here offer a new approach to understanding and learning about compassion in nursing.

8.4 How is compassion taught to nursing students?

Before addressing the research question, initial findings added to the ongoing debate for teaching compassion in nursing, separated mainly between those that maintain that it can be taught, and those who disagree because it is an innate virtue (Bray et al, 2014; Curtis, 2013). In the UK it is recommended that recruitment of nurses should be underpinned by a values based approach where candidates are assessed for compassionate values (Francis, 2013; Willis, 2012). In line with this, the findings in this study indicate that educators need to be aware that a tendency to assume that compassion is something nurses are born with could also have repercussions in the recruitment of nursing students. If recruiters believe that it cannot be taught, then potentially strong candidates could be dismissed as a result of a fixed view of

compassion. Equally, due to increasing demands to recruit nurses, universities could accept students without the qualities of compassion. Without the proper teaching facilities in place they may go on to develop nurses who are clinically astute but compassionately “hollow”.

Some of the views expressed in this study resonated with similar research where educators felt that nurses brought compassion with them to the role, and it would be challenging to teach what was not there (Bramley and Matiti, 2014). However, many disagreed and felt more positively that nurses could learn about compassion and it was important to do so. This suggests that nursing students need to understand the essence of compassion and its importance in their work so that they can demonstrate it with patients. Regardless of whether or not someone brings with them strong attributes of compassion, the findings imply that students could still be helped to cultivate the qualities of a compassionate nurse over the course of their training. According to Fotaki, (2015) it is important to understand the why and the how of compassion for the delivery of care. The current findings echo this and add to the research that stresses the importance of making the “what compassion is more explicit” and understanding how it can be demonstrated (Dewar, 2011; Roach, 1997; Sinclair et al., 2016b), but extends this to emphasise that even those already compassionate can still learn how to show it practice.

In response to the second research question, and unexpectedly, as previous research had also provided examples for how compassion could be taught (Adam and Taylor, 2014; Adamson & Dewar, 2015; Dewar 2011; Hofmeyer et al., 2018), several other factors emerged from this study that could further assist educators in the teaching of compassion. Most commonly applied to journalism and other disciplines including healthcare, the 5 W’s theory helps stimulate thought and answer questions of who,

where, why, when, and what (Kwok & Stevens, 1995). Although a similar pattern was observed in this study, however “when” was replaced with a “how”.

The findings emphasised the importance of understanding why nursing students should learn about compassion when developing teaching courses. In line with prior studies, the qualitative data indicated that not only does compassion help in the care of patients and a safeguard against stress, it can prepare students for practice, recognise patients who are suffering, and understand that central to compassion is what you do for the patient (Dewar et al., 2014). Clearly this shows that if students are taught about the reasons why compassion is critical to nursing and patient care, then they will feel motivated to do so. Despite this being an important starting point when designing educational course for compassion, it is not always enough to make nurses compassionate. Understanding what can or should be taught was equally as important.

Findings also suggested that students could learn how to develop the practical skills of compassion. However, before these skills could be taught, a clear definition of compassion was needed. Adding to the growing argument that without one or any knowledge of its meaning, several questioned how nursing students were expected to understand what compassion is and how they could demonstrate it in practice. Arguably, if educators are to encourage learning about the application of compassion skills, they could challenge those who think that they do not need to learn, or already know how to provide compassionate care (Dewar et al., 2014; Jull, 2011; Maxwell, 2017). In relation to this, the findings suggested that a measurable framework for compassion would benefit the training and recruitment of nurses. This supports previous claims that as the existing measures for compassion in nursing are limited,

(Durkin et al., 2018) and that more research is required to create the tools that will assess compassionate care effectively (Walker at al., 2016).

The findings further highlighted ways compassion could be taught, or how nursing students could learn to be compassionate. Personal reflection was considered an effective way of developing self-awareness to the factors that hinder or facilitate their compassion. This adds to the literature where capturing thoughts and feelings about events that occur in practice may help nurses cultivate compassion, provide a vehicle for learning, and increase awareness of work related stress (Elsden, 2016: Kimble & Bamford-Wade, 2013; Hannigan, 2001; Sabo, 2011). Given that time constraints, financial barriers, and that not all mentors are compassionate, it is essential that educators consider other viable options when developing courses for nursing students' compassion. The findings echo previous research where modelling of compassionate behaviours and attitudes empowers students to become compassionate professionals (Adam & Taylor, 2014; Bray et al., 2014), but add to this by suggested that nursing students could develop their compassion through modelling via scenario based online learning. This also supports The Point of Care Programme (Firth-Cozens & Cornwell, 2009).

The findings also proposed that knowing from whom students could learn about compassion was essential for developing courses. This study found that nurses learned about compassion from their teachers and peers. This highlighted the importance for nursing students to have access to a trusted lecturer to discuss any difficult situations they may encounter that challenge their compassion. Having someone to examine their feelings with, whether that was a lecturer, fellow student or nurse mentor, and express any worries or concerns about practice was important for the development of compassion. This relates to Taylor's (2012) "Connections –

Continuum", showing that a platform for students where they feel connected to others is helpful during training, and endorses claims that nurses who feel supported are better able to demonstrate compassion in practice (Adam & Taylor, 2014; Jones et al., 2016). Furthermore, the findings indicated how important it was to have enthusiastic lectures who inspired nursing students to develop their compassion and support them through their training. In addition, learning from patients was viewed as helping them understand a wide range of medical conditions and approaching them with compassion. This supports Deane and Fain (2016), who suggest that during the orientation phase of Peplau's theory, nursing students can practice compassion through interactions with patients, or as Halldorsdottir (1991) proposes their "compassion competence". This also adds to the literature that supports the development of compassion from a wide range of people in practice and education (Adamson & Dewar, 2015; McLean, 2012; Peters, 2006; Zammzadeh et al., 2017)

In addition, where students learn about compassion was fundamental to how they develop professionally. Although an educational environment provides the foundation for an understanding of compassion, findings indicated it is out in practice where nursing students develop their compassion skills and professional identify. In this study they were not considered mutually exclusive, showing that education and practice are complimentary rather than contradictory for learning about compassion. This supports previous research in that an educational setting provides the foundations for compassion while out in practice nursing students sharpen their skills through interaction and practice (Bray et al., 2014; Deaton et al., 2014).

Barriers to learning about and displaying compassionate care are well documented in the literature (Frampton et al, 2012; Guastello & Frampton, 2014). In this study, this included the change from nursing as a vocation to a degree, what students were

taught, and the Government's decision to abolish the nursing bursary in 2017. Conclusions drawn suggest that current nursing educational programmes were more focused on teaching students to be academically minded than compassionate. This again, indicates a need to develop educational programmes for compassion that showcase the art of nursing. Likewise, while the findings suggested that paying to study might attract those who genuinely wanted to become a compassionate nurse, it also found that the cost could put people off, and without financial support the quality of healthcare would suffer due to increased pressures placed upon nurses. Arguably, this could lead to further staff shortages, leaving nurses with little time to be compassionate. The relevance of this should not be overlooked as staff shortages and lack of time are common reasons why nurses struggle to show compassion and good quality care (Attree, 2001), and are responsible for 44% of nurses' leaving the profession (Health Education England, 2018). There is tentative support for the claim that the move to degree training for nurses could have been partly responsible for what happened at Mid-Staffordshire (Darbyshire & McKenna, 2013), in that educators lost sight of compassion to focus on clinical education.

At the clinical level some of these courses or interventions for developing compassion education in registered nurses do prove positive (Coffey et al., 2019). However, there are very few that have explored programmes for developing compassion in nursing students. The current study adds to this with the online course for compassion, guided by the compassion strengths model. In addressing the research question, the current study has shown that compassion can be taught. While this thesis argues that compassion can be taught, it does so by suggesting that this happens best when delivered in class. An important distinction throughout this study was that, rather than compassion be something that is taught, it was regarded as a concept where its

behaviours in practice could be learned. Thus, rather that it be something that can be taught, nursing students can learn about compassion and how to demonstrate it in practice.

8.5 Motivation

An interesting and noteworthy finding throughout this study was the theme of motivation. Many definitions for compassion place motivation as key to facilitating the alleviation of suffering or tending to the needs of patients. Findings from this study suggest that the attitude and motivation of the nursing students was paramount to learning about nursing and compassionate care. Without the motivation to provide compassionate care, nursing may cease to exist as the caring profession it is famed for, and the very foundation upon which it was built. The intrinsic motivation to care for patients was viewed as a guiding factor in the way nursing students engaged in the learning process, and what drove their compassionate behaviour. This also highlighted the political implications for compassionate care, as some students are motivated by job security rather than a vocational desire to nurse. This resonates with the body of knowledge where a student's beliefs and character can help motivate compassionate care and how beliefs and attitude towards a patient affects the care they receive (Bray et al., 2014; Higgins et al., 2007; Pope, 2012; Hellzen et al., 2003; Zamanzadeh et al., 2017). This also aligned with psychological theories where attitudes, beliefs, ability, past failures, and motivation for certain behaviour drive an individual's intention to behave that way (Ajzen, 1991; Bandura, 1977).

It is argued that motivation or a lack of it can other thwart or enable compassion to flourish. As was shown in the literature review, debates can be found about the reasons why some nurses struggle to be compassionate. These are between those

who place the responsibility of compassion with the nurse (Bradshaw, 2016; Darbyshire, 2014), and those who suggest that environments shape how a person behaves (Paley, 2014; Tierney et al., 2018; Traynor, 2014). In their seminal paper titled “Shitty Nursing – the new norm”, Richards and Broglin, (2019), claim that there is a serious problem with nursing care, which indicates a lack of motivation to be compassionate, and some nurses blame external factors for this. Like others, (Francis, 2013; Rolfe & Gardner, 2014), they argue that nurses should take more responsibility for their actions and demonstrate compassion at all times, especially when caring for patients. In agreement with this argument, to claim that Mid-Staffordshire and other incidents like it happened because of senior staff and nurses not taking responsibility for their actions is to do a disservice to the nursing profession and more importantly patients. When nurses blame others for a lack of compassion, this is a disempowering narrative that does nothing to serve the patient’s needs or address the issue at hand. In fact, it only adds to the problem. The theme around motivation, raises an important question and adds to the literature that seeks to understand what can organisations, educational establishments and the people who attend them do to motivate nursing students, identify those who already possess the motivation to be a compassionate nurse, and make sure this motivation continues long into practice. Identifying what motivates students and through teaching, encourage awareness and the development of compassionate care, is a crucial step towards addressing this.

For example, this study highlighted several issues regarding motivation to use the online course. Some of these could stem from the lack of motivation to log on outside of regular teaching hours. Thus, as was shown in the study, delivering classes on compassion might better be suited for teacher and learner if this done in class as part of formal course content. Moreover, this suggests further issues regarding self-

attended online learning courses. As was observed in the study expecting students to log on and take part in the course of their own volition can be problematic, mainly because it was too much to ask alongside an already heavy workload. To address this, future research should focus on the delivery of the course in a classroom, or with a blended learning approach where theoretical content is delivered in class, and resources and assessments are made available online.

The issue of low “uptake” also highlights some of the many demands facing nursing students during their first semester of a nursing degree. Similar to comments during the interviews, the demands on students can impact on their motivation to learn about compassion. Indeed, poor organisation and lack of support are cited reasons for attrition on nursing programmes (Ten Hoeve et al., 2018). The problem with low uptake and small participant samples in this study supports others like it while collectively they indicate a number of important factors related to motivation (Dewar & Adamson, 2013; Hofmeyer et al., 2018). One, as suggested by Jull (2011), nursing student think they already have compassion and therefore do not need to learn about it. Two, that a “shitty nursing” approach is evident and that nursing students do not care about caring with compassion, or three, that as was suggested, students simply did not have time because of the demands of training. However, there were some who did contribute to and learn from embracing the educational programme, suggesting, as noted by “shitty nurse”, that instead of blame, compassion is a matter of choice and responsibility. To have to encourage or seek ways to motivate nurses to be compassionate seems to violate everything nursing stands for, especially with regard to the care of patients.

Despite all that is going on, nurses should be compassionate, and more should be done to improve this through nurses taking responsibility and organisations promoting the continued training and development of compassion. Not only does this indicate

that an issue with motivation for learning, it implies that a larger lack of motivation for compassion exists in nursing.

These results pose many questions about motivation, such as, should organisations only take those who are motivated and display this, or can it be instilled in nursing students during their training? Thus, more research should be done to explore the motivation of nursing students, and what organisations can do to help encourage them to be compassionate. If nursing students are not motivated to learn about compassion, how are they expected to find the motivation to alleviate suffering and attend to patient needs?

Introducing a different angle to the argument, this study has shown, somewhat tentatively, that when individuals are motivated and their organisation provide the tools to learn about and develop compassion, nursing students can become compassionate practitioners. Thus, arguably, the responsibility to be compassionate lies at the feet of the nurse but needs support from their place of work and education so that these strengths can be realised in practice.

8.6 How is compassion measured in nursing? Development of the Bolton Compassion Strength Indicators.

To address the third research question, the relevant literature was explored, and a valid and reliable psychometric scale created. Griffiths et al (2008) highlight the need for a set of indicators to measure nursing care that include compassion. This study has not only provided a set of empirically based indicators for compassion, but a validated and reliable measure so that individuals can measure themselves for compassion. The Bolton Compassion Strength Indicators measures compassion

across a wide range of indicators. The factor structure of the BCSI was supported by the CFA.

A strength of the BCSIs are that they acknowledge the complexity of compassion and reflect the individual factors that influence someone's ability to provide compassionate care (Tierney et al, 2016). While some view this as problematic (Ford, 2009), the BCSIs helps with the identification and teaching of the specific strengths associated with being a compassionate nurse. Using the scale in this way could help nurses and students to identify and develop specific skills associated with being compassionate. Having a baseline measure has the potential to assist nurses in their development of compassion and the overall aims of practice to develop more compassionate nurses.

The compassion indicators support previous research into measures for compassion in that similar themes were identified, such as empathy, competence, connection and communication (Papadopoulos & Ali, 2016). They also add a different dimension to the literature where alterative non-psychometric methods are used to measure compassion (Dewar, 2011), with a set of empirically supported indicators. Whilst the small number of scales that have been developed to measure compassion in nursing do consist of similar factors, they are limited to only a few. For example, the Compassion Competence Scale (Lee& Seomun, 2016b), measures for communication, sensitivity and insight. A limitation of this being that it does not capture the full range of compassionate behaviours that nurses demonstrate. Thus, the current study contributes to new knowledge of measures for compassion with a psychometric instrument that includes indicators of self-care, character, and interpersonal skills.

An important addition to the current scale is that factors from the compassion strengths model, which was generated from stakeholder interviews, were used to develop it.

