DOCTORAL THESIS

The Development and Validation of the Relational Depth Frequency Scale

Di Malta, Gina

Award date:
2017

Awarding institution:
University of Roehampton

General rights
Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

• Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
• You may not further distribute the material or use it for any profit-making activity or commercial gain
• You may freely distribute the URL identifying the publication in the public portal

Take down policy
If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.
The Development and Validation of the Relational Depth Frequency Scale

By

Gina Saskjia Di Malta, BA, MSc, MA

A thesis submitted in partial fulfilment of the requirements for the degree of

PsychD

Department of Psychology
University of Roehampton
University of Surrey
2016
Acknowledgments

I would like to thank my highly esteemed Director of Study, Professor Mick Cooper, who was consistently present throughout this project. Along the hard work and focus, our meetings were filled with a precious kind of humanity, one of warmth, openness and exchange. I have been incredibly lucky to have him by my side throughout and I am grateful to have been able to learn from him.

I would also like to thank my co-supervisor, Dr. Joel Vos, for his advice, guidance and valuable contribution with regard to the research methods within this project.

Dr. Chris Evans, who became my third supervisor at a later point in the research, offered me expertise on scale development that came as a blessing. His devotion to communicating his knowledge with patience and kindness has left an imprint on my heart. I feel infinitely grateful for the time he has dedicated to this project.

I would like to thank my classmates and new friends Monique and Amy for our ‘study days’, for the memories of long hours of work in which I was not alone. You made them joyful by your presence.

I would like to thank my mother, Clemence, who has worked very hard in her life to support both of us. Thank you for your trust in me and your continuous support. You are my greatest inspiration and source of strength.

Finally thanks to the many participants in this study, this project could not have happened without you.
Abstract

Background: Relational depth is defined as ‘a state of profound contact and engagement between two people, in which each person is fully real with the Other, and able to understand and value the other’s experiences at a high level’ (Mearns and Cooper, 2005, p. xii). The concept emerged in humanistic therapies and became an area of interest in research on the therapeutic relationship. Evidence suggests relational depth may be associated to psychological growth and therapy outcome. The Relational Depth Inventory (Wiggins, 2007) provided a first instrument to measure presence of relational depth in a significant event. To this day there is no validated instrument to measure the frequency of relational depth in therapy.

Aims: The principal aim of this project is to develop and validate a scale that can reliably measure the frequency of relational depth in therapy. Other aims include explorations of the demographic moderators of the frequency of relational depth.

Methods: Standard procedures included the creation of an item pool, expert rating of items, and Three-Step Test interviews. A psychometric exploration was used to assess internal consistency in a sample of 556 clients and therapists, convergent validity with the RDI and WAI-SR, divergent validity with a measure of self-compassion, a principal component analysis, and associations in demographic variables.

Findings and further research: The 20-item Relational Depth Frequency Scale (RDFS) has excellent reliability in this sample and good initial construct validity. We uncovered two dimensions of relational depth: enduring relational depth and intense moments of relational depth. Therapists had higher relational depth frequency (RDF) than clients. Qualified practitioners had higher RDF than trainees. Individuals who self-identified as spiritual had higher RDF than those who self-identified as atheists. Therapists had higher RDF the longer the therapy was. Clients showed lower RDF between the sixth and twenty-fourth session. The RDFS can be used for further research particularly in assessing the predictive validity of relational depth on outcome.
Preface

My interest in relational depth started in 2011 when I shared a moment that seemed indescribable with one of my clients. It felt as if there had been a shift, something we had been waiting for, a moment of understanding like an unspoken agreement. Something deep between us that touched me, and remains to this day. This was a moment that would impact the rest of my life for it led me to make the commitment to train to become a Counselling Psychologist, knowing the impact such meeting could have on the lives of others.

In what seemed to me like a fateful turn of events, Professor Mick Cooper joined the University of Roehampton in my first year of training. He gave a lecture on relational depth, which probably several of us trainees were moved by. After the lecture I rushed to Professor Cooper’s office and mumbled that I wanted to work with him. Nonetheless, my clumsy manners and overly passionate attitude were received with a warm welcome.

With previous academic experience of quantitative research, I imagined different ideas of projects for relational depth, but I realised I was missing the right instrument. This is how the idea of developing a scale for relational depth came about.
# Table of Content

**Acknowledgments**.................................................................................................................. p2  
**Abstract**................................................................................................................................... p3  
**Preface**....................................................................................................................................... p4  

## Chapter 1: Introduction .................................................................................................................. p9  
1.1. **Context**................................................................................................................................. p10  
  1.1.1. Relational Depth Definitions .............................................................................................. p10  
  1.1.2. Measurement Scales .......................................................................................................... p11  
  1.1.3. Relational Depth and the Experience of Time .................................................................... p12  
1.2. **Limitations in Measuring the Frequency of Relational Depth** ........................................... p13  
1.3. **Contributions to Counselling Psychology** ................................................................. p15  
  1.3.1. A Missing Instrument ........................................................................................................ p16  
  1.3.2. Relational Depth and Outcome ......................................................................................... p17  
  1.3.3. Possibilities for Future Research .................................................................................... p17  
1.4. **Aims** ..................................................................................................................................... p18  
1.5. **Research Questions** ........................................................................................................... p18  
1.6. **Chapters** ................................................................................................................................ p18  

## Chapter 2: Literature Review ........................................................................................................... p20  
2.1. **What is Relational Depth?** ................................................................................................ p21  
  2.1.1. A Component of the Therapeutic Relationship .............................................................. p21  
    2.1.1.1. Person-centred theory and the therapeutic relationship .............................................. p22  
    2.1.1.2. Relational Depth and the rogerian relationship ......................................................... p23  
  2.1.2. Closely Related Concepts Across Therapeutic Modalities ........................................... p25  
  2.1.3. Two Possible Dimensions of Relational Depth ............................................................ p27  
  2.1.4. The Experience of Relational Depth .............................................................................. p31  
    2.1.4.1. Therapists' and clients' experiences ........................................................................... p31  
    2.1.4.2. Factors contributing to experiences of Relational Depth ......................................... p34  
    2.1.4.3. Other experiences: 'New Perspectives and Developments' .................................. p37  
  2.1.5. Summary ............................................................................................................................ p38  
2.2. **Why Might it Be Important to Measure?** ......................................................................... p38  
  2.2.1. The Working Alliance and Outcome .............................................................................. p39  
  2.2.2. The Rogerian Relationship and Outcome ..................................................................... p40  
    2.2.2.1. The Borett-Lennard Relationship Inventory and outcome ........................................ p41  
    2.2.2.2. The core conditions and outcome ............................................................................. p41  
  2.2.3. Mutuality and Outcome .................................................................................................... p43  
  2.2.4. Relational Depth Presence and Outcome ..................................................................... p44  
  2.2.5. Summary ............................................................................................................................ p46  
2.3. **How Has Relational Depth Been Measured Before?** ....................................................... p46  
  2.3.1. Measuring Related Constructs: Connection and Presence ........................................... p47  
    2.3.1.1. Measuring in-session connection .............................................................................. p47  
    2.3.1.2. The Therapeutic Presence Inventory ........................................................................ p48  
  2.3.2. Measuring Relational Depth Presence ........................................................................... p49  
    2.3.2.1. Relational depth content analysis ............................................................................... p49  
    2.3.2.2. The Relational Depth Inventory ................................................................................. p49  
    2.3.2.3. Findings from assessments with these measures ...................................................... p50  
  2.3.3. The Frequency of Relational Depth ................................................................................. p51
Chapter 3: Methods .................................................................................................................. p55

3.1. Epistemology ..................................................................................................................... p55
  3.1.1. Interpretivism and Positivism ................................................................................. p56
  3.1.2. Critical Realism ....................................................................................................... p57
  3.1.3. Critical Pragmatism ............................................................................................... p59
  3.1.4. Summary ................................................................................................................ p60

3.2. Design ................................................................................................................................. p60
  3.2.1. Reliability ................................................................................................................. p61
  3.2.2. Validity ..................................................................................................................... p61
  3.2.3. Exploratory Factor Analysis .................................................................................. p61

3.3. Item Creation and Selection .............................................................................................. p63
  3.3.1. Creation of an Item Pool ......................................................................................... p63
  3.3.2. Rating by Experts ................................................................................................... p63
  3.3.3. Item Selection ........................................................................................................ p64

3.4. Three-Step Test Interviews ............................................................................................... p64
  3.4.1. Piloting the Three-Step Test Interviews ............................................................... p65
  3.4.2. Participants ............................................................................................................ p65
  3.4.3. Measure ................................................................................................................ p66
  3.4.4. Procedure .............................................................................................................. p66

3.5. Online Psychometric Exploration Study ............................................................................ p69
  3.5.1. Piloting the Online Questionnaire ........................................................................ p69
  3.5.2. Participants ............................................................................................................ p70
    3.5.2.1. Sample size ....................................................................................................... p70
    3.5.2.2. Target populations .......................................................................................... p70
    3.5.2.3. Sampling and recruiting .................................................................................. p71
    3.5.2.4. Participant demographics .............................................................................. p73
  3.5.3. Measures ................................................................................................................. p76
    3.5.3.1. Socio-demographics ....................................................................................... p76
    3.5.3.2. The Relational Depth Frequency Scale ......................................................... p77
    3.5.3.3. The Relational Depth Inventory ..................................................................... p77
    3.5.3.4. The Working Alliance Inventory short version ............................................. p78
    3.5.3.5. The Self-Compassion scale short form ........................................................... p78
  3.5.4. Procedure ................................................................................................................. p79
  3.5.5. Map of the Analysis ................................................................................................. p80
    3.5.5.1. A priori aims .................................................................................................... p80
    3.5.5.2. Hypotheses ..................................................................................................... p80
    3.5.5.3. Map of the analysis ....................................................................................... p81
    3.5.5.4. Post hoc exploratory analysis ....................................................................... p83

Chapter 4: Results .................................................................................................................. p84

4.1. Three-Step Test Interview Findings .................................................................................. p84
4.2. Online Psychometric Exploration Study Results ............................................................. p88
  4.2.1. Reliability ................................................................................................................. p88
    4.2.1.1. Reliability of other scales ............................................................................... p88
    4.2.1.2. Reliability of the Relational Depth Frequency Scale ..................................... p88
  4.2.2. Exploratory Factor Analysis .................................................................................... p91
  4.2.3. Construct Validity ................................................................................................... p96
    4.2.3.1. Construct Validity of the RDFS .................................................................... p96
    4.2.3.2. Construct validity of the RDFS subscales ..................................................... p97
Chapter 5: Discussion .................................................................................................................. p108

5.1. Summary of Findings .......................................................................................................... p108
  5.1.1. Content Validity ............................................................................................................. p108
  5.1.2. Reliability ...................................................................................................................... p109
  5.1.3. Dimensionality ............................................................................................................. p109
  5.1.4. Construct Validity ........................................................................................................ p110
  5.1.5. Associations in Demographic Variables ....................................................................... p110
  5.1.6. Post-Hoc Analyses ....................................................................................................... p111

5.2. Comparison of the RDFS Psychometrics to Related Measures ..................................... p112
  5.2.1. The RDFS and Therapeutic Presence Inventory ......................................................... p113
  5.2.2. The RDFS and RDI ....................................................................................................... p114