Furthermore, the BCSIs was validated with UK nursing students. This is the first scale for compassion to be developed in the UK that can be considered an effective measure of compassion. While there are a small number of scales to measures compassion in nursing, they have not been validated with UK nurses, nor have they with a model or framework to help nursing students develop their skills. It also adds the literature by adding to the scant number of instruments to measure compassion (Durkin et al., 2018).

In line with previous research, this study found that the compassion strengths performed well against measures of burnout, empathy, compassion satisfaction, and wellbeing (Durkin et al., 2016; Kemper et al., 2015; Lee & Seomun, 2016). One of the most intriguing findings from this study was that self-care predicted an increase in overall compassion strengths. As a recurring theme throughout the research this link between self-care and total compassion strengths reveals an important finding in relation to self-care and compassionate practice. This suggests a link between nursing students who engage in self-care activities are compassionate more resilient and better able to manage the working environment and shield themselves from burnout. Adding to the literature in this area, the findings pose new insights but warrant further exploration to explore the relationship between these factors in more detail.

While previous research has focused mainly on self-compassion and mindfulness as practices for improving compassion for self and others, very few had explored the direct link between overall self-care and compassion (Beaumont et al., 2016; Kemper et al., 2015; Strauss et al., 2016), thus the findings add to the growing literature in this important area of research. In this study, participants with higher self-care scores also reported greater compassion, empathy, wellbeing, and lower scores for burnout. This was tested for discriminant and convergent validity using the Warwick Edinburgh

Mental Wellbeing Scale, Professional Quality of Life Scale, the Toronto Empathy Questionnaire, and supported by the Structural Equation Modelling regression output.

The findings add to the growing literature that explores how self-care and compassion can affect the positive and negative aspects of providing compassionate care by showing the association between them. Understanding how and what factors affect nurses and nursing student's ability to show compassion are paramount to ensuring that they can provide compassionate care for patients, and that their own needs are met (Adam & Taylor, 2014). Results in this study suggest that self-care practices potentially play a therapeutic role in the reduction of stress related symptoms among nursing students and improve overall compassion strengths. At first, this seemed counterintuitive due to previous studies showing that nursing students with high compassion were more likely to develop burnout and compassion fatigue (Maben et al., 2010; Bjerknes & Bjork, 2012). Contrary to this belief however, the results presented here suggest that compassion strengths may act as a psychological buffer to stressful situations, especially when nurse practice includes self-care (Cosley, 2010). In addition, self-care was also the biggest predictor of compassion strengths, suggesting that when nursing students focused their care inwards, they increased their overall compassion strengths. This too contradicted previous thought due to the nature of nursing being about providing compassionate care for others but highlighted the importance of self-care in modern day nursing. Thus, if nursing students and nurses are taught, encouraged and more importantly supported to engage in self-care by organisations which promote the benefits of such activities, then this may help reduce occupation stress and burnout.

In their study into Schwartz rounds, Maben et al., (2017), found a link between staff wellbeing, communication and compassion for patients. The current study also

discovered a similar pattern of results with the measures used. Thus, this suggest that the BCSIs could be used to measure compassion and assess the impact Schwartz rounds have on staff wellbeing, compassion and professional quality of life. Communication was also a strong predictor of wellbeing in this study. This may be accounted for by an emotional reward that nursing students felt from communicating with patients. A feature of this is that communication is the vehicle in which students connect and engage with their patients. Along with overall compassion strengths, these two factors predicted greater compassion satisfaction, meaning that the more engaged and connected nurses are with patients the more likely they are to experience the benefits of their compassion. The findings from this support previous research (Dewar 2011) and add further statistical support for the effect self-care can have on nurses' compassion and professional quality of life.

Similarly, the findings indicated that using interpersonal skills to communicate to colleagues, patients, their family and friends using non-clinical language, nurses experienced less burnout. This suggests that interpersonal communication is a key factor in the wellbeing of nursing students, in that the ability to communicate and discuss with colleagues could reduce the pressure on nursing students in practice. Equally, nursing students with a kind, honest, respectful character, who used a sense of humour in their work had a lower prevalence of secondary traumatic stress (STS). Those however, who went the extra mile were also prone to STS, implying that sometimes doing the little things come with a much larger cost. This may be associated with the link between engagement and increased empathy, in that empathy leaves the practitioner open to emotional vulnerabilities, whereas for similar reasons, connecting to patients has a deleterious effect on their empathy. This highlights the vulnerable positioning nursing students put themselves in when showing compassion and

arguably makes the case stronger for the inclusion of self-care and supportive strategies into nurse education and practice.

There was a weak relationship between secondary traumatic stress/compassion fatigue and overall compassion strengths score. Despite a negative relationship between the two factors, this was small and non-significant. These findings are consistent with other studies where scores on compassion fatigue did not correlate with compassion for others in similar nursing student samples (Durkin et al, 2016), or perform well psychometrically with other nursing populations (Hemsworth et al., 2018). In a sample of midwifery students, Beaumont et al (2015a) found a significant negative association between compassion fatigue and compassion for others, observing a similar pattern with a sample of student psychotherapy and trainee counsellors (Beaumont et al., 2015b). Perhaps, this is an indication that compassion fatigue has a bigger impact on practitioners' compassion in different healthcare fields than it does with nurses. The nature of working one to one with clients' experiencing trauma, or with mothers during a traumatic birth could be possible causes for this. Alternatively, many of the compassion fatigue items referred mainly to the secondary traumatic stress that can develop when working with trauma. As the sample was comprised of nursing students, it may be that they had not experienced a traumatic event during placement, or they simply had higher levels of resilience. Further research to explore this might offer more understanding of the hypothesis made here in this thesis.

In line with studies in positive psychology, this study showed how nursing students reported increased compassion satisfaction as a result of demonstrating compassion strengths and supports research into the positive effects of compassion (Mongrain et al, 2011). The study supports previous research showing that self-care is associated with compassion satisfaction and compassion for others (Durkin et al., 2016; Hinderer

et al., 2014). There were significant and negative correlations with character, communication and secondary traumatic stress. This indicates that personality traits can have an effect on nursing students' professional quality of life and supports the use of calm effective communication with patients through verbal and non-verbal means when responding to patients. Further research would help to explore this in more detail. The findings support research in positive psychology, which proposes an individual's character strengths might have the potential to influence their compassion strengths (Cassell, 1999; Gillham & Seligman, 1999), and extends this to suggest that the character scale of the BCSI can be used to predict the occurrence of secondary traumatic stress (Barr, 2018; Chen et al., 2018).

This study adds to the literature with a reliable psychometric scale for measuring compassion that was validated with nursing students, and against scales that measure similar concepts. The uniqueness of the BCSIs is that it encompasses more aspects of compassion than previous instruments and can be used as a measure for the self-development of individual and overall compassion strengths.

8.7 Can the META model help bridge the gap between education and practice?

In addressing the third research question, all the elements of the study together such as the scale and online course, formed the META model. The literature review outlined previous models relating to compassion in nursing. While providing a useful framework and outline for what compassion is and how it can be realised, it is argued that they do not offer an adequate guide for the process of development in nursing students. Through the combination of each distinct element and research throughout the thesis, this study has shown how the META model was developed in relation to compassion in nursing. For it to be applied to compassion in nursing and bridge the gap between

education and practice, it was necessary to also develop a model of compassion that would lay the foundation of the model. Much of the literature does not identify the ways in which nursing students can develop their compassion through reflection and self-measurement. This study adds to the theory with a detailed explanation for how compassion can develop but has also developed a tentative model that helps bridge the gap between education and practice. It also adds more to current literature with the inclusion of a scenario based learning program that included a unique POV video. In addition, the introduction of the scale added a new and effective dimension to the learning experience that was missing from previous studies.

The current study adds to the literature on learning in that the META model could be intertwined with the concept of deliberate practice to encourage learning of compassion strengths. In this study however, the structure of the online sessions were designed according to the process of deliberate practice but in a slightly different order; first, the completed self-assessment form for compassion strengths provided immediate feedback, second the motivated learner explored the background information on each strength, examining visual examples of good and bad practice, and resources to develop these strengths, third they could practice and try out their understanding with the visual scenarios, and four, answer the reflective question on what they would do in a similar situation, before five, practicing this again and repeating or applying the strength in practice, in a repeat practice cycle. This study into the META model, adds to the literature and provides evidence for the theoretical application of using visual scenarios to support deliberate practice (Gonzalez et al., 2017).

The reflective accounts at follow up indicate that the course not only taught students about compassion strengths but helped them to demonstrate these skills with patients

whilst on placement. Findings suggest that through the META model, nursing students gained new insights into themselves, their practice and the impact compassion has on self and others. They understood how engaging in small acts of compassion were enough to make patients feel valued. Moreover, the way in which they presented themselves through body language was significant in making a difference to the patient's wellbeing. The implications of this extend to practice nurses as well as nursing students, however more research is needed to support this.

The dictionary definition of META means to: *involve change*, *metamorphose* (to change into something), *outside the normal limits of something*, *change*, *occurring later*, and *transcending* (Cambridge Online Dictionary, 2018; Merriam-Webster Online Dictionary, 2018). Where in this study META is an acronym, the significance of these definitions is relevant to the underlying meaning behind the model. For example, the process undertaken at each stage represents the changes nurses go through when they first enter the caring profession. In relation to the course, nurses transcend all preconceived ideas of compassionate care to become stronger in each of the compassion strengths and change into compassionate practitioners. This again makes a strong case for the META models' ability to motivate nursing students to be compassionate, when applied to compassion education.

The qualitative element of the study showed evidence for the characteristics of a compassionate nurse, whereas the quantitative results showed a pattern of significant improvements on the BCSIs. Significant differences were found between the intervention and control group, suggesting that these improvements were a result of the online course. There were also clear indications that the compassion can be taught and measured when combined and applied to the META model. The increase in scores in both groups at post testing also adds further support for the BCSI's reliability.

These findings also suggest that nursing students could challenge the barriers to compassionate practice outlined in previous research and the results of earlier interviews in this study and develop their compassion strengths (Burridge et al., 2017; Dev et al., 2018; Horsburgh & Ross, 2013; Zamanzadeh et al., 2018). This adds further support to the theme of motivation running through this study. If nursing students can identify and become more aware of what strengths they have, then arguably this will motivate them to either carry on demonstrating their strengths or develop in areas where more practice is needed. As was found in previous studies (Durkin et al., 2016), findings from the development of the BCSIs showed there was a clear association between compassion satisfaction and compassion strengths. This could indicate that motivation for demonstrating compassion in practice is predicated on the satisfying feelings that arise in nursing students when they are compassionate. While these results are positive, they are based on a relatively small sample. Thus, further research with larger numbers is recommended to explore this in greater detail.

The current study has added to the literature with a practical intervention that can potentially help nursing students understand what compassion is and more importantly provide the how that motivates them to be compassionate practitioners. Feedback from the NMC reflective accounts indicated that the course motivated some to apply what they had learned of the strengths with patients and was supported by an increase in scores on the Bolton Compassion Strengths Indicators.

As already alluded to, the need to include a measurable framework was paramount to helping students learn about compassion. This study employed the use of a framework for compassion strengths, pre and post measures, plus a control group to compare the result of the course with those who took regular classes. In a recent article Ball & Griffiths (2017), highlight the importance of these factors when designing and

implementing interventions to teach about compassion. In addressing this, the current study highlights the importance of this approach to produce methodologically robust research when assessing the impact of a compassion course on nursing students. Studies indicate that students benefit more from blended learning (Hofmeyer et al., 2018). Therefore, it was hypothesised that students participating in the course delivered online, but in-class would experience a greater increase in compassion strengths that those for whom the course was provided online only. Although, the sample size was relatively small, comparing the results of the intervention against those who did not take part in the course, provided stronger evidence for the META models effectiveness at helping nursing students develop their compassion strengths.

Using the findings from this study, the 5 W's also provided a useful framework when applied to the development of the online course and META model. Firstly, it helped identify why nursing students should learn about compassion and informed the introduction section of the online course. Secondly, what could be taught and what was needed to teach compassion, helped with the modular design of the course and inclusion of resources for developing each strength. Thirdly, how nursing students could learn and suggestions pertaining to role models and scenarios promoted the creation of the videos. Fourthly, the use of nurse lecturers and real-life nurse patient hospital scenarios in the videos was helpful. Fifthly, findings in relation to where nursing student could learn about compassion, especially when it was suggested that education helped for understanding of the foundations of compassion strengths, and practice the development of these strengths, motivated the inclusion of theoretical, practical, visual and reflective elements that could be applied to practice. With their novel approach, these simple but effective questions have the potential to guide

educators during the development of courses on compassionate care, as well as other educational programmes.

In adding to the debate that nursing degree courses are too short to give nursing students the knowledge and experience for what it means to be compassionate (Pearcey, 2007), this thesis demonstrates that a brief online teaching intervention can have a lasting effect of up to four months, on students' knowledge and practice of compassion when presented as a Compassion Strengths model supported by the META model. The short videos and class delivery, adds to the literature where nurses end of life care behaviours improved as a result of receiving a one hour intervention that improved empathy and perspective taking when delivered to nurses as a blended learning resource (Bennett et al., 2018, Lobchuck et al., 2018; Shea et al., 2016). It has shown how a short course can increase compassion strengths in nursing students when delivered in class with additional online examples, supportive information and recourses. At the very least it suggests that this approach could be instrumental at helping nursing students "get the basics rights" when it comes to the fundamental aspects of compassionate care (Hofmeyer et al., 2018). The optimal number of sessions it would take to attain and retain compassion strengths and impact patient care requires further study.

The uniqueness of the current study was showing that a more robust and systematic course that includes a scale linked to each module can help students develop compassion strengths in ways commensurate to their needs. This adds to the small number of similar studies aimed at helping nursing students develop their compassion with a model to assist in this endeavour (Adam & Taylor, 2014; Adamson & Dewar, 2015; Hofmeyer et al., 2017). The META model could arguably be applied to studies like this to evaluate the impact these courses have on student learning and

development of compassionate care. More research is recommended to explore this further.

This study promoted the development of communication skills, and resilience to build nursing students compassion. However, building on from previous studies, rather than focusing on building resilience directly, this study recommended and saw an improvement as a result of developing individual self-care strategies that nursing students could adopt to not only build resilience but attend to practices to reduce stress. This again highlights the importance of extending nursing students knowledge of self-care beyond mindfulness and self-compassion to activities that fit with their needs and lifestyle. It was surprising to see such an increase in scores for self-care between the groups considering that care for others is usually most associated with nurses' compassion. As a result of presenting students with content that included information about the importance of looking after the self, they became more involved in the practice of self-care. This study adds to the literature that promotes educating students on the benefits of a healthy lifestyle, such as diet, exercise, sufficient sleep and finding time alone or to be with friends, helps maintain a positive work-life balance, and the strength needed to build emotional resilience in preparation for providing compassionate care, with an educational model that can help fulfil this (Durante et al., 2016; Hofmeyer, 2017; Klainin-Yobas et al., 2018; Sergeant, & Laws-Chapman, 2012).

The study also supported the use of reflection and real patient stories to connect emotionally with patients but extended previous methods to include a visual representation. This indicates that nursing students can learn about compassion from the patient story when it is delivered as an audio and video recording. It also adds additional support to the use of reflection in nursing students learning about

compassion in that students are given the opportunity to share their stories of witnessing poor care in practice, and how they might have approached the situation differently, which can encourage resilience among nursing students (Adam & Dewar, 2015). In addition, the format of the compassion strengths modules supports similar research in which an online modular course was effective in assisting nursing students in their understanding of compassion (Hofmeyer et al., 2017). However, this study showed that the impact was more effective when delivered in class and adds to the literature with the visual scenarios involving nurse patient interactions.

The use of VLEs in nurse education can be very effective if utilised in a way that gets the most out of the online platform (Bas-Sarmiento et al., 2017; Choi et al., 2015; Cunico et al., 2012;Edwards, 2008; Green et al., 2006; Lobchuk et al., 2018; McConville & Lane, 2006; Moule, 2011). Very few studies have explored how compassion can be taught using an online platform (Hofmeyer et al., 2016, 2018). The current study built on previous research to include a visual patient story seen from their point of view that participants could relate to on a different and arguably deeper level to understand the patient perspective and assess their needs. Linking this in with philosophical and psychological theory, assessing whether someone is deserving of compassion was discussed in the literature as a key factor when assessing if it should be shown to another. The homeless patient and thief videos provided students with the opportunity to observe the experience of someone who might have been judged as undeserving and reflect on their initial judgements. Thus, their initial beliefs could be challenged.

Role modelling a compassionate practitioner is often recommended for nursing students (Zamanzadeh et al., 2018). The current study supports this, but offers a new perspective in that, rather than observe an actual physical person in practice, the role

model can be experienced in a video scenario in a virtual learning environment. This provides a new take on how nursing students can role model compassionate practitioners to learn from them, without the impracticality of observing someone in practice. Similarly, research suggest that courses aimed at introducing nursing students to the realities of compassion through visual stories can help them come to terms with any difficulties they may encounter (Cutis et al., 2017; Shea et al., 2016; Wasner et al., 2005). In support of this, the current study adds to this with the inclusion of a number of real life scenarios that represent the stressful environments nursing students contend with. This indicates that courses aimed at teaching compassion should include such methods to encourage reflection and prepare students for the challenges that can occur in practice.

The findings also suggest that the videos provide an alternative, yet useful example of how nursing students can learn by modelling from one or more compassionate nurses (Straughair, 2012; Perry, 2009). Problems with role modelling in academic and clinical practice occur when students experience dissonance between role educators who embody compassionate practice and clinical staff who do not (Baldwin et al, 2014). Arguably, some educators who may have spent more time in educational settings may not understand the issues that staff presently encounter due to changes in the practice environment. As each scenario was developed based on recent clinical experiences of nursing staff, the videos presented in this study could provide an alternative approach to role modelling that reflects the reality of current practice. This in turn could prove invaluable for the nursing students practice and ability to be compassionate. The video recorded scenarios support the claims of Deane and Frain (2016) who suggest that nursing students can practice their compassion through patient

interactions during the orientation phase of Peplau's theory, by showing that this can be achieved through reflective visual media.

The findings from the pilot study to evaluate the effectiveness of the video recorded scenarios was positive and supported the use of the video based scenarios as effective tools for teaching nursing students about compassion. The real world feel of the videos helped participants become more cognizant to the reality of nursing practice. This was highlighted in the reaction to the POV video and its ability to capture the patient's experience in more detail. The additional use of recording the patient's thoughts and placing them over the POV scenes added an extra depth to the participant's experience. These findings add to the literature with empirical evidence that video recorded scenarios, particularly the point of view, result in a deeper awareness and appreciation for the suffering of others. While the findings extend to the demonstration of compassionate care, this is also arguably a prime example of what is referred to as the perspective taking element of empathy (Davis, 1989). Thus, the findings presented here could be used to inform research and practice where empathy is key to the service being provided. The POV scenario provides one possible way of addressing the concerns with nurse education and how educators can help students to understand what it feels like to be a patient (Cornwell & Goodrich, 2009), and adds to the growing literature on patient experience interventions.

The findings of this study suggest that the videos provided nursing students with a valuable resource for spotting variations in the quality of compassionate strengths. By all accounts, the scenarios made it easy for nursing students to spot the compassion strengths being demonstrated whilst also noticing scenes where compassion was missing. In relation to the META model, this suggests that the scenarios were a valuable medium for allowing nursing students to *Try out* their understanding of and

identify compassion strengths in a virtual learning environment. The current study identified how creating real–life interactive video scenarios could be a practical addition to methods of teaching compassion to nurses.

This study has also alluded to the potential benefit of the META model to address the issues of perceived behaviour control, as presented in the Theory of Planned Behaviour (TPB) with a set of resources that assist nursing students in the development of compassion. The current study supports previous research where the use of theory in the modules for each strength, simulated scenarios and constructive feedback in the class discussions, can help increase confidence towards the behaviours associated with compassion set out in the Compassion Strengths Model (Archer et al., 2008). This arguably can challenge students' perceptions to encourage them to believe in themselves to know that they either already possess these strengths, or that they can develop them further to behave compassionately in practice. The development of character shows that these traits can be learned, suggesting that similar to the theory of planned behaviour educators can understand how attitudes, subjective norms and perceived behaviour control affect behaviour, and implement strategies that remove barriers to changes in compassionate care (Eccles et al., 2005; McConnell, 2015). In line with the theory, this study showed how giving students the necessary information on compassion strengths and examples of how to perform particular tasks through background theory, simulations and constructive feedback, increased confidence towards the particular behaviour and addresses the issue of perceived behaviour control, specifically a lack of resources. The videos, particularly the homeless character and mobile phone thief address claims from Milgram's (1974), observations in his obedience study where certain subjects can be deemed unworthy individuals deserving of their suffering. It showed that with the help

of reflections students can learn to think differently about those they treat and provide compassionate care.

The NMC reflective accounts used in this study supported the effectiveness of the course to help nursing students think differently about compassion. Findings indicated that the course helped nursing students understand that compassion meant more than showing kindness to patients, and that self-care was just as important for them as providing care for others. The feedback had examples of how the course had not only increased their self-awareness but motivated them to express compassion in different ways than they had not previously thought possible. Arguably, these findings provide empirical evidence against the uncertainty that can occur in nursing students when they do not feel prepared to meet the demands of compassionate practice. It provides a strategic approach to learning that breaks compassion into demonstrable behaviours that align with students' ideals, and encourages self-care (Curtis, 2013, 2014). Again, these findings are limited to a small sample at one institution and cannot be generalised beyond these realms. Despite the significant results, the effectiveness of this course in relation to the META model still needs further research with larger groups to substantiate its claims.

The findings add to the body of knowledge on compassion by showing that it can be taught and measured especially when applied to the META model. This study makes the claim that compassion is a multifaceted concept that is expressed in multiple ways, and the META model can help nurses understand how to develop and express compassion in their own unique way.

8.8 Implications for education and learning

As an initial finding, the 5W's offer new insights that educators can ask when designing educational programmes for compassion. Although they proved effective, the 5 W's implications extend beyond the scope of this study to other areas. Future research could build on the findings of this study to explore the application of the 5W's when designing educational courses and develop it into a working model.

Although a tentative model, the META model and it constitute parts create what can be for nursing students and nurses alike, a flexible, self-empowering, and self-directed method of learning that gives them responsibility for their individual development of compassion. The compassion strengths model provides a repertoire of compassionate skills that are important to their learning and the compassion they demonstrate in practice. It can also be proposed that this model could apply to other areas of knowledge acquisition where compassion strengths are replaced with other measurable behaviours not reserved for nursing alone. Similarly, the META model could be used with other healthcare students and professionals to help them develop their compassion. More research is needed and highly recommended to explore these assumptions.

The META model has the potential to bridge the compassion gap between education and healthcare organisations with an innovative method of teaching compassion (Booth, 2016; Curtis et al., 2012; Waddington, 2006). This study has shown that through the design of a novel teaching approach grounded in evidence-based research, nursing students can learn about the fundamental aspects of compassion strengths that can help them develop and sustain their professional ideals of nursing and compassionate care.

Adding a reflective element to the course supported a constructivist theory to learning. Nursing students gained knowledge about compassion by thinking about what the new information presented in the course meant to them relative to existing schemas. Through an active process of action and reflection they were able to apply what they had learned to their practice. In line with behavioural theory, nursing students responded well to the course content being delivered as modules with each section provided as smaller chunks of information. This supports previous research into the learning theories that guide online learning but adds to the literature with the inclusion of a course based on the development of compassion (Larew et al., 2006). The META model also adds to the theory of guided construction, showing that with a guided framework for compassion and how to demonstrate it, students were able to develop compassion in their own way.

In addition, the findings show how The META model supports social learning theory and problem based learning in that students applied what they had observed in the scenarios and the course to their clinical practice. This adds to theories of learning in nurse education with the use of problem based learning and makes the argument for the use of online learning to assist students in developing compassion strengths. The use of online role models helped legitimise the compassion strengths so that nursing students could observe how to demonstrate them in practice. The META model also supports Eraut's (2013) claims about tacit learning in that the findings of this study indicate that nursing students were able to develop their natural compassion strengths. As alluded to in the general review chapter, it is suggested that humans have what is referred to as a "compassion instinct", suggesting that people are born with compassion but may also need to learn ways in which it can be demonstrated in a caring practice environment (Keltner, 2010). Arguably, this study has shown that with

the help of the META model as a guide, nursing students were able to learn how to develop their natural propensity for compassion and apply it to practice. This is important for those who may already have compassion but need to learn ways in which to demonstrate it in practice, and those for whom compassion comes naturally who would like to sharpen their skills.

The META model also adds to the argument that different learning styles can be applied to teaching modules so that leaners can learn in their own way (Pashler et al., 2008; Roher & Pashler, 2012). The findings from this study provide evidence that the META model can be used to help students understand and learn about their own compassion strengths in a manner subjective to their individual needs. The model involves a scale to uncover where individual strengths lie in particular areas of compassion. It then frames learning in an exploratory process where new ideas can be tested, and solutions redefined before applying them to practice. The reflective element creates a repeatable and measurable model for developing compassion. In line with Eraut (2000), this deliberate approach shows that learning is more effective when practitioners have some evidence, experience of the concept, and the willingness to reflect on what is possible in the circumstances. While the measure element can be captured through other methods (Dewar, 2011), this is a unique contribution to knowledge in that no other model for teaching compassion includes a psychometric scale to inform self-directed learning and deliberate practice.

Similarly, the META model could be applied to Benner's (1982) novice to expert model to guide nursing students towards becoming experts in compassion. Each element, can be used as the tool to measure, reflect upon and develop compassion strengths in real life and scenario based practice. At each stage, the nurse can assess their progress from novice to expert in relation to the situations they experience so that

growth can occur. As it seems this has not been considered before, the current study adds to the literature on nurses' development of compassion.

The online deliberate practice session guided by the META model offers a time and cost-efficient learning intervention that provides nursing students and nurses the opportunity to practice compassion strengths in a low risk environment. This has the potential to bridge the gap between education and practice and the focus on developing compassionate care. The META model provides an innovative approach to teaching compassion in line with deliberate practice theory that can be used to support nursing students as they transition through their training. Initial findings from this study indicate the course was well received by those who took part in it. Further longitudinal studies could also examine the long term impact of this on registered nurses' compassion.

Findings from this study suggest that nursing students can learn about their own compassion strengths from a less prescriptive approach that allows them to work autonomously to develop compassion. Arguably, this shows that the META model can motivate students towards an achievable learning goal about compassion. There is some evidence to suggest that the study changed students' thoughts about what compassion entailed and how it could be demonstrated. For example, students in the study spoke about how they previously thought compassion was about kindness but now realised there was more to it, such as doing the little things. This indicates that even the most compassionate and knowledgeable nursing students can still learn about the different elements of compassion and how to apply them to practice. As was also mentioned in the interviews, registered nurses have much to learn. Thus, highlighting that compassion is a continuous learning process and that programmes such as this can help.

The issue of motivation to be compassionate has been highlighted throughout this thesis. In line with deliberate practice theory, there is evidence to suggest that he META model helped motivate students to take responsibility of their own learning and explore ways in which they could develop their compassion for practice. In giving nursing students the platform to explore their compassion strengths, the META model may help them to develop and find ways to align their values with the reality of practice. This in turn could motivate them to sustain their compassionate behaviours and challenge conflicts between ideals and reality in practice (Curtis, 2013; Nijboer and Van der Cingel, (2019). The finding from the META model study add to previous studies with its potential to challenge beliefs and encourage character development in a way that is complementary to nursing students' unique learning style, so that behavioural change can occur (Day, 2015; Pearcey & Richardson, 2018). This highlights how the personal expression of compassion that is individual to them, is an important factor in the early stages of a nurse's development. Rather than take a prescriptive approach, the META model allows for flexibility in the demonstration of compassion strengths.

A strength of the META model is that it considers the development of compassion on a continuum of strengths that can change over time due to external and internal factors. Studies show that over time compassion and empathy decline in both pre-registration and registered nurses (Dulay et al., 2018; Hunt et al., 2017; Michalec et al., 2013) Based on the findings of this study, it is reasonable to propose that nurse training is an ideal time to implement compassion strengths training in an effort to help future nurses develop the skills required to provide compassionate care. The META model could also help challenge negative self-fulfilling prophecies, to one that is more positive where nursing students believe that they have the potential to be

compassionate, and that this is motivated by the continued development of compassion strengths. This is also key to encouraging the motivation to be compassionate. Changing the self-narrative about how compassion one is, to demonstrable action in practice is an important step in bridging the gap between education and practice. In line with Nijboer & Van der Cingel, (2019), the self-directed measure and online course provide the means for which nursing students can empower themselves as they develop their professional identify as compassionate practitioners.

The study also provided some evidence that the META model helped nursing students cultivate what Florence Nightingale called a “compassionate character” (Bradshaw, 2011). While this could be taken to mean character itself, where traits such as kindness, warmth and humour were developed as a result of using the model, it also suggests that nursing students can grow in other areas associated with the behaviours of a compassionate nurse (Nightingale, 1859). Indeed, the findings from this study support previous research in that the blend of a nurse’s character, their beliefs, a positive role model and patient experience can motivate them to be compassionate (Christiansen et al., 2015; Zamanzadeh et al., 2018).

Furthermore, the importance of strategies for self-care rarely focus on nursing students and very few on compassion. The inclusion of self-care as a key strength in relation to compassion is supported by literature, and has implications associated with the reduction of student anxiety and other possible mental health issues that can occur whilst training to become a nurse (Durkin et al., 2016). Exploring the findings from this study with wider populations to uncover the self-care activities nursing students take, could help inform future generations of nurses, so that they are better prepared for the stress of work and compassion can flourish in the workplace. An important feature of

this research was the recurring theme that self-care is important for demonstrating compassion for others. The inclusion of self-care strategies into nurse education and other healthcare programmes is reasonable given the evidence that the extracurricular occupational demands and stress have on practitioner wellbeing and ability to show compassion.