5.3. Frequency of Relational Depth and Demographic Associations in the Light of Pre-Existing Findings .............................................................................................................. p116
  5.3.1. Therapists vs. Clients .................................................................................................. p116
  5.3.1.1. Differences in overall frequency of Relational Depth ................................................ p116
  5.3.1.2. Differences in experience: Goals, tasks and bond .................................................... p118
  5.3.1.3. Duration of therapy ................................................................................................ p119
  5.3.2. Non-Mental Health Professional Clients ..................................................................... p121
  5.3.3. Gender ........................................................................................................................ p122
  5.3.4. Therapeutic Orientation ............................................................................................. p123
    5.3.4.1. Client RDFS scores based on reports of therapist orientation .................................. p123
    5.3.4.2. Therapists RDFS scores based on self-reports of orientation ................................... p125
  5.3.5. Practitioner’s Experience ............................................................................................ p126
  5.3.6. Trainee Psychologists ................................................................................................ p127
  5.3.7. Spirituality .................................................................................................................... p127

5.4. Two Dimensions of Relational Depth: ‘Moments’ and ‘Enduring’ ................................ p128

5.5. Limitations .......................................................................................................................... p131
  5.5.1. Study Limitations ........................................................................................................ p132
  5.5.2. Limitations in the Analyses ......................................................................................... p134
  5.5.3. Limitations in the Scale Format .................................................................................. p134

5.6. Further Research ............................................................................................................... p135

5.7. Implications for Practice .................................................................................................... p136

5.8. Reflexivity ........................................................................................................................... p137

Chapter 6: Summary .................................................................................................................. p140
References .................................................................................................................................................... p142
Appendices .................................................................................................................................................... p161
Appendix A: The Relational Depth Frequency Scale ................................................................. p161
Appendix B: Ethical Approval ................................................................................................................. p167
Appendix C: Email Communications and Item Ratings ................................................................. p168
Appendix D: Advertising for TSTI ....................................................................................................... p171
Appendix E: Advertising for Online Study Template ................................................................. p172
Appendix F: Consent Forms .................................................................................................................. p173
Appendix G: Socio-Demographics Questionnaire ........................................................................... p176
Appendix H: Principal Component Analysis Tables and Figure ................................................. p179
Chapter 1:

Introduction

In the last decades in the Western world, counselling psychology has known a relational shift where the centrality of the therapeutic relationship is more widely acknowledged (Schuhmann, 2016; Reynolds, 2007; Jordan, 2000). It would appear that in a context of political, environmental and humanitarian uncertainty, the place of relational psychology may come as a response to a need for human cooperation and unity. Relational developments have been expressed in different forms across the main therapy modalities. The psychoanalytic school has turned towards an understanding of the therapeutic encounter as inter-subjective or as moments of co-creation (Boston Change Process Study group, 2005; Carter, 2010; Orange, Atwood & Stolorow, 2015; Bebee, Rustin, Sorter, & Knoblauch, 2003). Third wave cognitive behaviour approaches have found an emphasis on compassion and acceptance (Gilbert, 2009; Hayes, 2004). The concept of relational depth emerges at the intersection of the person-centred and existential traditions in response to a new vision of the relationship between therapist and client. One in which either party is able to meet in a moment where the power imbalance has possibly vanished, a moment of realness and mutuality that seems to transcend the setting itself, a moment of connection that goes beyond words. These moments of relational depth have been experienced as significant moments of growth in therapy (Mearns & Cooper, 2005; Cooper, 2005; Knox, 2008; McMillian & McLeod, 2006; Wiggins, 2011; Leung, 2008). The current project is aimed at creating and validating a measure of the frequency of relational depth in the hope of opening new research avenues into a therapeutic experience that has the potential to be life enhancing.
1.1. Context

1.1.1. Relational Depth Definitions.

The concept of relational depth was developed in the context of humanistic psychotherapy, a client-led model based on humanistic psychology, which values unique experiences and recognises the relationship between therapist and client as significant for growth. The emergence of relational depth is also linked to a changing context where Martin Buber’s existential philosophy of the I-Thou relation takes predominance in helping relationships (Buber, 1947). Relational depth was originally theorised to be the quality of contact two persons may experience when one embodies Rogers’s person-centred core conditions of empathy, congruence and unconditional positive regard (Mearns & Cooper, 2005). The term ‘contact at relational depth’ was first used by Dave Mearns in 1996 (p.30) to highlight an aspect of the relationship, which he felt had not been explored. Mearns (2003) later described relational depth as ‘an extraordinary depth of human contact’ (p. 5) and emphasised the importance of such depth in the relationship.

Dave Mearns and Mick Cooper developed the concept of relational depth in their book *Working at Relational Depth in Counselling and Psychotherapy* (2005) and defined it as: ‘a state of profound contact and engagement between two people, in which each person is fully real with the Other, and able to understand and value the other’s experiences at a high level’ (Mearns and Cooper, 2005, p. xii). They added that in this state of presence: ‘one simultaneously experiences high and consistent levels of empathy and acceptance towards the Other, and relates to them in a highly transparent way. In this relationship, the client is experienced as acknowledging one’s empathy, acceptance and congruence – either explicitly or implicitly – and is experienced as fully congruent in that moment.’ (Mearns & Cooper, 2005, p. 36).
While the integration of the core conditions is implicit to the person-centred model, Mearns and Cooper propose that when offered in high degree they may represent a single variable: relational depth. According to the authors, relational depth seems to encompass qualities such as realness, presence, mutuality, client openness and a ‘meeting without words’ (p.47). In this book, they also theorise that relational depth can come in the form of a lasting experience of interconnectedness, which characterises the relationship, or in the form of intense and short-lived moments of connection.

**1.1.2. Measurement Scales.**

Measurement scales have been developed alongside civilisations as systems and sources of information (Baber, 1996). In psychology, they serve as a basis for assessment and empirical research (Steiner & Norman, 2008; Worthington & Whittaker, 2006). The Likert scale designed in 1932 is one of the most widely used types of measure in behavioural science and psychology questionnaires. It relies on the assumption that the strength of an experience is linear and that attitudes can be measured, and utilises interval or ordinal levels of measurement (Cook et al., 1981; Schmitt and Klimoski, 1991). Interval scales are numerical scales in which intervals have the same interpretation throughout, whereas ordinal scales can measure dichotomous or non-dichotomous data consisting of subjective values, such as 'completely agree', 'mostly agree', 'mostly disagree', 'completely disagree' when measuring opinion (Kirch, 2008). In psychology, ordinal scales are treated as interval scale for they lend to more powerful statistical techniques (Devellis, 2012).

Such ordinal Likert scales have been developed and utilised to measure various aspects of human behaviour, cognition, or personal attributes. Scales have also been used to measure interpersonal aspects of therapy such as the therapeutic relationship, i.e. the Working Alliance Inventory (Bordin, 1979). Other scales have been developed to measure self-reports of spiritual experience as a coping method in times of stress.
(Underwood & Teresi, 2002). Currently, scales are widely used in the National Health Service and NHS England programmes like Increasing Access to Psychological Therapies to monitor therapy outcome, i.e. GAD-7 (Spitzer, Kroenke, Williams, & Löwe, 2006), PHQ-9 (Kroenke & Spitzer, 2002), and CORE-10 (Barkham, Bewick, Mullin, Gilbody, Connell, Cahill, & Evans, 2013). The CORE-10 measures the frequency of a certain event over the last two weeks on a 5-point likert scale: ‘(0) Not at all’, ‘(1) rarely’, ‘(2) sometimes’, ‘(3) often’, ‘(4) Most or all of the time’. The Relational Depth Frequency Scale (RDFS) in development is an ordinal scale treated as an interval scale, using a 5-point Likert scale based on the validated core outcome measure format. Similarly it measures the frequency to which a person has experienced a certain event. In this case, the frequency of the event would be assessed over the course of therapy.

1.1.3. Relational Depth and the Experience of Time.

One central question that emerges in the construction of the Relational Depth Frequency Scale touches upon the link between relational depth and time. First, the definition of relational depth diverges into two separate aspects. Relational depth has been characterised by both its occurrence during moments and by its enduring quality and lasting sense of connection in the relationship (Mearns & Cooper, 2005). While some research has reported on the quality of the enduring relationship (McMillan & McLeod, 2006; Mearns & Schmid, 2006), and others on moments of relational depth (Knox, 2008; Wiggins, 2011) there is scope to explore the link between moments of relational depth and a relationship characterised by relational depth. In this study, there is an underlying assumption that the Relational Depth Frequency Scale could touch upon both aspects of the definition, as moments happening ‘often’ or ‘most or all of the time’ could suggest that therapist and client have entered into an enduring relationship characterised by relational depth. It is possible that an exploratory analysis of the data
would bring insights into the current understanding of the link between the two conceptualisations of relational depth.

Furthermore, the development of the Relational Depth Frequency Scale involves two understandings of time: Time can be conceptualised as a chronological sequence (notion of Chronos) or as a moment of indeterminate time in which a significant moment happens (notion of Kairos) (Doherty, 1996). In therapy, time has been described within both frames, consisting of periods of indiscernible change and moments of more intense emotion where therapists and clients can experience being intensely engaged (Whelton and Greenberg, 2002). Stern (2004) views therapy as involving a series of significant moments as time unfolds, and describes moments as ‘the smallest chunks of psychological experience that have a clinical sense’ (p.135). Schmid (2002) puts an emphasis on the significance of the encounter and source of change. Similarly moments of relational depth fit the analogy of Kairos in that they are unexpected and significant in bringing about change (Knox, 2008). Temporal frequency on the other hand, defined as the number of occurrences an event is repeated per unit of time or the rate at which something occurs over a particular period of time, is represented in the analogy of Chronos. In the current project, a person taking the scale would subjectively estimate the number of occurrences they have experienced relational depth moments over the course of therapy as a unit of time. In this sense, it seems the development of the Relational Depth Frequency Scale touches upon a discovery of the relationship between subjective kairian moments of relational depth and quantitative chronological time.

1.2. Limitations in Measuring the Frequency of Relational Depth

Much psychology research tends to lie at a divide between an empirical medical model and phenomenology. The medical model is based on a set of standard procedures
rooted in Cartesian reductionism (Laing, 1971), while phenomenology is based on the premise that reality consists of phenomena as perceived in the human consciousness (Husserl, 1970; Heidegger, 1988) and concerned with the subjective realms of clients and therapists. This is reflected in the acquisition of knowledge in which subjectivist and objectivist epistemologies are opposing philosophical paradigms that lead to sets of different research methodologies. This research project lies at the heart of this divide for it aims at empirically creating a measure of the phenomenological experience of relational depth. Yet one may question, is this at the expense of the uniqueness and depth of the human experience that is being measured?

The essence of relational depth characterised in its etymology is constituted by a relational component and a depth component. ‘Relational’ possibly refers to the mutuality of the experience. In psychology and counselling for instance, a relational model sees emotional wellbeing as depending on having satisfying mutual relationships with others (Jordan, 2000). The depth component, on the other hand, possibly encompasses a numinous quality. The essence of relational depth characterized in part by its numinous component may make the phenomenon particularly difficult to grasp, explain or measure. Current research on relational depth has been mostly qualitative and paints a picture of meeting a human being at a profound level of connectedness: ‘A sense of connectedness and flow with another person that is so powerful that it can feel quite magical. At these times, the person feels alive, immersed in the encounter, and truly themselves; while experiencing the other as open, genuine and valuing of who they are.’ (Cooper, 2009, cited in Knox, Murphy, Wiggins & Cooper, 2012). Qualitative descriptions provide insights into the construct and would typically offer a potential premise for quantitative research. Yet, words such as ‘intense’, ‘magical’, ‘immersed’, and ‘profound’ that describe such moments and convey a sense of a mystical presence could bring obstacles in creating a measurement scale.