Furthermore, with its ability to test their understanding of compassion, the video element of the META model can help in the recruitment of nurses where they are expected to demonstrate how compassionate they are. The scenarios could be used in interviews to challenge them to explain what they would do, rather than report on a personal example of when they have shown compassion to others or explain what it means. Equally, as was shown in the compassion model by Goetz et al., (2011), the META model could help illuminate each of the psychological processes that an individual goes through when assessing their decision to show compassion to others. The videos allow for the assessment of the other, and whether they are deserving of help, while the information and hints and tips for building each strength, in particular self-care, supports the individual resources to cope and help the other, thus reducing anxiety and allowing compassion to be shown.

Delivering the course in a classroom where discussion and debates were encouraged, gives credence to the theory that supportive environments can help compassion to flourish (Cole-King & Gilbert, 2011). This indicates that courses in compassion might be more effective when they are delivered in class. In this way students can ask questions, discuss issues and relate them to practice while surrounded by the support of educators and fellow students. While the findings suggest that students are not quite ready to engage with a fully online course for compassion, the online content may serve to support the subject matter that is delivered in class.

The scale gave students an idea of their compassion strengths, and the other elements provided the tools that helped develop their knowledge of compassion in practice, reflect and apply this to practice, thus raising their self-awareness too.

8.9 Implications for practice

This study adds to the current literature that promotes the use of interventions to enhance self-awareness, reflective practice, which enable the delivery of compassionate care (Dewar & Cook, 2014; Dewar & McKay, 2010). The META model provides a toolkit for developing compassion in nursing students that promotes self-exploration and learning within a supportive environment. This extends the work of Bridges and Fuller (2015), to support individual and work based learning with an online course for nursing students working with a range of different patients. Similarly, in line with suggestions from nursing scholars, the META model provided the educational means to encourage and guide nursing students in their understanding of compassion and how to utilise compassion strengths to become proficient practitioners (Von Dietze & Orb, 2000). As it fosters continual learning, the META model can arguably help nursing students become “compassionate literate” (Burridge et al., 2017). It provides examples of how compassion is demonstrated in practice, and as shown in the study, evidence of increased self-awareness towards compassion and the importance of self-care to help with this.

Although Waugh et al (2014), suggest that a character based approach to nursing recruitment, the specific characteristics were not explained, nor did they indicate the ways in which they could be evidenced in real life situations. With the Compassion Strengths model, the current study provides a framework for these character traits and the META model, has given students a chance to reflect on a real life environment, via

the online course. Arguably, the research has shown that through the identification of compassion strengths the META model could help foster an appreciation and awareness of the multifaceted nature of compassion and motivate nursing students to learn and apply compassion to their practice.

Despite the development of strategies such as “Compassion in Practice” in 2012, and the earlier “Point of Care” in 2009, the tragic events of Mid-Staffordshire still occurred. This arguably shows that nothing much had changed to address these issues of poor care and lack of compassion. The META model along with the Compassion Strengths Model adds to the growing number of similar approaches aimed at improving the quality of compassionate care. The META model presented in this study addresses the need to create a way of defining and assessing the teaching of compassionate care put forward by the Point of Care programme (Firth-Cozens & Cornwell, 2009). The use of a measure of compassion, and an online course that included visual examples of good and bad practice, helped nursing students develop their understanding of compassionate care.

The six C’s have been criticised for not showing how compassion can be demonstrated in practice only that it should (Ballie, 2015; Dewar & Christley, 2013). The compassion in practice strategy also claimed that it would change the way healthcare staff worked, transform the care of patients and promised to deliver a culture of compassionate care (Cummins, 2012). Yet, one year on from this claim, Mid-Staffordshire occurred. Arguably, and despite more recent reports suggesting it had started to make a positive difference, this strategy did not have the direction needed to deliver on its claims, nor has it provided practitioners with examples for compassion that could be demonstrated in practice. In presenting the META model with the Compassion Strengths, this study has arguably provided a model that could

address this issue in the future. The compassion strengths model adds clarity to what compassion is, while the META model promotes the how with a clearly outlined an easy to follow pattern of learning.

Moreover, Allen et al., (2015), discovered that several nurses resented the compassion in practice strategy as it undermined the fact that they were already demonstrating compassion in practice. The compassion strengths model through META supports this, in that those who are already compassionate could assess themselves and if needed, extend the original 6C's strategy to show how it can be taught as opposed to simply making nurses aware of what it is (Allen et al., 2015). With its flexible approach to personal development, the META model could arguably help reduce the risk of such strategies becoming a tick box exercise, by creating a descriptive model that can be adapted to the students learning style and needs.

A great benefit of the META model is that it is cyclical, thus it can be applied to practice through continued professional development (CPD), in a similar fashion to the transition from novice to expert in a never ending learning journey of discovery and knowledge development that is supported by deliberate practice. This has greater implications for the individual, the patient and the practice organisation (Fig 33 below). It could lead to change in culture, with patient care central to compassion. Thus, helping to address some of the issues that have blighted healthcare.

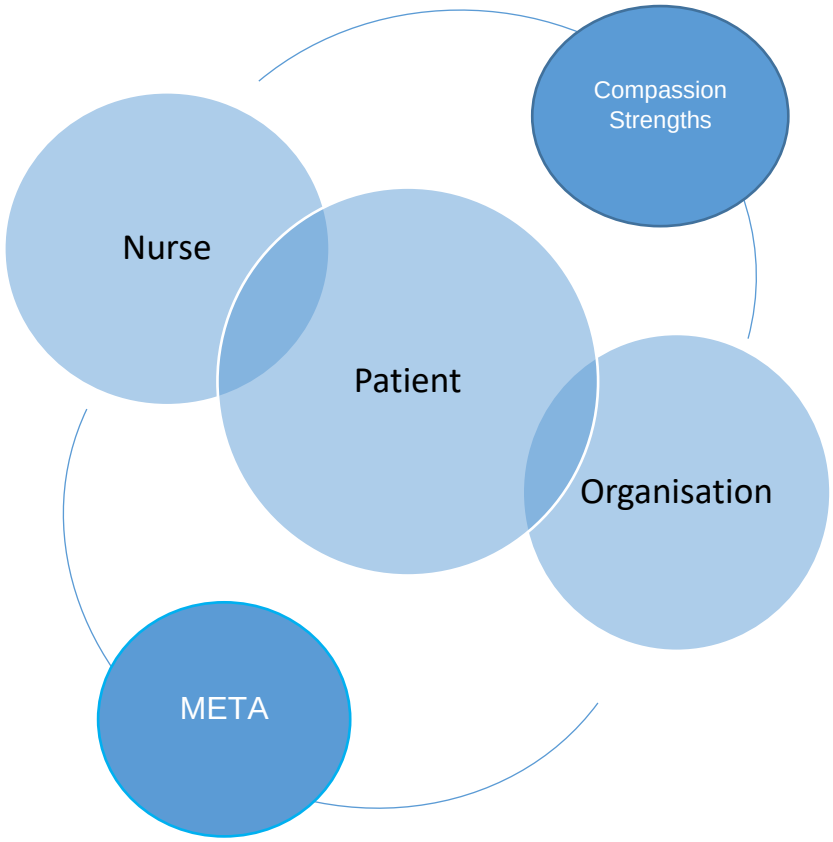


Figure 32. An indefinite example of continuous learning and development of compassion strengths within a healthcare organisation.

Unlike some of the previous models, the implications based on the inclusion of service users in the development of both models also suggest that more research should be conducted with this important group. For too long, a top down approach to understanding compassion in nursing has presided over the literature and previous models. The current study has shown how including service users and gaining their thoughts on an important aspect of patient care improved the development of the models and interventions presented in the study. This supports the propositions of Sinclair et al (2016), and Crawford, (2014) in that service user groups add a much needed bottom up element to the development of compassion in nursing.

The study indicated that the META model helped nursing students not only know what compassion is but gave the means to help them develop and deliver compassion to

patients. Contrary to Feo et al., (2018), this study also found that many understood the fundamental aspects of compassion. Arguably the META model could serve to help nurses and nursing students in developing a deeper understand of the importance of each strength and how to apply it to practice. This implies that and supports previous work which suggest that a model to guide and encourage nursing students to think about compassionate practice could helpful in the development of compassionate care (Lindh et al., 2009; Traynor 2014; Richardson et al., 2015).

While this study has shown that the compassion strengths model works well with the META model, it can also be used as a standalone framework for practice. This can also contribute to the continued professional development (CPD) of nursing students and practicing nurses. An example for this is presented in Table 27.

Table 27. Framework for evidencing the compassion strengths model in practice.

Strength	Indicators	Evidenced by
Character (CH)	-Kindness -Care -Honesty -Humour -Warmth -Respect	A nurse displays their own distinct positive virtues with patient, family, friends and colleagues.
Connection (CON)	-Connecting to and knowing the patient -Awareness of needs/suffering	Nurse makes effort to know more about patients holistically as an individual with unique needs and experience of ill health.
Empathy (EMP)	-Perspective of patient -Being in their shoes -Feeling the patients suffering	Nurse considers the patient's situation to get a greater understanding of what they are experiencing.
Communication (COMM)	-Verbal -Body language -Listening	Nurse displays excellent verbal and non-verbal communication. They actively listen to a patient's concerns no matter how small.
Interpersonal Skills (INTS)	-Involving patient and their families -Colleagues -Knowledge of clinical terms	Nurse uses skills to relate and connect to patient, family members, colleagues and all involved in the care of patients. They have the ability to explain medical terms and explain what is going on throughout the care journey
Engagement (ENG)	-Having time for patients -Small acts -Going the extra mile	Nurse takes time to be with patients, engage in small but not insignificant acts of care.
Self-care (SC)	-Emotional strength -Resilience -Looking after self -Self-compassion -Mediation -Exercise	A nurse engages in self-care practices that help reduce stress and increase compassion. Examples include healthy eating, exercise, yoga, mindfulness, self-compassion and socialising.
Competence (COMP)	-Professional competence -Skills to do the clinical work	A nurse is confident in the ability to demonstrate clinical skills in a competent manner. Active in continued professional development.

Considering the difficulties surrounding the identification of what actually can be considered compassionate behaviour (Dewar et al., 2011), this framework adds to current literature and provides a suggested example for evidencing compassion guided by the strengths model. There is scope for this framework to be used in nursing education as well as with other health professions and possibly more. Further research is needed to explore the impact of this in nursing and other health professions.

The tentative model (figure 33 below) explains how the compassion strengths can be utilised in relation to the delivery of compassionate care. To become aware of suffering, observation, emotional or cognitive reactions can be used as the indicators that someone needs assistance. Then the most suitable compassion strengths can be utilised depending on these needs, guided by an empathic response to changes that occur during the process. This leads to an effective and harmonious demonstration of compassionate care in line with the needs of the patient, family, friends, self and colleagues.

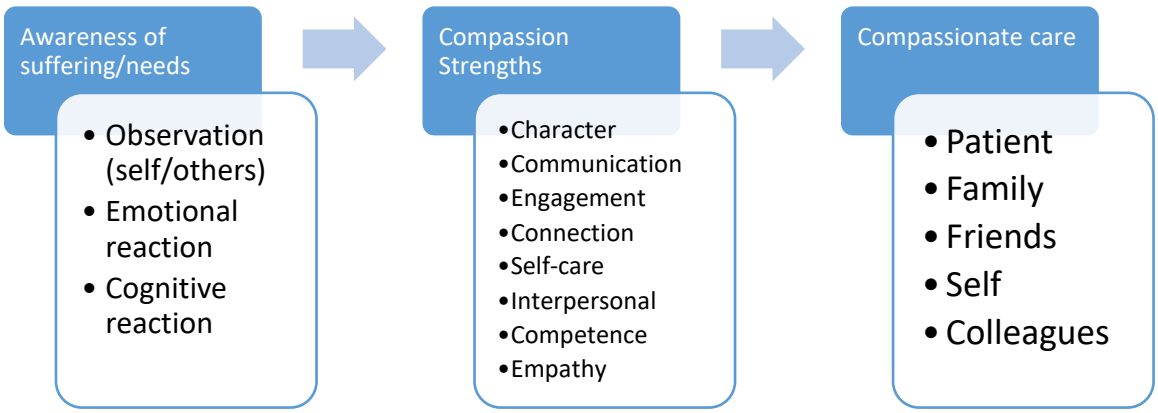


Figure 33. A tentative model for how compassionate care develops supported by the compassion strengths model.

With its modular approach to teaching about each compassion strength the META model builds on research that argues for a clearer definition of compassion, and instructions on how nurses and nursing students can apply it to practice and serve the needs of patients (Dewar et al., 2013; Firth-Cozen & Cornwell, 2009; McCaffery & McConnell, 2015). It supports the Point of Care programme in that simulation exercise, role modelling and patient stories enable the teaching of compassion but adds to the literature with the use of visual recorded patient scenarios that encouraged discussion and reflection on present and future practice.

Equally, the LCCP focused mainly on developing leadership skills to embed compassion into practice (Adamson et al., 2011). Rather than attend to compassion in this way, the META model encourages the development of compassion from a bottom up perspective where nursing students are motivated to build on their compassion strengths, and continuous learning to become compassionate practitioners. While the META model offers similar features to the LCCP, such as communication and getting to know more about patients, it offers a unique approach to cultivating compassion on a personal and individual level with nursing students. While it is theorised that it could be applied to leadership to provide guidance for leaders on how to develop compassion, the META and Compassion Strengths models require further research to explore this.

Similarly, as discussed in the introductory chapter, when compassion is absent it leaves a noticeable mark on the patients' and public's perspective of nurses and healthcare in general. It can be difficult for nurse education providers to sustain the aims of Government polices to improve the quality of compassion in services without a concise overall definition of compassion and the tools needed to develop it. While there have been numerous attempts to address the discrepancy between what

compassion is and what is expected of nurses with very little research to support how compassion can or should be delivered in practice. It is hoped that with the META and compassion strengths model presented in this study add to the small but important body of knowledge aimed at educating nursing students about compassion to improve patient care. Despite strong evidence showing the importance of each strength in the compassion strengths model, there is still much work to be done for how they can be supported in education and practice (Dewar, 2011).

An important distinction with the META model is that it supports the compassion strengths model, to provide clear guidance on the development of compassion at different stages over time. While others have developed effective methods of delivery, they do not include all these strengths and in the same way as presented in this study. Where other models have outlined what compassion is, the current study compliments this by showing that the META model can help in the development of these strengths. Thus, this thesis and the META model offer a new approach to teaching compassion to nurses that is supported by deliberate practice and can be embedded into education and bridge the gap to practice.

8.10 Implications for research

Equally, there are several implications associated with the Compassion Strengths Indicators (BCSIs) for use in practice and ideas for further research. There is potential for other nursing populations outside of the UK who could use the Compassion Strengths Indicators. Because of a dearth in standardised measures for compassion in nursing, staff and patients have relied on what they or others deem compassionate behaviour (Tierney et al, 2016). The Compassion Strengths Indicators could give educational and practice organisations an instrument to identify nurses and nursing

students who have or exhibit the potential to become compassionate nurses (Davidson & Williams, 2009).

In addition, the scale could help students and qualified nurses develop a broad range of compassion skills. As this new scale captures the underlying attitudes and behaviours associated with compassion in nursing, nurses and nursing students can access a measure that best reflects the things nurses do in practice. This would allow them to build their compassion strengths in particular areas rather than be limited by a single measure of compassion. Using the scale in this way could help nurses and students to identify and develop in specific areas that might need further exploration and practice. This could potentially help eradicate the blame culture that surrounds nursing, especially when it is said that nurses lack what is a fundamental human quality (Davidson & Williams, 2009). Instead, by pinpointing certain areas where nurses show less compassion and referring to them as strengths, practitioners may feel more supported in their work. This in turn may also lead to a change in the negative discourse that sometimes surrounds the nursing profession.

There is potential for nursing populations outside of the UK who could use the BCSIs. More importantly, the scales can help both students and qualified nurses develop a broad range of compassion skills. Furthermore, items on the scale relate to generic healthcare practice that is relevant to other healthcare students and professions. For example, changing the word patient to client or service user, on the BCSI means midwifery, medical or other clinical professions could use it. It could also be adapted to trainee and practicing clinical psychologists or psychotherapists.

Caution must be given to the claims of this scale in its current form. As it was developed and validated with a relatively small sample of nursing students at one

University in the north of England, its generalisability cannot be assumed. Thus, further research is needed to explore the effectiveness of the scale with other groups of nurses, and nursing students. More research is needed to validate the BCSI with other groups nationally and internationally.

As discussed in the general literature, compassion is very much a part of what it means to be human. It embodies the physical, metaphysical, religious and philosophical and has done so for many years. Compassion as a beneficial quality is something that has been debated in nursing discourse leading to several different definitions for it and how it can be realised in practice. As was shown in this study, debates pertaining to whether it can be taught or measured continue in the literature. The current study adds to the literature with evidence that both are possible when supported by the META model. Overall these studies show that compassion can be measured and taught. Both the META and Compassion Strengths model reject previous claims that compassion is impossible to teach, by unravelling the complexity of compassion into an easy to understand, measure and teachable framework for nursing practice.

8.11 Implications for a theory of compassion in nursing

While working models exist, at present nursing seems bereft of a theory of compassion. With the background literature, when brought together, the unique features of the Compassion Strengths model combined with the step by step simplicity of the META model contributes loosely to the start of what could be developed into a working theoretical model of compassion in nursing. This study has helped broaden the conceptual horizons of compassion in nursing from a vague solitary concept, into a clear and concise topology of compassionate behaviours and virtues grounded in the perspectives of key stakeholders. Not only does this make the identification,

measure and teaching of compassion more explicit, it provides a flexible approach to how compassion is demonstrated that can enhance compassionate practice. Evidently, it has helped provide an active way of expressing compassion. However, more research is needed to advance this idea further.

8.12 Overall implications for education, practice and policy

- Both models can be used to teach, train develop and facilitate nurses and other practitioners' compassion strengths in ways that are suitable to the individual and the organisation.
- The compassion strengths and video scenarios can be used as a resource to assist in the identification of compassion when recruiting potential nurse candidates (Waugh et al., 2014).
- In considering the demands of practice, the compassion strengths model untangles the complexity of compassion into manageable behaviours and virtues, adding clarity to what compassion entails and how to demonstrate it, whilst allowing practitioners to focus on one or more strength at a time.
- A definition of compassion is needed in nursing so that the above aims can be achieved. This study provides a definition that educators, organisations and policy makers can use to make clear what is meant by compassion in nursing.
- The compassion strengths model outlines a clear set of indicators that can be used to orientate practitioners, educators, policy makers and health organisations towards goals aimed at enhancing compassion in nursing.
- The use of creative technologies to help practitioners learn about compassion in new and unique ways that suit the learning style of the person.

- The study highlights the importance of encouraging self-care techniques into education, policy and practice so that nurses do not become overwhelmed with work and fall prey to the demands of occupation stress. In doing so, it values the work that nurses do under some of the most extreme conditions and for very little reward. Without their compassion, we all suffer.
- The scale provides a less judgemental approach to measuring compassion in nursing. Rather than look at what is wrong or lacking with nurses' compassion, it takes on a positive strengths approach so that students and nurses alike can develop in their own way and in areas they deem fit.
- The use of key stakeholders in this study was paramount to the understanding of what compassion means to them. Previously this definition has been decided mainly by senior figures and policy makers in healthcare. If we are to understand future policy more should be done to include those on the frontline who are truly representative of compassionate nursing.
- The models presented here can and should be integrated into other similar compassion models to form an overall compassion model.
- The studies indicate that the art of nursing is very much alive and with the compassion strengths model can be brought back to practice. It is recommended that educators, organisations and policy makers use the model to facilitate the art in nurses' compassionate care.
- The themes that emerged from the interviews should be considered by all parties involved in the design of compassionate care teaching programmes. Not only does this provide a clear and concise stepped process, it shows that there is much to contemplate when recruiting nurses.

- The findings add to the growing literature on the importance of continued professional development and implementing interventions in healthcare that enhance compassionate practice for students to help overcome the barriers to compassionate care.
- The compassion strengths add a vocabulary that enables practitioners to discuss the once difficult to describe aspects of compassion, while helping them to make sense of their experiences and learn from them.

8.13 Limitations of the studies

As in any study, it is important to discuss the limitations of these studies in relation to the research findings.

8.13.1 Limitations with participant sample

The number of participants in the study was a disadvantage. The nursing degree from which the sample was drawn was a relatively new course at one of the smaller UK Universities, thus limiting recruitment of participants. It would be ideal for further research to assess the interventions with a much larger group of nursing students. Similarly, as recruitment was limited to one University in the UK, extending this to include participants from other Universities might also improve the current findings. It is also importance to recognise that this study included participants from one university in the North West of England who were in the first year of study. Hence, the effectiveness of the course cannot be generalised to other national and international nursing students.

Another limitation was that in certain parts this study only recruited nursing students. In particular, when developing scales, it is advantageous for researchers to include

participants from a wider range of populations that best reflect the intended sample for that measure. A further drawback is registered nurses were not included when establishing the psychometric qualities of the BCSIs. Consequently, the scales cannot be generalised to the wider nursing population. It would be beneficial for future research to assess the BCSIs and investigate the findings from a wider sample of qualified nurses. Nevertheless, the sample size was enough to show that the BCSIs are a robust, valid and reliable measure of compassion among student nurses. Moreover, patient family members were not included in the interviews and focus groups due to limited access this participant group. As they represent an important voice in the understanding of compassionate care, this is a limitation that should be explored further in future research.

Although the purpose of the investigation was to evaluate the course with students who would have had very little experience of compassion, the long term implications cannot be fully assumed. As students' progress, the increased demands whilst on placement will undoubtedly create new challenges for demonstrating compassion strengths not considered in the course.

8.13.2 Limitations of the scale validation

A potential limitation of the study was not using Exploratory Factor Analysis (EFA). Although a statistically robust method of analysing scale items, due to the theoretical underpinnings for each subscale EFA was not deemed necessary. However, the classic methods used in this study did not compromise the validity or reliability of the scale as it used other recognised statistical methods for scale development. This study did however use confirmatory factor analysis (CFA) to validate the compassion strength indicators. Although model one had acceptable RMSEA and SRMR, it did not

reach the desired cut-off (>.95) for CFI or TLI (Hu & Bentler, 1999). It is worthy to note that fit indices used in CFA are a cause of disagreement among scholars (Raykov, 1998). While valuable, many argue that they do not really add to the analysis, with some claiming that the cut-offs are ambiguous and open to manipulation (Hu & Bentler, 1999*;* Kenny, 2015; Kline, 2010). The misleading belief that cut-off values are absolute considers them “golden rules” rather than general rules for fit indices which also makes them prone to type 1 and type 2 errors (Barrett, 2007; Marsh et al., 2009). Furthermore, due to the TLI and CFI being highly correlated, Kenny (2015) recommends only reporting one. The misunderstanding and use of fit indices can result in the rejection of acceptable models and the acceptance of poor models based solely on the misinformed interpretations of fit indices. Fit indices merely suggest statistical plausibility, not whether the model is true. Modification indices are also a cause for concern unless they can be theoretically justified (Hermida, 2015). In this study, each of the factors was collected from key stakeholders on the characteristics of a compassionate nurse. Therefore, it was theoretically important that each of the eight factors and their associated items remained.

Although model two had acceptable goodness-of-fit values, the short version of the scale performed poorly in convergent and discriminant validity. This suggests that the BCSIs psychometric properties were weakened when reduced to fewer than the originally eight theoretically identified factors. Considering this as well as other psychometric processes involved in the scale development, it is argued that the eight factor model as well as the individual indicators are acceptable and valid measures of compassion strengths.

In terms of the amount of variance explained by self-care in the model and regression analysis this was still relatively small, indicating that other variables in the model

affected the total compassion score. However, this helps show that all factors predicted overall compassion. The low factor loading on one of the items can also be considered a limitation. Despite the necessity of them being kept in the scale, studies should explore this further possibly with larger samples.

An additional limitation was the cultural and religious background of some students in that their beliefs could have impacted their response to the scale items. Further studies could include a larger sample of nurses from a wide range of backgrounds.

8.13.3 Social desirability

As this study relied on a self-report measure of compassion, the effects of social desirability responding (Crowne & Marlowe, 1960) could have skewed results. Social desirability works in two ways. The first is called impression management and is when individuals "*set out to fool others*" with the intention of placing themselves in a positive light, whilst the second called self-deception, refers to the person lacking self-awareness (Paulhus, 1984). Globally, there is a strong emphasis on nurses to exhibit compassionate behaviour. Given that compassion is such a desirable quality for nurses to have there is considerable pressure on nursing students to be compassionate. This could have affected responses to the BCSI's, as compassion is a socially desirable trait to have among nursing populations. Further studies could include a scale for measuring socially desirable responses and examine the relationship social desirability responding has with nurses and compassion.

8.13.4 Secondary Traumatic Stress/ Compassion fatigue subscale

It is debatable whether or not the compassion fatigue scale/secondary traumatic stress scale was the most suitable scale for this study and nurses in particular. Most items

on the scale reflected the negative outcome of working with victims of trauma. Not all nursing students have experience of working with trauma. It would therefore be beneficial for future research to explore the relationship between compassion strengths and compassion fatigue with more experienced nursing groups, especially those who work closely with trauma patients. It may also be more appropriate to consider a measure of compassion fatigue that is less trauma specific and more in line with nurses' experiences of working with patients. However, a more suitable measure of compassion fatigue for nurses does not seem to be available.

8.13.5 Other measures of compassion

The BCSIs were not tested against other measures of compassion in nursing. This is a limitation as a direct comparison may have added more support for the validation of the current scale. However, due to the multifaceted nature of the compassion strengths indicator none of the other available measures seemed appropriate enough to include in this analysis.

8.13.6 Limitations of the use of a VLE hosted intervention

A noticeable limitation was the recruitment process involved in encouraging students to use the intervention. It is important to acknowledge the participant sample for the pilot study was relatively small. A larger group of nursing students may have helped broaden the perspectives of the scenarios and highlighted areas that required further development. In study 2, students were given the freedom to explore the programme outside of regular lectures and teaching sessions. Consequently, very few were able to engage in the intervention because they felt overwhelmed with what they already had to contend with on the standard curriculum. A probable cause of the low responses in the February group could be that not all participants are proficient with online

learning. As O'Neil (2013a) suggests, students who engage in online courses are usually comfortable with using technology, self-motivated, and excel at writing.

In consideration of this, study 3 delivered the session "in class" with the researcher and two nurse educators on hand to answer questions and assist in removing glitches or bugs associated with the software. This proved more successful as all the class took part in the study. Future studies and learning programmes would benefit from delivery similar interventions "in class", rather than allowing students to access them in their own time.

8.13.7 Taking part and feedback

Similar limitations associated in student feedback about the online content are supported by previous studies in which very few students responded to the evaluation of the course (Hofmeyer et al., 2017; Adamson & Dewar, 2015). Further research is required to explore these phenomena in more detail. Likewise, as this course was not made compulsory some students chose not to contribute due to heavy academic and clinical workloads. This raises questions surrounding students' motivation towards learning about compassion when faced with such clinical and academic barriers.

8.14 Strengths of the research

The inclusion of nurses, educators, students and service users in identifying the compassion strengths and how to teach them, were key factors that helped strengthen the outcome of the study. This study offers a prospective and unique approach in that no other studies have explored the characteristics of a compassionate nurse and how to teach these skills from such a wide variety of key stakeholders. This study adds to

the growing literature involving service users in the definition and conceptualisation of compassionate care (Crawford et al., 2014; Sinclair et al., 2016).

A major strength for the scale was that it was validated with British nursing students from a wider variety of ethnic backgrounds, as an indicator of compassion strengths, making it the first of its kind in the UK. Previous psychometric instruments for measuring compassion in nursing have been validated with American and Korean nursing populations. With compassion high on the agenda for nurses in the UK, the current scale provides a scale that is a timely, relatively short, easy to administer, valid and a reliable measure of nurses' compassion. The implications of the scale with international nursing students and nurse practitioners requires further exploration.

For the pragmatic researcher, truth is what works at the time, thus they are open to using both quantitative and qualitative methods. *Scientific enquiry is viewed as a process where procedures and norms are evaluated and revised in light of new experience.* The use of pragmatism in the research allowed the study to explore barriers and facilitators of compassion, which indicates a clear pragmatic goal. Equally, pragmatism was achieved in other areas, in that the findings explored in this study have the potential to inform and improve other areas of healthcare as well as to support nurses, and nursing education.

8.15 Integration of data

In this study data from both studies not only helped in the development of the scale and online course, it also revealed the complexities associated with compassion in nursing. The findings from the thematic analysis and the results of the directed content analysis overlap in many areas. For instance, the theme that compassion is dependent on the nurse's attitude and motivation relates to the nursing characteristic of character.

Furthermore, where participants mentioned the demands, stresses, difficulties and barriers on nursing students to be compassionate, this can be associated with the need to practice self-care. Moreover, the subtheme explaining that nurses need to learn about the practical skills, links well with communication, connection, and other characteristics of a compassionate nurse. This indicates that the eight factors based on the characteristics of a compassionate nurse are important facets of nursing.