Indeed, there is already debate around the meaningfulness of researching and
especially of quantifying a phenomenon as subtle and holistic as relational depth (Cooper, 2013). As described in Conelly’s (2009) trainee interviews, ‘There’s a fear of catching something very beautiful and trying to define what it is. And then in that process, losing what it is’ (cited in Cooper, 2012). The argument is that the empirical examination of relational depth is antithetical to a philosophical premise for relational depth based on I-thou relations (Buber, 1947) as opposed to I-it reductionism. This argument goes further in John Rowan’s view as he describes relational depth as a phenomenon that originates in the ‘subtle level’ (Rowan, personal communications, August 4, 2015), which is a realm of deity and mysticism (Howard, 2005). Rowan explains that events that pertain to the subtle realm go beyond empiricism. Thus he understands the attempt to measure relational depth as a fallacy, for no ‘current method’ could be applied to measuring such experience. Furthermore, the experience is idiosyncratic, which brings questions not only around the usefulness of a measurement scale but also around the impact it may have on individuals whose personal experience would be reduced to a set of items (Brown, personal communications, July 20, 2015).

The epistemological divide underpinning this project is manifesting in the potential problems around measuring the frequency of relational depth in psychotherapy. Overall, qualitative designs have offered meanings and essences, which have allowed for the study of this holistic human experience, and such design may represent more valid evidence of relational depth (Wiggins, 2012; Moustakas, 1994). Despite these arguments, the type of research we are conducting represents another means to edge forward in the understanding of relational depth. It is not seen as having definite answers, but brought about as an open and inquisitive scientific inquiry, and looking at the possibilities and limitations of such project. Besides the creation of a reliable and valid measurement scale has a number of potential benefits that could outweigh limitations.
1.3. Contributions to Counselling Psychology

It seems that the uses of a measurement scale for relational depth frequency may be worthwhile. This is for several reasons. First, there is no current instrument for frequency of relational depth despite prior research interest in such measure. Second, there is research suggesting that relational depth presence is associated with therapy outcome (Wiggins, 2011). Thus the Relational Depth Frequency Scale is relevant in terms of therapeutic outcome and may have implications for psychotherapy practice. Third, the possibility of measuring the construct allows for a wider dissemination of results and may increase awareness of a factor that evidence suggests contributes to mental health. The key studies mentioned below are reviewed in more detail in the following Chapter.

1.3.1. A Missing Instrument.

Wiggins (2007) created an instrument to measure the presence of relational depth in significant moments in psychotherapy. The RDI is presented as ‘The Relationship Between Therapist and Client’ and begins with a question asking respondents to describe an important event experienced during a therapy session. Then the respondents are asked to rate this significant event using a 5-point Likert scale on different items representing aspects of relational depth. This measure specifically looks at rating the presence of relational depth in a significant moment in therapy.

In addition, there has also been prior interest in estimating the frequency of relational depth in therapy. One unpublished Internet survey by Leung (2008) revealed that most therapists report having experienced some moments of relational depth with their clients. Leung also explored the relationship between relational depth and therapeutic outcome asking participants to rate how important they believed relational depth moments were for the outcomes of therapy. Relational depth moments were found
to be therapeutic with enduring effects. In this study, he also established a subjective estimate of frequency as rated by therapists and clients. While this study offered useful insights, it based its results on a single survey item rather than a validated instrument. Despite an existing interest in research involving the frequency of relational depth, there is no validated instrument to measure the frequency of relational depth in therapy.

1.3.2. Relational Depth and Outcome.

Another implication of this project is one that touches upon the emerging relationship of relational depth with outcome. Relational depth has mostly been associated with psychological growth and positive outcome in qualitative studies (Cooper, 2005; Knox, 2008; Knox & Cooper, 2010; Knox, Murphy, Wiggins & Cooper, 2012). Wiggins (2011) provided a first quantitative account of the link of relational depth with outcome using the RDI. She found that presence of relational depth was associated with positive outcome above and beyond the Working Alliance. Limitations in this study as well as the potential impact of such results call for replication. Furthermore, a measure of frequency of relational depth over therapy may be more adapted for such outcome study. In effect, a measure of presence of relational depth in a single event may not be representative of what happens in therapy. This is considering that participants could choose any significant event, and relational depth may have happened in other events.

1.3.3. Possibilities for Future Research.

An instrument of the frequency of relational depth in therapy can have multiple uses in future research. It can open multiple other research avenues in terms of differences across moderating variables such as age, gender and other socio-demographic factors, as well as its association with therapy model, common factors, or person characteristics.
Additionally one of the contributions is the possibility to use the instrument in outcome studies to assess the relation between relational depth over the course of therapy and therapy outcome. Such study could bring information into aspects of the therapeutic relationship that are associated with outcome and have implications for practice.

1.4. Aims

i. To develop a measure of relational depth: the Relational Depth Frequency Scale.

ii. To validate the Relational Depth Frequency Scale.

iii. To explore the associations between relational depth frequency and moderating demographic variables.

1.5. Research Questions

i. Can the content validity of the Relational Depth Frequency Scale be established?

ii. Can the reliability of the Relational Depth Frequency Scale be established?
   - Internal consistency (Cronbach's alpha)

iii. Can the construct validity of the Relational Depth Frequency Scale be established?
   - Factor structure
   - Convergent validity
   - Discriminant validity

iv. What are the social demographics associated with the frequency of relational depth in therapy?

1.6. Chapters

Chapter 2 consists of a review of the literature on relational depth focused around what relational depth is, why it may be important to measure, and how it has been measured
before. Chapter 3 is a method section including the epistemology of this project, design of the study, and three steps of scale development: the item creation and selection, the three-step test interviews, and the online psychometric exploration study. Chapter 4 is a presentation of the results divided into two parts: the interview findings, and the psychometric study results. Chapter 5 is a review of the findings in the light of previous literature on relational depth. The thesis ends with a summary of important findings including suggestions for further research.
CHAPTER 2:
LITERATURE REVIEW

This section provides a context and rationale for what led to the current research questions and project. The literature is organised around the following questions: What is relational depth? Why might it be important to measure? And how has the question previously been approached?

**Systematic review for ‘relational depth’**

The ISI Web of knowledge search engine was used to search all publications for the inclusion of the term ‘relational depth’ under the general categories of Arts and Humanities, and Social Sciences with subject areas of psychology and behavioural science. The search was expanded to include ‘moments of contact’, ‘moments of meeting’, and ‘moments of connectedness’. I repeated the search on psychnet, proquest, the Roehampton search engine and the Cochrane library. In addition, searches were conducted through Google Scholar for the term ‘relational depth’, ‘relational depth counselling’, and ‘relational depth psychology’. To the best of my knowledge, this literature review includes all published studies with the term ‘relational depth’. It also includes some published studies with the related search terms mentioned above which are relevant to relational depth, and unpublished studies and student works that are directly relevant to the research questions around measuring the frequency of relational depth in therapy. Additionally, the review includes studies used to contextualise relational depth. They are selected based on their relevance to the current rationale with an emphasis on selecting recently published and peer-reviewed studies.
2.1. What is Relational Depth?

Relational depth can be considered an aspect of the therapeutic relationship and originates in the person-centred tradition. It also appears to be present in other therapeutic approaches in the form of closely related concepts, in which descriptions of the experience are coloured by varying shades of meaning. Other related concepts also reflect Mearns and Cooper’s (2005) two possible dimensions of relational depth. However, recent research on experiences of relational depth has seen qualitative descriptions of a unidimensional relational depth. Further research included the factors contributing to the experience in therapists and clients.

2.1.1. A Component of the Therapeutic Relationship.

Relational depth can be conceptualised as a component of the therapeutic relationship. The therapeutic relationship is a broad construct that has been labelled therapeutic alliance, working alliance, helping relationship, and helping alliance (e.g. Horvath, 2005; McCabe & Priebe, 2004; Reynolds & Scott, 1999). Murphy (2010) proposes that it may divide in three main traditions: The Freudian, the alliance, and the Rogerian. The Freudian tradition offers a view of the relationship based mainly on transference and countertransference where interpretations serve to make the unconscious conscious, and the patient is seen as unaware while the analyst is the agent of change (Clarkson, 1994). The therapeutic alliance, often used interchangeably with therapeutic relationship, also comes from a psychoanalytic tradition and has been extensively studied and associated with outcome across models of therapy (Norcross & Wampold, 2011; Horvath & Bedi, 2002; Krupnick, Sotsky, Simmens, Moyer, Elkin, & Watkins, 1996). In this section, I review the Rogerian tradition where relational depth has emerged.
2.1.1.1. Person-centred theory and the therapeutic relationship.

Some of the greatest contributions to the conceptualisation of the therapeutic relationship come from the Rogerian tradition (Mearns & Thorne, 2000; Anderson, 2001). Rogers’s theory of actualisation (1951, 1959) is not typically seen as a relational theory for it was written at a time when individualism was valued and autonomy emphasised. However, postmodern authors have argued that Rogers’ ideal would now be culturally and contextually limited and have demonstrated that Rogers’ theory is relational (Tudor, 2010; O’Hara, 1992).

In effect, Rogers (1951) argues that the self-concept forms as a differentiation of the organismic experience. In the early relational environment, positive regard as a response to behaviour indicates a sense of worth to the child. As part of developing in an interpersonal environment the child will behave in ways to receive positive regard and may learn to value their own worth from an external locus of control. From this theory, the social and interpersonal environment can be the root of psychological distress. Person-centred theory can overall be seen as a relational theory in which early relationships determine psychological health (Mearns, Thorne, McLeod, 2013; Schmid & Mearns, 2006).

In his theory, Rogers (1959, 1961) bases therapeutic change on six conditions in the therapeutic encounter, which aim at providing an environment in which the absence of conditions of worth will offer a possibility for the person to become in touch with their organismic valuing process. The six therapeutic conditions are as follows (Rogers, 1959; p.213):

1. That two persons are in contact.

2. That the first person, whom we shall term the client, is in a state of incongruence, being vulnerable, or anxious.

3. That the second person, whom we shall term the therapist, is congruent in the relationship.
4. That the therapist is experiencing unconditional positive regard toward the client.

5. That the therapist is experiencing an empathic understanding of the client’s internal frame of reference.

6. That the client perceives, at least to a minimal degree, conditions 4 and 5, the unconditional positive regard of the therapist for him, and the empathic understanding of the therapist.

In this context, therapeutic change can be seen as a result of a reparative therapeutic relationship where the core conditions of congruence, empathy, and unconditional positive regard are principally the relational attributes of therapists (Murphy, 2010).