Mixed methods gave a rounded view of compassion in nursing and the associated strengths. Findings from one study complimented the other. A pragmatic approach was suitable for this study as it allowed for practical applications when developing and evaluating the course and scale. In the spirt of pragmatism, the results indicate positive results of the intervention, yet indicated that further research was still required to adapt and create a more effective tool.

Pragmatism allows for data to be collected from various sources using a free range of methods. The data collected in this study utilised both qualitative in the form of self-reported questionnaires, and quantitative methods including focus groups and interviews to explore “insider knowledge” of the subject.

8.16 Strengths and Limitations of mixed methods research

One of the limitations of content analysis is the frequency of words or categories that occur within the text. While the repeated occurrence of a certain word could signify a greater importance, some caution that this may just indicate a responder’s willingness or need to talk about this topic more than others (Loffe & Yardley, 2004; Shields & Twycross, 2008). In addition, both thematic and content analysis are considered low level methods of analysing data (Vaismoradi et al., 2013). Arguably, this study only potentially “scratched the surface” of what the characteristics of a compassionate

nurse are, and how they can be taught, plus the wider context of compassion in nursing. In addition, the results here capture a relatively small amount of views from a modest number of participants. There is also a potential bias associated with directed content analysis, which proposes that by its very definition issues surrounding the validity of the findings can be a concern. Nevertheless, the results were collected from a wide range of nursing stakeholder groups, adding support to previous themes found in research using similar participant samples.

Another limitation was that this research chose to analyse the interview data using thematic analysis. Although, Braun and Clarke (2006) promote the theoretical flexibility of TA, Pringle et al., (2011, p.22) argue that "*theoretical roots can add a sense of depth and purpose that thematic analysis may lack*". However, even though there is a lack of theoretical support for compassion in nursing and that the aim of the research was to capture an overall perspective of compassion, as the alternate approaches would not capture the overall sense of what compassion was and what it meant to stakeholders collectively.

In addition, sequential exploratory research is criticised for being limited in its scope as a single research design, and one that takes a lot of time and resources to undertake (Ivankova et al., 2006). Nevertheless, when the results of one approach inform the next method in the development of a psychometric scale as was the case in this study, a sequential research design was considered absolutely necessary for the purpose of this investigation. Though time consuming and quite technical at times, the results of the studies support the rationale for using this design. A further drawback to mixed methods is the researcher's ability to understand both quantitative and qualitative methods fully enough to analyse and interpret them independently as well as combine them correctly to produce research of good quality (Doyle et al., 2009).

Although a valid criticism, meticulous steps were made throughout to ensure that rigour was maintained at every step of the study. In summary, the research achieved its purposes with a mixed methods approach. It is hoped that this is reflected in the thesis.

8.17 Future research

Based on the findings of these studies, future research could focus on developing new ways of making the course more accessible to students. Smartphone apps are an effective method for teaching nursing students. For instance, previous studies in nurse education have developed smartphone applications to educate and measure students' knowledge, skills and confidence in performing clinical tasks (Kim et al., 2017). Online courses that include a goal setting option have been shown to improve academic performance and motivate students to achieving their goals by elaborating and reflecting on what they want and how they will do it (Morisano et al., 2010). A similar app can be developed with the compassion strengths model and its effectiveness assessed with nursing students. Students can be given information on each strength and set themselves daily tasks for demonstrating compassion, whilst the inclusion of the scale can be used to assess their own progress. This could also be applied to other professions. Furthermore, as this study did not utilise the full impact of having a lecturer on hand to support students with difficulties in practice. Future research could investigate this alongside delivery of the course in-class and online.

The inclusion of technology based interventions such as Virtual Reality (VR) is another viable option for future research into compassion strengths based nurse education. A study by Herrera et al., (2018) showed that there was a long lasting effect on participants who took part in a VR perspective taking study aimed at building long-

term empathy after experiencing what it was like to be homeless. Similar studies could explore the impact VR has on nursing students who can take the perspective of the patient in various scenarios. Building on the effectiveness of the POV scenario in this study, future research could develop a more immersive experience for compassion and include the option to act upon the situation with compassion strengths.

In addition, research should include validating the scale with other clinical and non-clinical populations. Results could be compared to add further support to the scale's psychometric properties and its application across interdisciplinary groups. As self-report measures bring into question issues around social desirability, it would be helpful for future research to test the self-report compassion strengths alongside observed behaviours in practice. For example, nurses/nursing students could measure themselves using the scale, then mentors or patients could score the nurse on the scale and the results compared. This may confirm the individual's performance or encourage further learning in areas where compassion strengths require additional work. Further research should also include a measure of social desirability using the Crowne – Marlowe (1960) social desirability scale. This would provide further support for the validity of the scale.

Testing the Compassion Strengths Indicator with more robust compassion scales would also benefit future research, as it would show how the current scales performs with other measures of compassion in nursing. As the compassion fatigue subscale performed poorly in this study, future research would have to investigate these factors and a valid and reliable measure of nurse's compassion fatigue created. This supports results found in previous studies that included nursing populations (Durkin et al., 2016; Hemsworth et al., 2018). Due to the current compassion fatigue scale containing items

specific to working with trauma, an alternative scale could be developed that includes items that reflect the deleterious effects of nursing practice.

8.18 A definition of compassion

The original purpose of this study was not to contribute to a new definition of compassion per se. However, this study has established that compassion in nursing is defined by a typology of characteristics that can be described and subsequently measured as strengths. Other definitions mentioned in chapter 2, centred on recognising suffering and having the motivation to alleviate it, without describing how exactly to do this. Equally, building on from previous research, as each person's definition of suffering can be different, and that compassion can be about attending to vulnerability, directing compassion to their needs not only helps patients express the help they want, but gives nurses a better understanding of what they can do to address them. Evidence of this can be found in the literature and study findings with examples of the little things or small acts that mean so much more to patients. As such, the following definition of compassion was proposed in line with the compassion strengths model:

"*Compassion is the ability to draw on strengths during times of need, utilising them to act in response to suffering or vulnerability, whether that be in the service of self or others*".

8.19 Chapter summary

To address the research questions posed in this thesis, this chapter has provided an in depth discussion of each of the studies conducted in the research. It has synthesised the findings from each in relation to the META and Compassion Strengths Model for nursing. The implications of which were examined in detail for nurse education, practice and policy as well the potential each has on other healthcare practices. It concluded with a definition of compassion based on the compassion strengths model. The next chapter summarises the research and highlights the unique contributions to knowledge before concluding the thesis.

Chapter 9. Conclusion

"*To comprehend the tool is not to look at it but know how to use It*"- Emmanuel Levinas

9.1 Introduction

This chapter concludes the thesis with an overall summary of the aims and objectives, a conclusion of the study and the unique contributions to knowledge.

9.2 Overall summary of thesis aims and objectives

The aim of this study was to develop and explore the implications of the META model in relation to compassion in nursing. In addressing the research questions;

1. *What is compassion in nursing?*
2. *How is compassion taught to nursing students?*
3. *How is compassion measured in nursing?*
4. *Can the META model help bridge the gap between education and practice?*

the specific objectives were:

- To systematically review the literature on the characteristics of a compassionate nurse, how compassion is taught and measured.
- Confirm the findings with a group of key stakeholders.
- Develop and validate a psychometric scale of compassion based on a compassion strengths model.
- Design an online course that could teach these strengths to nursing students.

- Asses both interventions for improving students understanding and demonstration of compassion in practice.
- Combine all these elements to create the META model.

The study used a mixed methods approach underpinned by a theoretical framework of pragmatism. Specifically, it included a sequential exploratory design where qualitative data collected in phase one was used to develop a measure and online course for compassion strengths, then validated with quantitative methods in phase two of the study. In line with the suggestions of Richardson et al (2015) nursing students in this study learned about how to develop compassionate care using a compassion strengths model that encouraged them to consider and reflect on how they would demonstrate each strength with patients.

This study achieved its aims and objectives by creating a model of compassion strengths, developing and validating a psychometric scale that could measure compassion strengths, and an online course to assist nursing students in their understanding and demonstration of compassion in practice. Collectively, each one of these elements represents the META model. In short, the research addresses the research questions posed by the thesis by showing that compassion can be measured and taught to nursing students.

If as it is stated in the NMC (2015) guidelines that compassion is a skill, then logic suggests that it can be measured, taught and developed in nursing students. The evidence presented here supports this claim and has multiple implications for nurse education as well as practice. The META model informs the how for learning about and demonstrating compassionate care in nursing, while the Compassion Strengths model provides the indicators for what can be learned if nurses are to be compassionate. Whilst often being thought of as a single concept, this study shows

that compassion is multifaceted containing eight overlapping characteristics. As such, the Compassion Strengths model has made the characteristics of compassion more explicit, measurable and easier to teach. Moreover, as they were developed from the views of key stakeholders, they offer a unique insight into what matters most to patients, staff and educators.

The META and compassion models address what Waddington (2016) refers to as the compassion gap between universities and practice in that the teaching elements have been shown to be transferable to nursing practice, and more importantly improving the compassion shown to patients. It adds to the need for a theoretical framework with demonstrable actions that assist nurses as they navigate through their practice and become compassionate practitioners.

A criticism of previous theories and frameworks of compassion in nursing is there was more expectation on how nurses should behave but little if any guidance provided for what this would look like in practice. The findings presented in this thesis offer a different approach that attends to the multifaceted nature of compassion which when applied to these frameworks helps to make compassion more tangible. As each of the strengths were supported by relevant research in the field, the model contributes to the knowledge surrounding theories of evidence based practice to inform nurses understanding and demonstration of expected virtues and behaviours. This is important mainly because it is grounded in a certain level of proof that such practices are significant elements of compassion in nursing.

This thesis has shown that the BCSIs are a set of comprehensive and psychometrically robust measures of compassion strengths, devised for and validated successfully with nursing students. They include eight indicators associated with

compassionate nursing practice based on responses to empathy, connection, self-care, communication, interpersonal, competence, engagement, and character. The BCSIs help contribute to knowledge as they represent the wide variety of behaviours and characteristics described in the literature on compassionate nursing and are subjective to the user's needs. In support of the psychological factors associated with compassion, they include items representative of the motivation to alleviate patient suffering (Gilbert, 2009; Goetz et al., 2010).

The study by Tierney et al (2016) highlighted a need for a reliable measure of compassion in healthcare. They suggested that it should acknowledge the complexity of compassion and reflect the personal and environmental factors that can influence an individual's ability to provide compassionate care. The BCSIs could be that measure. The reasons being that it recognises compassion as a multifaceted construct containing several other underlining virtues and behaviours that all contribute to the spectrum of compassionate care. It is also distinct from other scales as it includes a measure of self-care and views each domain as well as overall compassion as being in a state of flux, taking into account the internal or external factors affecting the practitioner.

Furthermore, the findings in this study act as a reminder that nursing students experience heavy demands and that the compassionate work, they do requires great physical and emotional strength. Whilst many emphasise that registered nurses can do more to improve their mental wellbeing, this tends to focus more on activities such as mindfulness or self-care and very rarely extends to nursing students. The findings here indicate that nursing students would benefit greatly if modules on developing individual self-care strategies were introduced into the curriculum. More research is needed to understand how this could be integrated into nurse education programmes.

9.3 Contribution to knowledge

- I developed, tested and validated a set of Compassion Strengths Indicators for nurses' compassion.
- I created an empirically tested Compassion Strengths Model that helps promote and enhance compassionate behaviour in nursing practice.
- I devised the META model which is a unique learning tool to help students improve on specific strengths associated with compassionate care.
- I demonstrated how compassion is a multifaceted concept that requires strength to show.

In an age where nurses are increasingly being held accountable for their actions in practice, this study serves to inform nursing students, educators, and organisations about the importance of the continued development of compassion strengths. This study found that nursing students who engaged in the course were able to influence and increase their own understanding of compassion, which led to them becoming more compassionate and better equipped to manage the difficulties of practice. This research contributes to the gap in knowledge that proposes compassion in nursing can neither be taught nor measured. It addresses the ongoing argument for the complexity of compassion as a single concept with the compassion strengths model. In relation to the META model, these studies provide important information for how compassion in nursing can be demonstrated. The findings of this study have potentially major implications for the future of teaching compassion in healthcare.

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Appendix B – Participant information sheets

Participant Information Sheet

Nurses Compassion Strengths

My name is Mark Durkin. I am a PhD student conducting research at the University of Bolton under the supervision of Professor Jerome Carson and Professor Russell Gurbutt. I am working on a project to develop an online learning scenario based learning intervention. You are being asked to participate as I believe that you represent the people this study aims to understand.

What will I have to do if I take part?

If you agree to take part, you will be asked to attend sessions in and online scenario based learning package that aims to assist nursing students in their understanding of compassion in practice. Before and after taking part, you will also be asked to complete a short questionnaire measuring compassion in nursing. **For taking part in the study, you will be offered the chance to be part of a draw to win a prize. In addition a copy of your scores and what they mean will be available to you at the end of the study.**

Do I have to take part?

No, **taking part is voluntary**. If you don't want to take part, you do not have to give a reason and no pressure will be out on you to try and change your mind. However, once the consent form is signed, you may no longer withdraw from the study.

If I agree to take part what happens to what I say?

Although **you will have to provide your name and email to be part of the prize draw**, all the information you give us **will be kept confidential** and used for the purposes of this study only. The data will be collected and stored in accordance with the Data Protection Act 1998 and will be disposed of in a secure manner. **The information will be used in a way that will not allow you to be identified individually by anyone other than the researcher.**

What do I do now?

Think about the information on this sheet, and ask me if you are not sure about anything. If you agree to take part, sign the consent form. The consent form will not be used to identify you. It will be filed separately from all other information. If, after the discussion, you want any more information about the study please feel free to contact me at mad1hss@bolton.ac.uk

THANK YOU VERY MUCH FOR YOUR HELP!

Please take this sheet for your records

APPROVED BY THE UNIVERSITY OF BOLTON RESEARCH ETHICS COMMITTEE

Participant Information Sheet

Nurses Compassion Strengths Scale

My name is Mark Durkin. I am a PhD student conducting research at the University of Bolton under the supervision of Professor Jerome Carson and Professor Russell Gurbutt. I am working on a project to develop a compassionate strengths scale for nurses and nursing students. You are being asked to participate as I believe that you represent the people this scale aims to understand.

What will I have to do if I take part?

If you agree to take part, you will be part of a group who will be asked to fill out a number of questionnaires on things such as empathy and communication. The actual time for completing the questionnaires should take about 20 minutes at the most.

Do I have to take part?

No, **taking part is voluntary**. If you don't want to take part, you do not have to give a reason and no pressure will be out on you to try and change your mind. You can pull out of the discussion at any time.

If I agree to take part what happens to what I say?

All the information you give us **will be confidential** and used for the purposes of this study only. The data will be collected and stored in accordance with the Data Protection Act 1998 and will be disposed of in a secure manner. The information will be used in a way that will not allow you to be identified individually.