2.1.1.2. Relational depth and the Rogerian relationship.

The concept of relational depth has emerged in the person-centred tradition (Mearns, 1996). There are speculations about how it relates to person-centred theory. As described, several authors converge towards a theory that one development of the person-centred model includes a shift from a ‘one-person centred therapy’ to a ‘two-person centred therapy’ (e.g. Tudor & Worall, 2006; Tolan, 2012; Khan, 1996; Cooper & McLeod, 2010). Cox (2009), for instance, argues that the concept of relational depth brings a contemporary outlook and a new language with which to describe person-centred phenomena. In this new context, the client can be part of a dynamic therapeutic encounter. This dialogical process of therapy moves away from a classical and non-directive approach and emphasises realness and transparency in the relationship (Mearns & Cooper, 2005).

Within this approach, Mearns (1996) proposed that relational depth was a quality of contact that could be achieved in therapy. He wrote about Rogers’ first of the six conditions and found that while much attention had been given to lack of or poor psychological contact, there had not been much focus on the other end of the spectrum.
involving quality of contact. Rogers had previously referred to a quality of contact as ‘knowing’, which he viewed as an extra dimension that could be accessed where one became aware of a form of non-cognitive intelligence (Rogers, 1963). More recently, Wyatt (2007) wrote that relational depth may represent a holistic view of psychological contact, accounting for the interpenetrative influence of the self, the other, the organic world, and culture. The quality of contact that characterises relational depth was described as involving slowness, sensitive and accepting empathic responding, a willingness to be vulnerable and a capacity to be affected by the client, sometimes arising in silence or other times by being interactive and mutual (Mearns & Cooper, 2005).

In addition to a quality of contact, Mearns and Cooper (2005) proposed that the client does not receive the three core conditions of congruence, empathy and unconditional positive regard as separate conditions. Instead, when practiced in the way Rogers meant, clients would receive the core conditions as an integration. Mearns and Cooper reiterate Mearns’ (1997) hypothesis when he said ‘one of the ingredients involved in the therapist’s ability to work at relational depth is a coming together of high levels of the therapeutic conditions of empathy, unconditional positive regard and congruence’ (p. 23) suggesting that such integration may represent the single variable of relational depth. Cooper (2005) later described relational depth as ‘a synergetic encounter not reducible to the sum of its parts’. Knox, Wiggins, Murphy, & Cooper (2012) also described relational depth as emerging from the ‘synergistic effects’ of the core conditions.

Wiggins (2012) further speculated that moments of relational depth are specific moments where the client experiences congruence as opposed to Rogers’ second condition stating that the client is in a state of incongruence. This would happen as a result of the safe environment provided by the Rogerian relationship.

In summary, relational depth emerged in a shifting person-centred model: It may
be a quality of contact, involving the integration of the six conditions when practiced in high degrees, and in moments where the client experiences congruence in relation to a congruent therapist allowing reciprocity in the relationship (Murphy, Cramer, Joseph, 2012).

2.1.2. Closely Related Concepts Across Therapeutic Modalities

Relational depth also appears closely linked to existing concepts, some of which pertain to other models of therapy. One closely linked concept within Humanistic psychology, for instance, is the concept of therapeutic presence. Bugental (1989) defines presence as openness to all aspects of the client’s experience, as well as to one’s own experiencing and responsiveness. Hycner (1993) emphasised the wholeness of the therapist’s self. Clarkson (1997) describes presence as ‘an emptying of one’s knowledge’ and opening up to the other’s experience. Geller & Greenberg (2001, 2002, 2010, 2012) have put forward the concept of therapeutic presence in several studies and define it as being completely in the moment on a physical, emotional, cognitive and spiritual level while bringing the whole self into engagement for the client. They proposed a model of therapeutic presence in which the process involved receptivity, inwardly attending, and contact. Some descriptions related to characteristics of relational depth included: timelessness, experiencing deeply with non-attachment, alertness, energy and flow, enhanced awareness, trust, lack of self-conscious awareness, respect and love. Moreover, the authors advance that therapeutic presence is a moment-to-moment state of deep contact involving being with rather than doing to the client, and involving being willing to be moved by the client. They add that presence may be the foundation for the core conditions or that it may be expressed through the conditions of empathy and congruence. Thus it may be closely associated to relational depth.

The psychoanalytic tradition has also known a relational turn where more authors address the question of inter-subjectivity (Stolorow, 1997; Bebee & Lachmann,
Daniel Stern was interested in intersubjectivity and the present moment. He compared the therapy process to the psychological growth originating from right brain-to-right brain activity in mother and baby interactions. Similarly, he also viewed the therapeutic process as co-created between therapist and client. Within his theory, he put forward the concept of ‘moments of meeting’ (2004) referring to the quality of the present moment where there is an inter-subjective experiencing of the other person through empathy. He defines the present moment as the time in which psychological processes are grouped into the smallest units that have a sense in the context of a relationship. In moments of meeting, both parties are aware of the emotional experience of the other. Stern describes a moment where ‘two people traverse together along a feeling landscape as it unfolds in real time’ (p. 172). It is a moment of change where the intersubjective field is being reshaped and alters the relationship. Such moments are emerging from the micro-context of the present moment, involve authenticity, and do not require verbalisation to be lasting and effective. Similarly to relational depth, moments of meeting represent a quality of the present moment, where both parties are authentic and empathic and have ‘uncanny’ awareness of the other. In his theory, Stern does not make mention of the valuing for the other person in the relationship, which may or may not be an implicit characteristic of a moment of meeting.

Within a cognitive behaviour orientation, mindfulness has become increasingly mainstream and integrated into psychology practice (Kabat-Zinn, 1982; Teasdale, Segal, & Williams, 1995; Linehan, 1987; Hayes & Wilson, 1994). Relational mindfulness is a developing concept, which puts an emphasis on qualities such as interpersonal relationships, spirituality and the therapeutic alliance (Germer, Siegel & Fulton, 2013). In this context, spirituality refers to transcendence, the sense that an experience goes beyond the ordinary; it involves boundlessness, a sense of unrestricted time and space; ultimacy, the underlying essence of all experience; and
interconnectedness, a sense of dissolving boundaries around the self and increasing unity with the world (Pargament & Saunders, 2007). In therapy, relational mindfulness is thought to be relevant for it cultivates the qualities that enhance the therapeutic relationship, such as warmth, empathy, curiosity, self-attunement and acceptance, and contributes to the development of a spiritual dimension of the therapeutic encounter (Falb & Pargament, 2012). It involves various techniques that emphasise the interactions between people such as a deliberate stance of awareness to emotional and bodily states as influenced by the other person. Additionally, Cohen and Miller (2009) found that interpersonal mindfulness trainings led to increased social connectedness and awareness of nonverbal communication in psychology graduates. Beckerman and Sarraco (2011) looked at the integration of mindfulness in couples’ exchanges during couples’ therapy sessions. Deliberately bringing attention to thoughts and feelings during arguments or heated exchanges, led participants to avoid withdrawal behaviours, interrupt their negative thought cycles, express their vulnerable feelings and communicate in a more compassionate manner.

Besides trans-modality and an emphasis on being a likely widespread human experience, other concepts reveal two potential dimensions of relational depth: these are intense moments of relational depth and an enduring relational depth (Mearns & Cooper, 2005).

2.1.3. Two Possible Dimensions of Relational Depth.

Other closely linked concepts could reflect the two dimensions of relational depth theorised by Mearns and Cooper (2005). They proposed a phenomenological perspective of relational depth characterised by discrete and distinct moments of heightened contact. They also suggested that relational depth could be a characteristic of the overall relationship, which they described as a sense of enduring connection.

Carl Rogers suggested that healing probably occurred with the integration of the
three conditions. In an interview published by Baldwin (2000), he said:

I am inclined to think that in my writing I have stressed too much the three basic conditions. Perhaps it is something around the edges of those conditions that is really the most important element of therapy, when my self is very clearly, obviously present. (p.30).

Here Rogers’s description appears to put an emphasis on his theory, which is consistent with the construct of relational depth as a possible heightened merging of the core conditions in the relationship (Brown, 2012).

Later in his life, he also addressed a spiritual quality that he referred to as the ‘other characteristic’ (Rogers, 1974, 1980). He saw it as a form of transcendent energy in the relationship, or as a vehicle for growth and healing. On this topic he wrote:

When I am at my best, as a group facilitator or a therapist, I discover another characteristic. I find that when I am closest to my inner, intuitive self, when I am somehow in touch with the unknown in me, when perhaps I am in a slightly altered state of consciousness, then whatever I do seems to be full of healing (Rogers, 1980).

Rogers was suggesting that healing occurred alongside an elevation of the relationship to something akin to the spiritual. He wrote: ‘it seems that my inner spirit has reached out and touched the inner spirit of the other. Our relationship transcends itself and becomes part of something larger. Profound growth and healing and energy are present’. While relational depth characterised by a gestalt of the core conditions could partly reflect Mearns and Cooper’s (2005) enduring relational depth; ‘peak’ moments of relational depth appear similar to what Rogers referred to as the ‘other’ characteristic.

Peak and flow have also been conceptualised as different occurrences of the same experience, and appear linked to the two aspects of relational depth. The concept of peak experience was developed by Abraham Maslow (1964) in relation to one of the
higher levels on the hierarchy of needs: self-actualisation, characterised by fulfilling one’s potential. Maslow believed that peak experiences were rare, exciting, deeply moving, elevating, and generating an advanced form of perceiving reality. He described characteristics such as arising with a sense of acceptance, enjoyment and understanding. The experience was also described as including a loss of judgment, a feeling of being whole or integrated, a lack of strain or struggle, a feeling of responsibility, being without fear and doubt, a natural expressiveness, and a mindfulness to the present moment (Maslow, 1970). Maslow added that the most intense peak experiences could be like: ‘a feeling of being simultaneously more powerful and also more helpless than one ever was before’ (Maslow, Frager & Cox, 1970, p.164). In this sense, peak experiences appear similar to moments of relational depth.

Furthermore, self-actualisation was characterised by both peak experiences in specific moments, and ‘flow’ (Csikszentmihalyi, 1990). Flow experiences arose with an enduring sense of connection to the activities undertaken by an individual, or to the present moment. While flow was understood as a subjective process happening internally, a peak experience was thought to occur as a result of a connection to the outside. Similarly, an enduring relational depth could be a symbolic representation of a connection to another person, which may be felt in a moment and sustained in their absence. On the other hand, moments of relational depth like peak experiences arise as discrete occurrences as a result of an interaction with the outside. Here one difference is the emphasis on relational depth arising from an interaction with a person.

More recently, the concept of flow has undergone relational developments. In a work relationship for instance, the conditions for experiencing interpersonal flow are affect-based trust such as sharing feelings, cognition-based trust like recognising a colleague’s professionalism, viewing complimentary skills as enabling to face challenges, having shared goals, and recognising how well we are doing (Snow, 2010). Individuals characterise the experience as having their perspective broadened by the
other person, feeling a shared sense of identity, not feeling self-conscious with each
other, not worrying about what outsiders think, having total concentration on the shared
activity, feeling able to respond almost instantly to presenting situations as a pair, time
passing differently than normal, and intrinsic enjoyment. Here descriptions of co-flow
are described as arising from an interaction but keep an element of mentalisation, which
is still relevant to enduring relational depth.