What do I do now?

Think about the information on this sheet, and ask me if you are not sure about anything. If you agree to take part, sign the consent form. The consent form will not be used to identify you. It will be filed separately from all other information. If, after the discussion, you want any more information about the study please feel free to contact me at mad1hss@bolton.ac.uk

THANK YOU VERY MUCH FOR YOUR HELP!

Please take this sheet for your records

APPROVED BY THE UNIVERSITY OF BOLTON RESEARCH ETHICS COMMITTEE

Participant Information Sheet

Nurses Compassion Strengths Scenarios – Pilot study

My name is Mark Durkin. I am a PhD student conducting research at the University of Bolton under the supervision of Professor Jerome Carson and Professor Russell Gurbutt. I am working on a project to develop an online learning scenario based learning intervention. You are being asked to participate as I believe that you represent the people this study aims to understand.

What will I have to do if I take part?

If you agree to take part, you will be part of a group who will be asked to watch eight short patient nurse scenarios. After watching the scenarios you will be encouraged to answer a short questionnaire and provide feedback for each of the scenarios.

Do I have to take part?

No, **taking part is voluntary**. If you don't want to take part, you do not have to give a reason and no pressure will be out on you to try and change your mind. However, once the consent form is signed, you may no longer withdraw from the study.

If I agree to take part what happens to what I say*?*

All the information you give us **will be confidential** and used for the purposes of this study only. The data will be collected and stored in accordance with the Data Protection Act 1998 and will be disposed of in a secure manner. The information will be used in a way that will not allow you to be identified individually.

What do I do now?

Think about the information on this sheet, and ask me if you are not sure about anything. If you agree to take part, sign the consent form. The consent form will not be used to identify you. It will be filed separately from all other information. If, after the discussion, you want any more information about the study please feel free to contact me at mad1hss@bolton.ac.uk

THANK YOU VERY MUCH FOR YOUR HELP!

Please take this sheet for your records

APPROVED BY THE UNIVERSITY OF BOLTON RESEARCH ETHICS COMMITTEE

Participant Information Sheet

Compassion in nursing

My name is Mark Durkin. I am a PhD student conducting research at the University of Bolton under the supervision of Professor Jerome Carson and Dr Russell Gurbutt. I am working on a project that seeks to investigate the qualities of a compassionate nurse, and how these qualities can be taught to nursing students. I wish to hold several focus groups, in which participants will be asked to comment on ***what they believe are the qualities of a compassionate nurse and what they think are the best ways to teach these qualities to nursing students***. You are being asked to participate as I believe that you represent the people this study aims to understand.

What will I have to do if I take part?

If you agree to take part, you will be part of a group who will be asked to answer some questions on the subject of compassion. There aren't any right or wrong answers – I just want to hear about your opinions. The discussion should take about an hour at most.

Do I have to take part?

No, **taking part is voluntary**. If you don't want to take part, you do not have to give a reason and no pressure will be out on you to try and change your mind. You can pull out of the discussion at any time.

If I agree to take part what happens to what I say?

All the information you give us **will be confidential** and used for the purposes of this study only. The data will be collected and stored in accordance with the Data Protection Act 1998 and will be disposed of in a secure manner. The information will be used in a way that will not allow you to be identified individually.

What do I do now?

Think about the information on this sheet, and ask me if you are not sure about anything. If you agree to take part, sign the consent form. The consent form will not be used to identify you. It will be filed separately from all other information. If, after the discussion, you want any more information about the study please feel free to contact me at mad1hss@bolton.ac.uk

THANK YOU VERY MUCH FOR YOUR HELP!

APPROVED BY THE UNIVERSITY OF BOLTON RESEARCH ETHICS COMMITTEE

Appendix C – Consent forms

Informed Consent Form

*This form is to be completed independently by the participant.

	Yes	No
1. I have read and understood the attached information sheet and have had the opportunity to ask questions. **OR: I have had the attached information sheet explained to me and have had the opportunity to ask questions.**		
2. I understand that when I sign the consent form I can no longer withdraw from the study.		
3. I understand that withdrawing from the study will not affect me in anyway		
4. I am aware that my identity will only be used for the purposes of the prize draw and final individual compassion strengths report.		
5. I agree with the publication of the results of this study in a research journal. I understand that I will not be identified in these publications.		
6. I give consent that I would like to be involved in this research project.		

APPROVED BY THE UNIVERSITY OF BOLTON RESEARCH ETHICS COMMITTEE

Informed Consent Form

*This form is to be completed independently by the participant.

Name: _____

	Yes	No
1. I have read and understood the attached information sheet and have had the opportunity to ask questions. **OR: I have had the attached information sheet explained to me and have had the opportunity to ask questions.**		
2. I understand that I can withdraw from the study at any time without having to give any reasons.		
3. I understand that withdrawing from the study will not affect me in anyway		
4. I am aware of, and consent to the tape recording of my discussion with the researcher, OR **I am aware of, and consent to the researcher taking notes during the course of the discussion.**		
5. I agree with the publication of the results of this study in a research journal. I understand that I will not be identified in these publications.		
6. I give consent that I would like to be involved in this research project.		

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Consent Form

Completing this form is a way of providing me with your consent to take part in my study. Do **NOT** complete if you do not wish to take part. Please tick each of the follow statements if you agree.

1. I have read and understood the attached information sheet and have had the opportunity to ask questions. **OR: I have had the attached information sheet explained to me and have had the opportunity to ask questions.**	
2. I understand that I can withdraw from the study at any time without having to give any reasons.	
3. I understand that withdrawing from the study will not affect me in anyway	
4. I agree with the publication of the results of this study in a research journal. I understand that I will not be identified in these publications.	
5. I give consent that I would like to be involved in this research project.	

Please complete the following:

Age_____

Gender_____

Current year of study_____

Current number of placement hour's _____

Ethnic background_____

Relationship status_____

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Appendix D – Questionnaires used in this study

1. Which of the scenarios do you think was the most effective as a way of helping nursing students understand compassion in practice? This can include all if you wish. Please comment on your answer.

2. Do you think that the scenarios would be useful in helping nursing students learn about how compassion is delivered in practice? Please comment on your answer.

3. Did you find it easy or difficult to identify the compassion strengths being displayed in the scenarios? Please comment on your answer.

4. Do you think that these particular scenarios could also be used to train qualified nursing staff about compassion? Please comment on your answer.

5. Any other comments?

Thank you for taking part in this study

Toronto Empathy Questionnaire

Below is a list of statements. Please read each statement *carefully* and rate how frequently you feel or act in the manner described. Circle your answer on the response form. There are no right or wrong answers or trick questions. Please answer each question as honestly as you can.

	Never	Rarely	Sometimes	Often	Always
1. When someone else is feeling excited, I tend to get excited too	1	2	3	4	5
2. Other people's misfortunes do not disturb me a great deal	1	2	3	4	5
3. It upsets me to see someone being treated disrespectfully	1	2	3	4	5
4. I remain unaffected when someone close to me is happy	1	2	3	4	5
5. I enjoy making other people feel better	1	2	3	4	5
6. I have tender, concerned feelings for people less fortunate than me	1	2	3	4	5
7. When a friend starts to talk about his\her problems, I try to steer the conversation towards something else	1	2	3	4	5
8. I can tell when others are sad even when they do not say anything	1	2	3	4	5
9. I find that I am "in tune" with other people's moods	1	2	3	4	5
10. I do not feel sympathy for people who cause their own serious illnesses	1	2	3	4	5
11. I become irritated when someone cries	1	2	3	4	5
12. I am not really interested in how other people feel	1	2	3	4	5
13. I get a strong urge to help when I see someone who is upset	1	2	3	4	5
14. When I see someone being treated unfairly, I do not feel very much pity for them	1	2	3	4	5
15. I find it silly for people to cry out of happiness	1	2	3	4	5
16. When I see someone being taken advantage of, I feel kind of protective towards him\her	1	2	3	4	5

Professional Quality of Life Scale (ProQOL)

Compassion Satisfaction and Compassion Fatigue
(ProQOL) Version 5 (2009)

When you help people you have direct contact with their lives. As you may have found, your compassion for those you help can affect you in positive and negative ways. Below are some questions about your experiences, both positive and negative, as a nurse/nursing students. Consider each of the following questions about you and your current work situation. Select the number that honestly reflects how frequently you experienced these things in the last 30 days.

	Never	Rarely	Sometimes	Often	Very Often
1. I am happy.	1	2	3	4	5
2. I am preoccupied with more than one person I help.	1	2	3	4	5
3. I get satisfaction from being able to help people.	1	2	3	4	5
4. I feel connected to others	1	2	3	4	5
5. I jump or am startled by unexpected sounds.	1	2	3	4	5
6. I feel invigorated after working with those I help.	1	2	3	4	5
7. I find it difficult to separate my personal life from my life as a helper.	1	2	3	4	5
8. I am not as productive at work because I am losing sleep over traumatic experiences of a person I help.	1	2	3	4	5
9. I think that I might have been affected by the traumatic stress of those I help.	1	2	3	4	5
10. I feel trapped by my job as a helper.	1	2	3	4	5
11. Because of my helping, I have felt "on edge" about various things.	1	2	3	4	5
12. I like my work as a helper.	1	2	3	4	5
13. I feel depressed because of the traumatic experiences of the people I helper	1	2	3	4	5
14. I feel as though I am experiencing the trauma of someone I have helped.	1	2	3	4	5
15. I have beliefs that sustain me.	1	2	3	4	5
16. I am pleased with how I am able to keep up with helping techniques and protocols.	1	2	3	4	5
17. I am the person I always wanted to be.	1	2	3	4	5
18. My work makes me feel satisfied.	1	2	3	4	5
19. I feel worn out because of my work as a helper.	1	2	3	4	5
20. I have happy thoughts and feelings about those I help and how I could help them.	1	2	3	4	5
21. I feel overwhelmed because my case work load seems endless.	1	2	3	4	5
22. I believe I can make a difference through my work.	1	2	3	4	5
23. I avoid certain activities or situations because they remind me of frightening experiences of the people I help.	1	2	3	4	5
24. I am proud of what I can do to help.	1	2	3	4	5
25. As a result of my helping, I have intrusive, frightening thoughts.	1	2	3	4	5
26. I feel "bogged down" by the system.	1	2	3	4	5
27. I have thoughts that I am a "success" as a helper.	1	2	3	4	5
28. I can't recall important parts of my work with trauma victims.	1	2	3	4	5
29. I am a very caring person.	1	2	3	4	5
30. I am happy that I chose to do this work.	1	2	3	4	5

The Short Warwick-Edinburgh Mental Well-being Scale

(SWEMWBS)

Below are some statements about feelings and thoughts.

Please tick the box that best describes your experience of each over the last 2 weeks

STATEMENTS	None of the time	Rarely	Some of the time	Often	All of the time
I've been feeling optimistic about the future	1	2	3	4	5
I've been feeling useful	1	2	3	4	5
I've been feeling relaxed	1	2	3	4	5
I've been dealing with problems well	1	2	3	4	5
I've been thinking clearly	1	2	3	4	5
I've been feeling close to other people	1	2	3	4	5
I've been able to make up my own mind about things	1	2	3	4	5

Appendix E - Final version of the Bolton Compassion Strengths indicators (BCSIs)

Bolton
Compassion Strengths Indicators (BCSIs)

The purpose of this scale is to help you identify and develop your compassionate strengths. Please read the following set of statements *carefully*. Using the scoring guide score each statement with the number that *honestly* reflects your experience as a nurse/nursing student. There are no trick questions, nor is this a test. Please make sure that you answer all of the statements on all sides of the form.

	Statements	Definitely not like me	Generally not like me	Slightly not like me	Slightly like me	Generally like me	Definitely like me
1	I evaluate care effectively	1	2	3	4	5	6
2	I encourage caregivers to be supportive	1	2	3	4	5	6
3	I am aware of whether or not a patient's interpretation of something is the same as mine	1	2	3	4	5	6
4	I am gentle in my approach to patients	1	2	3	4	5	6
5	I explain symptoms and what they mean to help alleviate any worries patients may have	1	2	3	4	5	6
6	Honesty is an important quality for a *nurse* to have	1	2	3	4	5	6
7	I try to be as open as possible with patients	1	2	3	4	5	6
8	I develop a shared decision when making a treatment plan	1	2	3	4	5	6
9	I like to make small talk with patients at every opportunity	1	2	3	4	5	6
10	I often take time out to ask patients about the state of their health	1	2	3	4	5	6
11	I listen to the complete message before making a judgment about the speaker	1	2	3	4	5	6
12	Listening helps me understand the speaker's intentions	1	2	3	4	5	6
13	Where appropriate, I adapt my *nursing* practice to meet unpredictable circumstances	1	2	3	4	5	6
14	I stick to my promises when I agree to help patients	1	2	3	4	5	6
15	I believe in myself no matter what	1	2	3	4	5	6
16	I carry out an effective discharge plan	1	2	3	4	5	6
17	I feel in control of my life	1	2	3	4	5	6
18	When patients start talking I do not interrupt them	1	2	3	4	5	6
19	I find people to be the most interesting thing in life	1	2	3	4	5	6
20	When I'm feeling burned out I sooth myself with comforting words	1	2	3	4	5	6
21	I prepare patients appropriately for diagnostic procedures	1	2	3	4	5	6
22	Working with patients energises me	1	2	3	4	5	6
23	The ability to imagine myself in another's situation contributes to providing quality healthcare	1	2	3	4	5	6
24	I enjoy speaking to patients and finding out how they are doing	1	2	3	4	5	6

	Statements	Definitely not like me	Generally not like me	Slightly not like me	Slightly like me	Generally like me	Definitely like me
25	Respecting the patient is just as important as the care they receive	1	2	3	4	5	6
26	Patients would describe me as showing warmth	1	2	3	4	5	6
27	I am confident about the future	1	2	3	4	5	6
28	I believe that empathy is important for the therapeutic relationship between *nurse* and patient	1	2	3	4	5	6
29	My ability to understand how patients and their families are feeling helps me care for them	1	2	3	4	5	6
30	Trust is an important part of the caring relationship	1	2	3	4	5	6
31	I am able to accurately assess the effectiveness of preventative health advice to meet the patients' needs	1	2	3	4	5	6
32	I can make my patients feel better when I understand their feelings	1	2	3	4	5	6
33	Despite the challenges I gain pleasure from caring for patients	1	2	3	4	5	6
34	I have respect for my patients needs	1	2	3	4	5	6
35	I provide relevant and current health information to patients in a way that they understand and which gives them the option to choose	1	2	3	4	5	6
36	I feel I am approachable to patients	1	2	3	4	5	6
37	I believe that the ability to view things from the patient's perspective can lead to better care	1	2	3	4	5	6
38	I listen to what others have to say when they are talking	1	2	3	4	5	6
39	My life experiences have prepared me to deal with whatever comes my way	1	2	3	4	5	6
40	When there are no clear solutions to my problems sometimes fate or God can help	1	2	3	4	5	6
41	I take time out to listen to patients' concerns	1	2	3	4	5	6
42	I think that the best way to take care of a patient is to try and understand what they are going through	1	2	3	4	5	6
43	I do not see each patient as a whole person	1	2	3	4	5	6
44	I ask patients to discuss any matters about their stay in hospital	1	2	3	4	5	6
45	I feel a sense of joy from meeting new people and finding out more about them	1	2	3	4	5	6
46	Being a nurse serves a greater purpose	1	2	3	4	5	6
47	I pay close attention to what my patients are saying	1	2	3	4	5	6
48	I ask patients if they have any problems following what the doctor has recommended	1	2	3	4	5	6

Appendix F - Initial 80 item draft version the BCSIs

The Bolton Nurse Compassion Strengths Scale

The purpose of this scale is to help you identify and develop your compassionate strengths. Please read the following set of statements *carefully*. Using the scoring guide score each statement with the number that *honestly* reflects your experience as a nurse/nursing student. There are no trick questions, nor is this a test. Please make sure that you answer all of the statements on both sides of the form.