Within transpersonal psychology, linking has been described as a form of
merging between therapist and client, which could be similar to Mearns & Cooper’s
moments of relational depth. Rowan (1998) theorises that linking results from making
contact with the other at the subtle level. That is, one of the levels pertaining to the
transpersonal, which is still accessible to human consciousness. The subtle level is
characterised by intuition, which can be retrieved and expressed through symbols and
imagery and enables an experience of near fusion with another being and a blurring of
personal boundaries. Linking has been compared to transcendental empathy (Hart,
1997), which is seen as having the possibility of taking the persons involved outside of
themselves. This type of empathy is thought to have enough mutuality to facilitate both
the client and the therapist’s growth. Rowan (1998) has argued that ‘linking’,
transcendental empathy and moments of relational depth may represent a single
phenomenon: a moment of deep connection, where one’s ego defences are down and
where ‘we can genuinely let go of our boundaries and be with another person’s soul’

The two dimensions of relational depth find some resonance in pre-existing
concepts but still appear ill defined. Current empirical research has not yet addressed
the two possible dimensions of relational depth; instead it opens explorations on overall
relational depth depicting a unidimensional construct.
2.1.4. The Experience of Relational Depth.

As described relational depth may be a relatively widespread experience in therapy, which exists across modalities. Following the publication of the book *Working at Relational depth in Counselling and Psychotherapy* (Mearns & Cooper, 2005), there has been growing research interest in relational depth. This section grounds the existence of relational depth further with studies, which aimed at uncovering its essence and quality.

2.1.3.1. Therapists and clients’ experiences.

Some of the first research into relational depth involved qualitative inquiry into therapists’ experiences of relational depth. Cooper (2005) explored these experiences in a qualitative study with eight therapists, most of whom were person-centred. In this study, he asked therapists who had experienced relational depth to think and report on events where they thought they had engaged at high levels of relational depth using unstructured interviews lasting forty minutes aiming at uncovering phenomenological content (Kvale, 1996). The definition provided was:

A feeling of profound contact and engagement with an Other, in which one simultaneously experiences extremely high and consistent levels of empathy and acceptance towards that Other, and relates to them in a highly transparent way.

In this relationship, the Other is experienced as acknowledging one’s empathy and acceptance, and is experienced as fully congruent and real (Mearns & Cooper, 2005, p. 36).

Commonalities that emerged in participants’ descriptions were categorised into self-experience, experiencing the client and reciprocity. Self-experiences included heightened feelings of empathy and acceptance, which had a holistic emphasis and included the clients’ past, present and different ‘configurations of self’ (Mearns & Thorne, 2000). For some participants the empathy was ‘embodied’ (Cooper, 2001). Participants also reported more congruence such as bringing more of themselves, being
spontaneous, willing to take risks. Another common self-experience was feeling ‘impacted, ‘touched’ or ‘moved’ by the client. Therapists also reported powerful feelings of immersion in the work associated with altered states of consciousness, such as changes in perceptions of time, or feeling lighter. There was also a greater perceptual clarity, aliveness and satisfaction. In those moments, therapists experienced clients as open and transparent. They reported elements of bi-directionality, including a knowing of the other knowing, ‘mutuality’ and ‘symmetry’. Cooper (2005) concluded that relational depth may be conceptualised as a form of ‘co-presence’ as formulated by Geller and Greenberg (2002), or formulated as a co-experiencing of the facilitative conditions. The study’s limitations included the possible demand characteristic as most therapists in the study were from a person-centred orientation. This study opened many questions on the mysterious construct, including around its existence in other forms of therapy, and whether clients’ experiences were different.

Clients’ experiences of relational depth were then explored in a study by McMillian and McLeod (2006), who focused on what they termed ‘deeply facilitative’ relationships. As opposed to Cooper (2005) they chose to conduct interviews without providing a definition of relational depth to avoid imposing assumptions about what relational depth may be, and encouraged participants to describe the therapeutic relationship in general while prompting further if relational depth events arose. Participants were ten counsellors (four men and six women) who had undergone at least two courses of therapy, most were humanistic in orientation, one was psychodynamic and they were from a similar white British cultural background. Probe questions were around self-experiences in the relationship, the quality of awareness of the relationship, reflections on the ambient energy, or around shifts in consciousness and the sense of connection. Researchers used a grounded theory analysis (Strauss & Corbin, 1990). Seven out of ten participants identified a deeply facilitative relationship. They found a theme of ‘letting go’ involving a client’s readiness to make a contact at depth. The
therapist was experienced as human and willing to meet the client’s needs. Overall
findings were mostly confirmatory of previous explorations of relational depth. All
informants characterized deep connected moments as marked by altered sense of time,
exploratory immersion into their issue, some awareness of communicating at a different
level and a shift in the experience of personal boundaries. They found the experience
difficult to put in words. Participants also reported a lasting sense of their therapist’s
presence. The authors add that accounts of moments as described by Mearns and
Cooper (2005) were rare. The study also brought new speculation on relational depth
around the possible negative effects of ‘over-involvement’. Additionally, clients’
accounts differed from moments of closeness accounted by therapists in that it tuned
down the aspect of ‘mutuality’ due to more focus on the self. Limitations of this study
include a small homogenous sample which may lead to less diverse reports of
experiences. Also they only used clients who were also practitioners who may have
been motivated to overstate the quality of depth of the relationship in which they were
engaged. The authors consider that the study provides a heuristic exploration of clients’
experiences of relational depth.

Following this, Knox (2008) conducted another study of client’s experiences of
relational depth in specific moments of deep connection. In this study, there were five
men and nine women, from different cultural backgrounds, all were therapists or
trainees who had been clients of person-centred counselling. Here participants were
given an abbreviated definition of Mearns and Cooper’s (2005, p.xii). She used the
same sub-domains as in Cooper’s study (2005) and experiences were similar to those of
therapists’ with feelings of acceptance, aliveness and openness, feeling real, and
allowing oneself to be vulnerable. Clients also described a bi-directional peak
experience with heightened awareness and feelings of vibrancy. As opposed to
therapists’ experiences, clients experienced therapists as providing a strong foot hold
and going beyond their professional role. Knox adds that these moments of relational
depth appeared to have positive effects on the outcome of therapy as well as the therapeutic relationship. As opposed to McMillian and McLeod’s exploration (2006) participants did not report any negative effects apart from a sense of confusion in two of them. Overall, relational depth experiences were similar in clients and therapists with some differences associated with their role in the relationship. Reports on these experiences appeared associated with psychological growth.

These studies offer an account of the existence of relational depth in clients and therapists. They were limited to small homogenous samples and clients’ experiences have only been explored in therapist populations, which offered little generalizability but useful insights and theoretical grounds around the quality and essence of relational depth. Moreover, clients and therapists have for most parts stated or suggested that relational depth experiences have promoted growth (McMillian & McLeod, 2006), positively affected their relationships and contributed to progress in therapy (Knox, 2008). Thus, it became interesting to study the factors contributing to experiences of relational depth.

2.1.3.2. Factors contributing to the experience of relational depth.

Following the associations of relational depth with psychological growth, there was interest in factors contributing to experiences of relational depth. Knox and Cooper (2010) investigated clients’ descriptions of relationship and therapists’ qualities associated with relational depth. They conducted semi-structured interviews with fourteen participants who were therapists or trainee therapists drawing from experiences as clients. Participants were of various ages and cultural backgrounds, five were men and nine were women, and most had been in person-centred counselling. The same shortened definition as in Knox’s (2008) study was used as a starting point to engage in phenomenological reports of experience. The data was categorized into relational depth experiences, and quality of relationship in general. The analysis involved looking at specific relationship characteristics associated with the presence or absence of relational
depth. Commonalities perceived in a moment of relational depth included openness, trustworthiness and understanding, and as reported in McMillian and McLeod (2006) therapists were described as real and fulfilling more than a professional role. However findings differed from that study in that they found elements of mutuality expressed as an absence of power differential. In this study, no participants described becoming ‘over-involved’. The commonalities emerging in the absence of relational depth included a controlling therapist, distance, absence of warmth or empathy, use of power, and lack of personal contact, leading to experiences of being objectified. One of the most significant factors influencing relational depth was genuineness of the therapist in their interest for the client. Limitations included all clients being also therapists and experiences being embedded in a person-centred discourse.

Knox and Cooper (2011) explored client experiences around the role they played during events of relational depth using the same method as Knox and Cooper (2010) with a grounded theory analysis. They organized the data in two domains: the clients’ historical process and the clients’ in-session processing. Results were consistent with McMillian and McLeod (2006) and highlighted clients’ awareness of their desire or readiness to bring the relationship to another level and open to the therapist. There was again a description of flow ‘like a stream or a river, with the sense of passing the point of no return’. Participants felt that they had some control over allowing a moment of relational depth. When at heightened moments of relational depth, participants reported becoming aware of their vulnerability and willingness to be vulnerable. Knox reflects that at this stage clients may allow vulnerability for they perceive a complete lack of threat due to the therapist offering high degrees of the core conditions. Knox (2011) also reported a theme of clients sensing an invitation from their therapists to relate more closely. Factors inhibiting relational depth were a therapist experienced as distant, too different or perceived as unprofessional and in some instances as misusing power.

Following this finding, Tangen and Cashwell (2016) took further interest in
counsellor factors that were inviting and facilitative of relational depth in an empirical study using partial concept mapping (Trochim, 1989). This involved providing participants with a voice throughout the process and quantitatively substantiate their conceptualisations with multivariate analyses. Results corroborated previous conceptualisations of therapists’ factors contributing to relational depth, but highlighted concrete skills. They found that relationships outside are essential in cultivating the ability to relate at depth. Participants also argued that relational depth is trainable though some capacity or desire for it is needed, which is probably based on earlier relationships. Finally, the study emphasized that relational depth is grounded in structure and specific counselling techniques as opposed to previous emphases on its numinous and elusive quality. From their finding, they theorised that relational depth occurs across Rowan’s instrumental, authentic and transpersonal uses of self as opposed to only the transpersonal as suggested by Rowan and Jacobs (2002). Researchers’ findings are limited in part because they used a homogeneous sample consisting of white heterosexual females located in one area. Also they asked participants how the clusters represented the three positions, which may have influenced responses into forming a connection that may not exist.

Another factor contributing to experiences of relational depth was uncovered by Baker in 2016 in a study exploring the impact of mindfulness on trainee therapist’s experience of relational depth. Fifteen participants (5 males and 10 females) completed an eight-week mindfulness training aimed at reducing stress (MBSR, Kabat-Zinn, 2003). Fourteen participants attended focus groups on training completion and eight took part in individual semi-structured interviews consistent with Interpretative Phenomenological Analysis methods four months later. Themes that emerged reflecting experiences following the mindfulness training included therapists’ increased capacity of ‘being with’ as opposed to ‘doing to’, such as being present, letting go of agendas, theory or techniques. This factor led to an experience of flow associated with a deep
connection or moment of meeting. Another theme was ‘modelling mindful qualities’ into the relationship with the client in a way which enhanced relational depth. Researchers also identified ‘a deeper connection and moments of meeting’ as the majority of participants reported that they felt mindfulness enhanced their capacity for mutual attunement or connection. The author concluded that mindfulness offered increased self-acceptance and presence, which could be modelled by the client and would enhance relational depth. The study is limited in that results cannot be guaranteed to be a contribution of the mindfulness training. Researchers found that some participants referred to their psychotherapy training as opposed to the mindfulness training. Another limitation of this study includes self-selection bias with participants already holding positive attitudes to mindfulness. As opposed to Knox’s studies, the sample here was heterogeneous and the study is grounded in a Cognitive-Behaviour tradition.

2.1.3.3. Other experiences: New Perspectives and Developments.

Knox, Murphy, Wiggins and Cooper (2012) edited a book: Relational Depth New Perspectives and Developments, grouping various of the current findings on relational depth, including findings from the published studies mentioned before, some unpublished studies done by students, as well as different authors’ theories around experiences of relational depth in their specialist populations. Authors’ accounts included experiences of relational depth with children and young people where the event is described as having the potential to be transformative (Hawkins, 2012). Murphy and Joseph (2012) proposed that relational depth could be helpful in facilitating post-traumatic growth, offering a person-centred understanding of working with trauma. Other authors addressed the limitations in accessing such experiences when confronted with cultural diversity, which could lead to obstacles such as projections, moral judgment, or different communication styles (Lago & Christodoulidi, 2012). They added that special attention could be given to factors such as mutual effort to limit the
gap, being non-directive and accepting, deep listening and empathic attunement. Wyatt (2012) contributed with the proposition that relational depth on a larger scale is necessary to a new understanding of relationships based on mutual empathy in the face of the current world challenges. Authors also formed ideas and linked relational depth to current research such as the dialogue in person-centred therapy (Schmid, 2012), mutuality in the relationship (Murphy, 2012) and therapeutic presence (Geller, 2012). Overall, this book summarises the various links that exist with relational depth, the potential applications for it and also its potential impact on future research and practice.

2.1.4. Summary.

Relational depth is a component of the therapeutic relationship, and may be an intrinsic aspect of the Rogerian relationship. In addition, related concepts across modalities potentially suggest that it may be a trans-modal construct involving mutuality, presence and a mystical dimension. Relational depth is in part reflected as having two possible dimensions: Enduring relational depth and moments of relational depth. However, most research on relational depth has focused on a single experience of relational depth in therapists and clients and the factors contributing to it. The construct has known various developments including evidence that it may be associated to psychological growth.

2.2. Why Might it Be Important to Measure?

Measurement in psychotherapy allows for the assessment of process and outcome in the view of improving therapy services. Psychological treatment is continually being researched in terms of its effectiveness. The early part of this century was marked by the development of a broad measure of distress that could be used as an outcome measure for the effectiveness of treatment (CORE-OM, Evans, Connell,
Barkham, Margison, Mellor-Clark, & Audin, 2002). The speculation that outcome was independent of the type of treatment had emerged in an influential paper where Saul Rosenzweig (1936) referred to Lewis Carroll’s Alice’s adventures in Wonderland and called it the ‘Dodo bird verdict’ (p.34). Since then, research has found growing acceptance for a theory of ‘common factors’ contributing to outcome independently of therapeutic orientation (Stiles, Barkham, Mellor-Clark, and Connell, 2007; Norcross and Goldfried, 1992) where the therapeutic relationship figures and contributes a significant part to therapy outcome (Norcross, 2011). The therapeutic relationship including notably the Rogerian relationship and the working alliance, is considered a therapeutic factor strongly associated with positive outcome (Norcross & Wampold, 2011; Krupnick, Sotsky, Simmens, Moyer, Elkin, & Watkins, 1996; Horvath & Bedi, 2002). Research has also shown association of mutuality of the core conditions and outcome (Murphy, 2010), and presence of relational depth and outcome (Wiggins, 2011). This suggests that measuring relational depth could be useful in the view of conducting further outcome studies and improve therapy services.

2.2.1. The Working Alliance and Outcome.

One of the most widely used instruments as a measure of the therapeutic relationship is the Working Alliance Inventory (Norcross & Wampold, 2011; Horvath & Bedi, 2002; Norcross, 2010), which led to further acknowledgement of the alliance being a predictor of outcome; it brought a more valid conceptualisation of the therapeutic relationship as a common factor and confirmatory evidence to the ‘Dodo bird verdict’ (Weston, 2011). The WAI was developed and validated by Horvath and Greenberg in 1989. It is constituted of three subscales: tasks, goals and bonds that conceptualise the therapeutic alliance. Goals refer to the level of agreement around aims in therapy; Task refers to the level of agreement around how goals can be achieved. Bond refers to the emotional connection including levels of respect, attunement and
mutual liking between participants. The wealth of research between the WAI and outcome rising since the 1990’s, led recent research to focus on meta-analyses. The association of alliance and positive outcome is independent of the person rating the alliance (clients, therapists or observers), with the client’s rating predicting outcome better that the therapist’s. Additionally, the time course of therapy does not predict outcome, which confirms the predictive success of the working alliance (Luborsky, 1994; Martin, Garske, and Davis 2000; Horvath & Bedi, 2002). Findings were reiterated by Norcross and Lambert (2010): Therapy is effective irrespective of the type of therapy and the therapeutic relationship contributes consistently to therapy outcome and client success in all types of therapy that have been studied, including humanistic, cognitive, psychodynamic, behavioural and systemic therapy. Most recently, Horvath, Del Re, Fluckiger, and Symonds (2011) synthesized 200 studies based on independent data sources and found a correlation between alliance and outcome of .275. Overall from this collection of analyses, we can affirm that the working alliance as measured by the WAI is an important factor in effective therapy and contributes moderately to therapy outcome.

2.2.2. The Rogerian Relationship and Outcome.

The Rogerian relationship has been measured with different instruments. One prominent instrument is the Barrett-Lennard Relationship Inventory (1962) assessing the presence of the core conditions. While there is little theoretical consensus around the extent to which the alliance and Rogerian relationship overlap, various studies have looked and found support for association of the core conditions of positive regard, empathy and congruence with outcome (Norcross, 2011; Farber and Lane, in Norcross, 2011; Bohart, Elliott, Greenberg and Watson, 2002; Klein, Kolden, Michels and Chisholm-Stockard, 2002).
2.2.2.1. The Barrett-Lennard Relationship Inventory and outcome.


Zuroff and Blatt (2006) used data from randomised control trials of psychotherapy for depression (Elkin et al., 1989) for a process outcome study looking at the BLRI and comparing effects of interpersonal therapy, cognitive-behaviour therapy, pharmacotherapy and placebo with clinical management and found that an early positive therapeutic relationship was directly associated with positive outcome independently of the type of therapy. There were 250 clients who suffered from depression. They found using multilevel modelling that high scores on the BLRI led to a faster decrease in maladjustment during treatment and at follow up 18 months after. They concluded that a positive therapeutic relationship predicted decrease in maladjustment and greater improvement after therapy supporting the long-term positive effects of the Rogerian relationship.

2.2.2.2. The core conditions and outcome.

Rogers (1959) described empathy as a state where the therapist accurately perceives the internal frame of reference of the client ‘as if’ they were one’s own (p. 210-211). Bohart, Elliott, Greenberg & Watson (2011) collected data from 59 samples of 3599 clients including 190 different tests for the association of empathy and outcome. They found an effect size of .31, accounting for 9% of the variance, which would be more than the contribution of the working alliance to therapy outcome. The tools included measures by clients, therapists and observers, where client and observer’s perceptions of empathy in the therapist predicted outcome better. One limitation related
to these findings is that most data originates from correlation studies, and therefore researchers cannot infer causation. However, several studies used structural equation modelling to establish causality. For instance, Burns and Nolen-Hoeksema (1992) looked at the effect of therapeutic empathy on recovery for depressed patients and concluded a direct effect with $r = .26$. Overall, empathy shows a strong association with therapeutic outcome, which may be stronger than the one of the working alliance. There is less established evidence that therapeutic empathy causes recovery. Yet the relational variable has received enough supportive evidence and been classified as an ‘empirically supported relationship variable’ (Norcross, 2011).

Unconditional positive regard first known as acceptance (Rogers, 1959) and also called positive regard, positive affirmation, warmth, or non-possessive warmth has been reviewed in relation to outcome and also shows relative association. There is ample evidence of a modest effect of positive regard on outcome (Farber & Lane, 2002), with studies showing varying support. The effect was stronger when considering clients’ ratings of positive regard (Orlinsky, Grawe and Parks, 1994). A more recent meta-analysis conducted by Farber and Doolin (2011) concluded a moderate association of positive regard and outcome. Inclusion criteria were studies that identified positive regard and its related terms, and populations of adults and adolescents. They found 18 studies and the overall effect size was .27 showing a moderate association. Evidence shows mixed results for the association of outcome and positive regard, with a possible moderate association, and a need for further research.

Rogers (1967) viewed congruence as the most basic of the conditions and assumed it was part of the encounter, and therefore did not provide many examples of what he viewed congruence to be. This makes it an elusive condition that may be represented as personal characteristics of an individual or as moment-to-moment states of experiencing. Also it can be an observed behaviour or a phenomenological experience. Research points towards congruence being a fluid experiential state, which
may be dependent on the interaction with another person (Behr, 2009; Greenberg & Geller, 2001; Cooper, 2005; Grafanaki & McLeod, 2002). Gendlin (1962) also added that congruence cannot be separated from incongruence, and exists only in relation to another person. Recently, Kolden, Klein, Wang and Austin (2011) investigated congruence and genuineness and conducted a meta-analysis using 16 studies. They only included quantitative results as they were looking at effect sizes, finding a range of -.26 to .69. Additionally, a few studies reported on moment-to-moment experiential congruence. Two studies investigating experiential congruence revealed that levels of congruence did not impact on alliance (Fitzpatrick, Iwakabe, & Stalikas, 2005) or outcome (Swift & Callahan, 2009). However, in a study looking at moment-to-moment experiential congruence Kivlighan and Arthur (2000) found that the degree to which client and therapist agree on their experience of the session is significantly associated to outcome. Evidence shows some support for the association of congruence and outcome. It seems that the various definitions of congruence make it an elusive condition, yielding mixed results.

Overall there seems to be moderate support for associations of the therapeutic conditions and Rogerian relationship with outcome. While empathy appears to be a stronger predictor of outcome and shares most variance with the WAI, positive regard and congruence have different conceptualisations, which may make them more difficult to assess. Nevertheless, there is evidence suggesting that characteristics of the Rogerian relationship are associated with outcome, thus emphasising the potential use of measuring relational depth.

2.2.3. Mutuality and Outcome.

Mutuality is a broad construct that has had various conceptualisations. For instance involving both an ethical way of being in the therapeutic relationship and the behaviour resulting from it (Proctor, 2010; Aron, 2013). Mutuality could also be seen as
individuals sharing personal attributes. Recently, it has been described as high levels of mutual genuineness, or as the reciprocity of the core conditions and has been associated to positive outcome (Murphy, 2012).

Murphy and Cramer (2014) studied mutuality as a construct in the therapeutic relationship, specifically the mutual experience of the facilitative conditions in regard to therapy outcome. In this research they used the CORE outcome measure and the BLRI at session one and session three in samples of 12 therapists and 62 clients. They found that client’s rating of the relationship was the best predictor of outcome. They also found a significant interaction between client and therapist’s view of the therapeutic relationship. Furthermore, the association of the client’s rating of the relationship with outcome was stronger when the positive ratings by the therapist were similar, in other words when the therapeutic conditions were mutually perceived. Authors concluded that mutually perceived high levels of the relationship conditions are associated with better outcome. This study has implications in that it emphasises the importance of the client as an agent in the therapeutic relationship and the bi-directionality of the core conditions as a factor of outcome.