	Statements	Definitely not like me	Generally not like me	Slightly not like me	Slightly like me	Generally like me	Definitely like me
1	I understand what makes me feel anxious	1	2	3	4	5	6
2	I feel in control of my life	1	2	3	4	5	6
3	Some people describe me as being cold-hearted	1	2	3	4	5	6
4	I feel uncomfortable in the presence of strangers	1	2	3	4	5	6
5	I express concerns about the feelings of my patients	1	2	3	4	5	6
6	Despite the challenges I gain pleasure from caring for patients	1	2	3	4	5	6
7	I effectively evaluate care	1	2	3	4	5	6
8	When patients start talking I do not interrupt them	1	2	3	4	5	6
9	I do not share my optimism with patients	1	2	3	4	5	6
10	I do not get upset when I see people being treated disrespectfully	1	2	3	4	5	6
11	I can provide good quality care without the need to see things from the patient's perspective	1	2	3	4	5	6
12	I have respect for my patients needs	1	2	3	4	5	6
13	I encourage caregivers to be supportive	1	2	3	4	5	6
14	I find people to be the most interesting thing in life	1	2	3	4	5	6
15	I provide relevant and current health information to patients in a way that they understand and which gives them the option to choose	1	2	3	4	5	6
16	I am aware of whether or not a patient's interpretation of something is the same as mine	1	2	3	4	5	6

	Statements	Definitely not like me	Generally not like me	Slightly not like me	Slightly like me	Generally like me	Definitely like me
17	When I'm feeling burned out I sooth myself with comforting words	1	2	3	4	5	6
18	I can sense how someone is feeling without them having to tell me	1	2	3	4	5	6
19	I feel I am approachable to patients	1	2	3	4	5	6
20	I do not ask patients if they felt they could comply with the treatment	1	2	3	4	5	6
21	I am gentle in my approach to patients	1	2	3	4	5	6
22	I prepare patients appropriately for diagnostic procedures	1	2	3	4	5	6
23	I do not let my personal bias affect my interpretation of what the patients are saying	1	2	3	4	5	6
24	I do not take the stressful events of the day home with me	1	2	3	4	5	6
25	I believe that the ability to view things from the patient's perspective can lead to better care	1	2	3	4	5	6
26	I am able to connect with other people who are suffering	1	2	3	4	5	6
27	I explain symptoms and what they mean to help alleviate any worries patients may have	1	2	3	4	5	6
28	Working with patients energises me	1	2	3	4	5	6
29	I listen to what others have to say when they are talking	1	2	3	4	5	6
30	Honesty is an important quality for a nurse to have	1	2	3	4	5	6
31	The ability to imagine myself in another's situation contributes to providing quality healthcare	1	2	3	4	5	6
32	I do not inform patients about the side effects they might get from medication	1	2	3	4	5	6
33	My role as a nurse brings little value to my life	1	2	3	4	5	6
34	I evaluate the plan of care with the other members of the team	1	2	3	4	5	6

	Statements	Definitely not like me	Generally not like me	Slightly not like me	Slightly like me	Generally like me	Definitely like me
35	My life experiences have prepared me to deal with whatever comes my way	1	2	3	4	5	6
36	I try to be as open as possible with patients	1	2	3	4	5	6
37	I enjoy speaking to patients and finding out how they are doing	1	2	3	4	5	6
38	I cannot adapt easily when mixing with a variety of people	1	2	3	4	5	6
39	I do not follow up on patient's progress to check the effectiveness of interventions	1	2	3	4	5	6
40	When there are no clear solutions to my problems sometimes fate or God can help	1	2	3	4	5	6
41	I develop a shared decision when making a treatment plan	1	2	3	4	5	6
42	Respecting the patient is just as important as the care they receive	1	2	3	4	5	6
43	I take time out to listen to patients' concerns	1	2	3	4	5	6
44	I do not get a lot of satisfaction from going the extra mile for patients	1	2	3	4	5	6
45	I like to make small talk with patients at every opportunity	1	2	3	4	5	6
46	Patients would describe me as showing warmth	1	2	3	4	5	6
47	I think that the best way to take care of a patient is to try and understand what they are going through	1	2	3	4	5	6
48	I often take time out to ask patients about the state of their health	1	2	3	4	5	6
49	I am not confident enough to administer medicine using the appropriate procedures	1	2	3	4	5	6
50	I am confident about the future	1	2	3	4	5	6
51	I do not see each patient as a whole person	1	2	3	4	5	6
52	I understand what makes my work meaningful	1	2	3	4	5	6

	Statements	Definitely not like me	Generally not like me	Slightly not like me	Slightly like me	Generally like me	Definitely like me
53	I listen to the complete message before making a judgment about the speaker	1	2	3	4	5	6
54	I believe that empathy is important for the therapeutic relationship between nurse and patient	1	2	3	4	5	6
55	I ask patients to discuss any matters about their stay in hospital	1	2	3	4	5	6
56	Listening helps me understand the speaker's intentions	1	2	3	4	5	6
57	My ability to understand how patients and their families are feeling helps me care for them	1	2	3	4	5	6
58	I feel a sense of joy from meeting new people and finding out more about them	1	2	3	4	5	6
59	I am unable to pick myself up if I am feeling down	1	2	3	4	5	6
60	I take time to ask the patient's family how they are coping	1	2	3	4	5	6
61	Where appropriate, I adapt my nursing practice to meet unpredictable circumstances	1	2	3	4	5	6
62	Trust is an important part of the caring relationship	1	2	3	4	5	6
63	Being a nurse serves a greater purpose	1	2	3	4	5	6
64	People would say they cannot depend on me	1	2	3	4	5	6
65	It is not my place to outline what the patient should expect from their care	1	2	3	4	5	6
66	I stick to my promises when I agree to help patients	1	2	3	4	5	6
67	I am able to accurately assess the effectiveness of preventative health advice to meet the patients' needs	1	2	3	4	5	6
68	Because of human diversity I find it difficult to see things from the patient's perspective	1	2	3	4	5	6
69	I ask questions when I don't fully understand what the patient is saying	1	2	3	4	5	6
70	I struggle to identify patients who would benefit from preventative health advice	1	2	3	4	5	6

	Statements	Definitely not like me	Generally not like me	Slightly not like me	Slightly like me	Generally like me	Definitely like me
71	I pay close attention to what my patients are saying	1	2	3	4	5	6
72	I am a relaxed and calm person	1	2	3	4	5	6
73	I am not one to take turns in conversation with patients	1	2	3	4	5	6
74	I believe in myself no matter what	1	2	3	4	5	6
75	I can make my patients feel better when I understand their feelings	1	2	3	4	5	6
76	I disconnect from patients when they are being difficult	1	2	3	4	5	6
77	I do not need to use eye contact to show that I am listening to patients	1	2	3	4	5	6
78	I ask patients if they have any problems following what the doctor has recommended	1	2	3	4	5	6
79	I become weaker after a stressful event	1	2	3	4	5	6
80	I carry out and effective discharge plan	1	2	3	4	5	6

Appendix G - Bolton Compassion Strengths Indicators 16 item version

Bolton
Compassion Strengths Indicators 16 (BCSIs16)

The purpose of this scale is to help you identify and develop your compassionate strengths. Please read the following set of statements *carefully*. Using the scoring guide score each statement with the number that *honestly* reflects your experience as a nurse/nursing student. There are no trick questions, nor is this a test. Please make sure that you answer all of the statements on all sides of the form.

	Statements	Definitely not like me	Generally not like me	Slightly not like me	Slightly like me	Generally like me	Definitely like me
1	I am aware of whether or not a patient's interpretation of something is the same as mine	1	2	3	4	5	6
2	I am gentle in my approach to patients	1	2	3	4	5	6
3	I often take time out to ask patients about the state of their health	1	2	3	4	5	6
4	Where appropriate, I adapt my *nursing* practice to meet unpredictable circumstances	1	2	3	4	5	6
5	I believe in myself no matter what	1	2	3	4	5	6
6	I feel in control of my life	1	2	3	4	5	6
7	When I'm feeling burned out I sooth myself with comforting words	1	2	3	4	5	6
8	Working with patients energises me	1	2	3	4	5	6
9	I enjoy speaking to patients and finding out how they are doing	1	2	3	4	5	6
10	I am able to accurately assess the effectiveness of preventative health advice to meet the patients' needs	1	2	3	4	5	6
11	Despite the challenges I gain pleasure from caring for patients	1	2	3	4	5	6
12	I provide relevant and current health information to patients in a way that they understand and which gives them the option to choose	1	2	3	4	5	6
13	I feel I am approachable to patients	1	2	3	4	5	6
14	My life experiences have prepared me to deal with whatever comes my way	1	2	3	4	5	6
15	When there are no clear solutions to my problems sometimes fate or God can help	1	2	3	4	5	6
16	I take time out to listen to patients' concerns	1	2	3	4	5	6

Appendix H - Example of an individual Bolton Compassion Strengths Indicator – Self-Care

Bolton
Compassion Strengths Indicators – Self-Care (BCSIs-SC)

Please read the following set of statements *carefully*. Using the scoring guide score each statement with the number that *honestly* reflects your experience. There are no trick questions, nor is this a test. Please make sure that you answer all of the statements on all sides of the form.

	Statements	Definitely not like me	Generally not like me	Slightly not like me	Slightly like me	Generally like me	Definitely like me
1	I believe in myself no matter what	1	2	3	4	5	6
2	I feel in control of my life	1	2	3	4	5	6
3	When I'm feeling burned out I sooth myself with comforting words	1	2	3	4	5	6
4	I am confident about the future	1	2	3	4	5	6
5	My life experiences have prepared me to deal with whatever comes my way	1	2	3	4	5	6
6	When there are no clear solutions to my problems sometimes fate or God can help	1	2	3	4	5	6

Appendix I – NMC reflective account from

Nursing & Midwifery Council

REFLECTIVE ACCOUNTS FORM

You must use this form to record five written reflective accounts on your CPD and/or practice-related feedback and/or an event or experience in your practice and how this relates to the Code. Please fill in a page for each of your reflective accounts, making sure you do not include any information that might identify a specific patient, service user or colleague. Please refer to our guidance on preserving anonymity in the section on non-identifiable information in **How to revalidate with the NMC**.

Reflective account:
What was the nature of the CPD activity and/or practice-related feedback and/or event or experience in your practice?
What did you learn from the CPD activity and/or feedback and/or event or experience in your practice?
How did you change or improve your practice as a result?
How is this relevant to the Code? Select one or more themes: Prioritise people – Practise effectively – Preserve safety – Promote professionalism and trust

Appendix J - Published work directly related to the PhD

Chapter 3. Durkin, M., Gurbutt, R., & Carson, J. (2018). Qualities, teaching, and measurement of compassion in nursing: A systematic review. *Nurse Education Today*, *63*, 50-58.

Chapter 5. Durkin, M., Gurbutt, R., & Carson, J. (2019). Stakeholder perspectives of compassion in nursing: the development of the compassion strengths model. *Journal of Advanced Nursing.* https://doi.org/10.1111/jan.14134.

Appendix K – Conference papers

Durkin, M. (2018). An introduction to the META model in relation to compassion in nursing. (University of Bolton TIRI Conference 2018 Wednesday 4th - Thursday 5th July 2018).

Durkin, M., Gurbutt, R., & Carson, J. (2018). Results from an online scenario based compassion intervention: a pilot study. Session theme: Experiences in health sciences education (11th International Technology Education and Development Conference INTED2018, Valencia, Spain, 5th – 7th March 2018).

Durkin, M., Gurbutt, R., & Carson, J. (2017). Design factors in building a compassion intervention (paper). Session theme: blended learning (11th International Technology Education and Development Conference INTED2017, Valencia, Spain, 6th – 8th March 2017)

Durkin, M. (2017). Designing a virtual learning environment (VLE) and compassion strengths scale to measure and teach compassion in nursing. (University of Bolton TIRI Conference 2017 Wednesday 5 - Thursday 6 July).

Appendix L – Authors related articles to the PhD topic

Durkin, M., Smith, J., Powell, M., Howarth, J., & Carson, J. (2013). Wellbeing, compassion fatigue and burnout in APs. *British Journal of Healthcare Assistants September*, *7*(09), 457.

Beaumont, E., Durkin, M., Martin, C. J. H., & Carson, J. (2016). Compassion for others, self-compassion, quality of life and mental well-being measures and their association with compassion fatigue and burnout in student midwives: A quantitative survey. *Midwifery*, *34*, 239-244.

Beaumont, E., Durkin, M., Hollins Martin, C. J., & Carson, J. (2016). Measuring relationships between self-compassion, compassion fatigue, burnout and well-being in student counsellors and student cognitive behavioural psychotherapists: a quantitative survey. *Counselling and Psychotherapy Research*, *16*(1), 15-23.

Durkin, M., Beaumont, E., Martin, C. J. H., & Carson, J. (2016). A pilot study exploring the relationship between self-compassion, self-judgement, self-kindness, compassion, professional quality of life and wellbeing among UK community nurses. *Nurse Education Today*, *46*, 109-114.

Beaumont, E., Durkin, M., McAndrew, S., & Martin, C. R. (2016). Using Compassion Focused Therapy as an adjunct to Trauma-Focused CBT for Fire Service personnel suffering with trauma-related symptoms. *The Cognitive Behaviour Therapist*, *9*.

Beaumont, E., Rayner, G., Durkin, M., & Bowling, G. (2017). The effects of Compassionate Mind Training on student psychotherapists. *The Journal of Mental Health Training, Education and Practice*, Vol. 12 Issue: 5, pp.300-312.

Durkin, M. (2017). Student life-Be an agent of compassion: Five qualities, practised every day, can make you more compassionate, says psychology graduate and PhD student Mark Durkin. *Nursing Standard*, *31*(38), 35-35.