This association of mutuality with outcome has brought support for a ‘mutuality hypothesis’ (Murphy, Cramer, & Joseph, 2012) and suggests that research into reciprocal aspects of the quality of the therapeutic relationship constitute areas of development for psychotherapy research and practice.

2.2.4. Relational Depth Presence and Outcome.

Additional evidence suggesting it may be important to measure relational depth comes from a first study investigating the relationship of relational depth presence and outcome (Wiggins, unpublished doctoral thesis, 2011). The sample consisted of 42 clients recruited from the Strathclyde Research Clinic: 15 were males and 24 were females, three did not indicate gender. 36% of the clients suffered from social anxiety
and 64% did not have a clinical diagnosis. They were in person-centred therapy or emotion-focused therapy for an average of 28 sessions ranging from three to 67. The researchers assessed outcome with three measures, completed throughout therapy approximately every ten sessions: The CORE-OM, the Strathclyde inventory assessing the fully functioning person (Freire & Cooper, 2007), and the personal questionnaire where the participant is interviewed and creates their own items (e.g. Elliott, Shapiro and Mack, 1999; Wagner and Elliott, 2001). Results showed general clinical improvement post therapy. They used Pearson correlations to look at significant relationships between outcome and the criterion variables WAI-SR and RDI, and found that RDI correlated significantly with all three outcome measures post-therapy while WAI-SR did not. Multiple regression analyses were used confirming that RDI accounted for a significant portion of the variance (13.8%) in therapy outcome on the three measures when controlling for pre-therapy and WAI-SR. The WAI-SR when controlling for pre-therapy and RDI, only accounted for 2% of the variance in therapy outcome. In this study, neither WAI-SR or RDI had impacts on outcome in the Social anxiety client sample.

The researcher posits that one of the reasons the WAI-SR scores were not influential in outcome could be that the measures were completed at a different time and place. While the RDI and outcome measures were completed at the clients’ home, the WAI-SR was completed at the research clinic. Another likely reason is that WAI-SR and outcome were measured at the same stage of therapy, which has previously shown a weak association (Horvath, 1994). The timing of completion is therefore a major limitation in the study. In terms of the RDI, participants were asked about an event that had happened in the past, and could therefore be completed at the same time as outcome measures. Overall the study opens questions and may need to be replicated to account for the timing of administration. Despite these limitations, the study suggests that presence of relational depth in a single significant event in therapy is associated with
positive outcome beyond working alliance. This study suggests relational depth could be an important factor in therapy for which more research is needed.

### 2.2.5. Summary.

There is vast empirical evidence showing association between the therapeutic relationship and outcome, with strong support for the working alliance but also for the Rogerian facilitative conditions. Congruence and mutuality have also been associated with positive outcome and require more research for these more elusive constructs appear to hold some answers in terms of process and outcome in therapy. Finally, a first study has shown association between relational depth presence in a significant event and outcome. This association went beyond the association of working alliance and outcome. This could have important implications for practice and calls for replication.

### 2.3. How Has Relational Depth Been Measured Before?

To this day, there have already been attempts at measuring relational depth. Related studies have looked at assessing the synchrony of in-session moments of connectedness, which may represent relational depth (Cooper, 2012). One instrument was created to measure the closely related construct of therapeutic presence (Geller, Greenberg, Watson, 2010). In addition, two instruments of relational depth presence, the relational depth content analysis and the RDI were created and used in prevalence and outcome studies (Wiggins, Eliott, & Cooper, 2012). However, none of these measures looked at the frequency of relational depth over the course of therapy. While there has been prior interest in the frequency of relational depth in therapy as raised in several studies, the question was only tentatively answered using single survey items
Thus it seems a measure of relational depth frequency is still missing and would be useful in the current context.

2.3.1. Measuring Related Constructs: Connection and Presence.

2.3.1.1 Measuring in-session connection.

Cooper (2012) provided a first study looking at the synchrony of subjectively felt experience of connection between therapist and client in an experimental setting. Participants were 80 pairs of therapists and trainee therapists some of whom took the role of ‘clients’, they role-played a dummy therapy session for twenty minutes. The aims were to identify intra-sessional level of connection as rated by the participants in real time, and the degree of consensus in rating. Another aim was to identify factors predicting these ratings. Participants were provided with a grid in which they rated at every minute how deeply connected they felt on a scale ranging from (0) not at all connected and (10) deeply connected. The therapists were asked to respond as they normally would while the ‘clients’ spoke of anything of concern. Levels of connection increased throughout the session and was mostly synchronous with a correlation of .67. This analogue study provided with an intra-sessional measure of relational depth assessing its synchrony. Cooper also found that warmth and agreeableness were predictors of connection, whilst an anxious therapist was an inhibitor of connection. Due to the artificial setting, including the short session and the lack of a therapeutic relationship, it is likely that the study measured moments of connection rather than actual moments of relational depth. Also it is possible that trainee therapists are more likely to tune in or experience events differently than clients in a natural setting. Despite this, the study shows that participants ratings of connection is highly correlated and suggests that events of connection perhaps like relational depth are likely to be experienced synchronously some of the time.
2.3.1.2. The Therapeutic Presence Inventory.

In 2010, Geller, Greenberg and Watson developed a scale of in-session therapeutic presence based on a model of therapeutic presence as the foundation for the core conditions. Items were formulated from qualitative interviews to capture the components of the process and experience of presence. The measure has 21 items and rated on a 7-point Likert scale ranging from ‘not at all’ to ‘completely’. They were able to find good reliability for both the client (Cronbach’s alpha = .82) and the therapist versions (Cronbach’s alpha = .94). Construct validity was established through the process of item refinement, i.e. ratings of 32 items by 9 experts. Convergent validity was assessed through the relationship of the TPI and the BLRI. Additionally they found that both versions were unidimensional. In their study, Geller, Greenberg and Watson also found that therapist presence is related to their perception of the therapeutic relationship and that client’s rating of therapist presence is linked to outcome and a positive alliance. Furthermore, they found no significant association of therapist ratings of their in-session presence with the session outcome as rated by the Client Task Specific Measure, a validated measure of client in session change (Watson, Schein, & McMullen, 2010), or working alliance as measured by the WAI. They thought a possible reason may be that presence is not necessarily communicated or expressed or that while the therapist’s presence is theorized to lead to the client’s presence, the client may need to be receptive to this state. The authors encourage further research on client factors that can enable receptivity to presence. Overall, there appear to be similarities with relational depth, only the scale does not assess mutuality in the relationship, and may be emphasising an internal experience of presence rather than a relational construct. Also this measure does not assess the frequency of presence over therapy, but in a single session.
2.3.2. Measuring Relational Depth Presence.

Wiggins and colleagues (2007, 2011a, 2011b, 2012) developed two related measures of relational depth from Knox’s (2008) grounded theory data. The Relational Depth Inventory is a first validated measure of relational depth, and is used to rate intensity of relational depth presence in a single event. The other measure was concerned with dividing events into relational depth events and non-relational depth events as rated by experts following a set of instructions.

2.3.2.1. Relational depth content analysis.

Wiggins, Elliott and Cooper (2012) looked at dichotomising relational depth events from non-relational depth events. For this purpose, they assigned pairs of experts, who were researchers as well as therapists and trained with manualised instructions and discussions of relational depth to rate descriptions of significant events. This measure was designed to clarify what relational depth events are. Raters scored the events from zero to three depending on how they deemed relational depth to be present with 0: ‘clearly not present’; 1: ‘probably not present’; 2: ‘probably present’; 3: ‘clearly or strongly present’. Significant events were dichotomized at a mean rating of 1.5. They found that 182 events were relational depth events, 116 were non-Relational depth events, and 23 resulted with a mean rating of 1.5.

2.3.2.2. The Relational Depth Inventory.

The first version of the RDI had 64 items and was tested with 152 clients and 189 therapists. Items were rated by three judges for their suitability in terms of representativeness of Mearns and Cooper’s (2005) definition. Wiggins established a correlation ranging from -.37 to .47 between ratings of relational depth presence and RDI items. Items with a rating of .30 or more were then included in the final version of the scale (Wiggins, Elliott & Cooper, 2012). The current RDI, the RDI-C consists of 24 items used to rate the presence of relational depth on a single significant event in therapy. Items include for instance: ‘I felt I was going beyond my ordinary limits’, ‘I
felt more alive’. The scale has a five-point Likert scale ranging from ‘not at all’ to ‘completely’.

The measure was tested for reliability and validity. They found a correlation of .34 between RDI-C and WAI-SR indicating different but related constructs showing convergent validity. Moreover, RDI-C scores predicted therapeutic outcome, which supported concurrent validity. They found a Cronbach’s alpha of .93 showing high internal consistency. They established construct validity in the refining of items. The scale had a two-factor structure as established through exploratory factor analysis: ‘genuineness/availability of therapist’ and ‘transcendence’ both accounting for 47% of the variance.

A specificity of this measure is that its aims were to assess relational depth in a single event that the client estimated helpful or significant in therapy. It could be a limitation when used in outcome studies, as it does not measure relational depth in the overall therapy. As significant moments are identified randomly, an intense moment of relational depth could be identified and potentially be the only relational depth moment in therapy. The opposite could also occur where a significant event with no relational depth is identified but there may have been other moments of relational depth over the course of therapy. Furthermore, the factor analysis suggests that contrary to what Mearns and Cooper’s (2005) definition intended, the RDI does not measure a single and unidimensional construct. Also, some of the items do not appear directly related to relational depth but instead seem to offer a wide range of descriptions, which reflect characteristics from mundane to out-of-ordinary (i.e. ‘I felt my therapist respected me’ and ‘I felt as if time had stopped’), and would be unlikely to reflect a single construct.

Another limitation of the RDI is a lack of testing for divergent validity.

2.3.2.3. Findings from assessment with these measures.

The two measures were used in a large-scale prevalence study where Wiggins, Elliot and Cooper (2012) established connections between presence of relational depth
and other variables. There were 80 males and 257 females taking part in the study, 189 entered the study as therapists and 152 as clients. The study showed that presence of relational depth had a medium correlation with WAI scores \( r = .33 \) indicating conceptual overlap or alternatively that relational depth is more likely to be present when there is a strong therapeutic alliance. They found no significant difference for clients and therapists’ prevalence of relational depth in significant events, but found that they experienced it differently as rated by the different items and consistent with previous studies (McMillian & McLeod, 2006; Cooper, 2005; Knox, 2008). The prevalence of relational depth events was calculated by estimating the level of relational depth in significant events, and by looking at the proportion of participants showing a threshold of relational depth in significant events. They found that 38% of therapists experienced relational depth in significant events. They found this was the case for 34% of clients. One limitation of this study is that client participants were likely to have been therapists participating as clients. Furthermore, it is likely that there was a response bias where participants who already valued the therapeutic relationship took part in the study thus influencing the prevalence numbers.

### 2.3.3. The Frequency of Relational Depth.

Assessing the frequency of relational depth moments over therapy is likely to be the most suitable method to uncover associations with outcome. As seen previously, subjective accounts by clients and therapists characterize relational depth moments as rare (McMillian and McLeod, 2006). Leung (unpublished, 2008) provided a quantitative account investigating clients’ and therapists’ experiences of moments of relational depth using an online survey. He developed an online questionnaire that included Mearns and Cooper’s (2005) definition of relational depth, and enquired about individuals’ experience of relational depth, the frequency of relational depth and the perceived experience on outcome and personal change. There were 259 responses with 168
participants, 140 were therapists and 28 were clients. 72 therapists also completed as clients, and 19 respondents completed a second time drawing on another experience of therapy. Leung found that in 88% of the responses, participants had experienced relational depth. In this study, the average perception of the contribution to outcome was 5.73 (on a scale from 1 to 7) and did not differ in terms of client and therapist respondents. The enduring effect was even higher with a mean of 5.87. Therapists reported relational depth more often than clients but it could be due to being more acquainted to the experience. Females were more likely than male to report it. Leung also took an interest in the frequency of relational depth for which he established estimates based on subjective reports of therapists and clients. Therapists experienced relational depth with a frequency of 4.06 on 7-point scale (1 = not at all, 7 = all the time); clients who had experienced relational depth rated an average frequency of 3.87. The study had several limitations, firstly we can assume that individuals who chose to retake the questionnaire were more likely to retake it because of a personal interest and were more likely to have experienced relational depth, thus skewing responses. Furthermore, the responses were based on single survey items rather than reliable and valid measures. Overall, despite an existing interest in research involving the frequency of relational depth, there is no validated instrument to measure the frequency of relational depth in therapy.

2.4. Chapter Summary

Relational depth is an aspect of the Rogerian relationship involving high levels of an integration of the six conditions in moments where these are mutually experienced and reciprocated. Such moments are characterised by deep mutuality and intimacy (e.g. Mearns & Cooper, 2005), and point at higher levels of relational quality (Wiggins et al., 2012). Additionally, it is an experience that has been seen across modalities and under
various labels, and as well as mutuality involves presence, and a mystical dimension. Recent research on relational depth offers qualitative accounts of this experience in clients and therapists and accounts of psychological growth, including enduring positive effects like being more connected to one’s self, and improved relationship with others (Cooper, 2005; McMillian & McLeod, 2006; Knox, 2008). As a result there has been growing interest in factors that contribute to relational depth, but also of the quality of the experience in various population groups (Knox, Murphy, Wiggins, Cooper, 2012).

Relational depth is important to measure for it is an aspect of the therapeutic relationship. The therapeutic relationship conceptualised and measured with different instruments (Bordin, 1979; BLRI; Barrett-Lennard, 1986; WAI; Horvath & Greenberg, 1986) is considered one of the major therapeutic factors in psychotherapy and is widely associated with positive outcome (Norcross & Wampold, 2011). The mutuality of the core conditions in the relationship have been associated with positive outcome (Murphy, 2010). In addition a measure of relational depth presence has shown association with therapy outcome beyond working alliance (Wiggins, 2011). Overall, it seems relational depth is likely to be associated to outcome, thus measuring it would be significant in terms of further research and implications for practice.

To this day, there have been attempts to assess relational depth. There have been instruments developed that measure related constructs such as therapeutic presence (Geller, Greenberg & Watson, 2010) or the synchrony of moments of connection (Cooper, 2012). The Relational Depth Inventory is an instrument developed to assess presence of relational depth in a significant moment. The instrument has limitations, one of them is that it cannot assess relational depth in the therapeutic relationship as its assessment is confined to a single and random significant event in the overall therapy. There has also been prior research interest in assessing the frequency of relational depth in therapy (Leung, 2008). In this online study, assessments were based on a single survey item. Thus it seems a reliable and valid instrument to measure the frequency of
The aims of the proposed program of research are:

i. To develop a measure of relational depth: the Relational Depth Frequency Scale.

ii. To validate the Relational Depth Frequency Scale.

iii. To explore the associations between relational depth frequency and socio-demographic variables.
Chapter 3:

Methods

Ethical approval

The research project was submitted for ethics consideration under the reference PSYC 15/164 in the Department of Psychology and was approved under the procedures of the University of Roehampton’s Ethics Committee on 20.05.15 (Appendix B).

3.1. Epistemology

The current project derives information from multiple sources. While the main methods are grounded in empirical positivism, there is an acknowledgment that relational depth is more than what is being measured and thus the methods used are only indicative of a possible estimation of relational depth as a ‘real’ phenomenon. The epistemology underpinning this project is based on critical realist and critical pragmatist stances where the researcher tries to remain open to arising possibilities and does not attempt to make truth claims about ‘reality’, but only offers a tentative representation and assessment of a construct, which has the potential to be useful in the current context. This critical stance emphasises the importance of acknowledging the difference between ontology as the essence or nature of reality (Hudson & Ozanne, 1988) and epistemology as the way we acquire knowledge about reality (Carson, Flores & Meade, 2001) in studying the construct of relational depth.
3.1.1. Interpretivism and Positivism.

Until recent days, the unobservable and subjective experience of relational depth had been approached mainly from an interpretivist stance (Cooper, 2005; Knox, 2008). Interpretivism implies that standards of rational belief are those of the individual believer or the believer's community, making reality relative and multiple (Hudson & Ozanne, 1988). In this regard, realities cannot be interpreted with set structures but are dependent on individual meaning (Schwandt, 1994). Ontologically, relational depth is an event or experience that can be understood as co-created between two individuals and does not exist independently of the two subjective beings having this experience. In this sense it fits the interpretivist stance in that it is a unique meaning or interpretation of human experience. However, from an epistemological stance, positivist methods can in part be useful to acquire knowledge on relational depth as a real phenomenon.

Aspects of a positivist philosophy have been partly helpful and partly maladaptive in acquiring knowledge on relational depth. Positivism implies that there is an objective truth that can be uncovered through the scientific method. It can be understood as the merging of empiricism or gaining knowledge through observations, with a version of rationalism as symbolic logic (Tuli, 2011). In the 19th century, August Comte established sociology as the scientific study of society and advanced positivism as an epistemology for the social sciences. In psychology, it can be seen as the view that anything that exists is measurable through the scientific method, and knowing what exists involves knowing its quantity (Thorndike, 1918). Rather than interpreting human meaning, its aim is to discover facts about a reality separate from us. The naturalist view is one of its tenets posing that there is no difference between the natural and social sciences. Empiricism posits that we can know the world through what we observe and that knowledge originates in the sensory experience and social phenomena can be predicted by means of laws. The purpose of science is to discover these laws. Positivist methods are useful in that they serve to approximate a unified system of truth based on
human experience using experiments and quantitative methods. Additionally, one implication of positivism is that measuring the world through the scientific method enables us to make predictions and to some extent have control over it (Trochim & Donnelly 2001). Overall it seems that while useful, a positivist epistemology may be problematic when addressing the complexity of a social phenomenon such as relational depth (Krauss, 2005). While this research projects relies primarily on quantitative methods, it remains limited in terms of positivist claims.

3.1.2. Critical Realism.

Realism is a facet of the positivist philosophy advancing that there is a physical world that truly exists, and is separate from, but is accurately represented in our perceptions of it (Boyd, 1983). Critical realism, as part of the post-positivist movement, recognises the aim of science to be accuracy and prioritises the real world over any other system of practice. However it also recognises that this may not be perfectly achieved (Steinmetz, 1998). Additionally it offers a critique of both positivism and interpretivism as guilty of an epistemic fallacy, which is the reduction of beings to our knowledge of beings (Bhaskhar, 1997). In this sense a critical realist philosophy provides a possible foundation for the study of relational depth in this project.

Roy Bhaskhar developed the critical realist philosophy in the 20th century. Along with positivism, critical realism acknowledges the existence of a reality that exists independently of human concepts and beliefs. Yet, this reality also consists of unobservable events, which cause the observable ones. Thus critical realism is suited to understanding the social context in that it points towards understanding its underlying structures. It also helps distinguish what causes events from events themselves. Critical realism theory is divided in three domains: the empirical is about experiences being observable. The actual is about events and their underlying mechanisms. The real is concerned with the mechanisms that have generated the events (Morton, 2006). The
theory developed with a ‘spiritual turn’ in Bhaskar’s publications ‘From East to West’ (2000) and ‘Reflection on meta-reality’ (2002) which established a third phase of critical realist philosophy as a meta-theory. Furthermore, Bhaskar focused on critical naturalism, which seeks to resolve dualisms such as individualism and collectivism, mind and body, or values and facts. There is a similar dualism at the heart of this project where relational depth is seen as subjective and idiosyncratic, and yet there is recognition that measuring it may enhance our understanding or knowledge of it.

Within a critical realist philosophy, society and cultures are seen as generated by dynamic human actions and thus continuously changing. Furthermore, there is a dynamic interaction between social science and human action, which affect and shape one another. Margaret Archer (1998) contributed to critical realism with ‘morphogenesis’, labelling the relationship between the social world and the actor. Morphogenesis portrays the social world as intertwined with individuals. Furthermore, the knowledge gained through social science continually catalyses the social world and creates new social forms. In this context, change may be for better or for worse. Such philosophy appears more adapted to social science than positivism in that the rules of social science are more transient than those of the natural sciences and dependent on the context including the time and location in which they arise.

Overall critical realism requires a deep understanding of a social situation or event. It is concerned with more than the observable as such. Instead it also looks at investigating the underlying mechanisms of an event. Thus the aim of this theory is to explain a social event in all its complexity while ruling out other possibilities. The dynamic interaction and transience of the social world and knowledge also imply that rules are unlikely to be controllable or predictable. In effect, reality is not a closed system and social reality is too complex and temporal (Collier, 1994). As a result, a critical realist epistemology does not have a predictive power but serves as an explanatory theory. The acquisition of knowledge in this project is mostly aligned with
a critical realist position. Furthermore, there is an additional assumption that the knowledge acquired in this research on relational depth is ethical and useful in the current context.

3.1.3. Critical Pragmatism.

In addition to a critical realist stance, pragmatism emphasises the justification of concepts by examining their goals and the values they support. Within a pragmatic ontology, reality becomes the practical effects of ideas. Such epistemology emphasises ways of thinking and doing that lead to pragmatic solutions and uses various types of empirical methods. Like critical realism, critical pragmatism incorporates positivism, but does not claim to reveal ‘the truth’ about ‘reality’, instead enabling different hypotheses to be subjected to comparative testing. It is open to fallibility and acknowledges that some variables cannot be observed. The original founders of pragmatism were Peirce, Dewey, and James. William James (1975) contributed to pragmatism in proposing that it could resolve the dilemma of the claims of science clashing with religion and morality. He observed a division of the ‘tough’ and ‘tender’ minded: a division between the sceptical materialist, factual empiricists and the idealistic, optimistic and dogmatist subjectivists (Garrison, 1999).

A critical pragmatist epistemology views the acquisition of knowledge as a critical inquiry, where no truth is seen as absolute and no reality transcends the conditions in which they emerge. Knowledge emerges from experience, interaction, and a dialogue to establish consensus. The acquisition of knowledge through science and empirical methods is not guided by universal principles but by the context they are likely to influence; they are not seen as a truth or leading to truth but as providing tools and enhancement in a specific context. In this sense, it puts an emphasis on the openness of culture and society to a form of critical change (Kadlec, 2007). As a result,
critical pragmatism can offer an ethical turn to critical realism in that change is chosen, and the researcher can take a responsible stance for public good (Vannini, 2008).

3.1.4. Summary.

The current project is based in a post-positivist foundation and draws from critical realist and critical pragmatist epistemologies. In effect, I consider that relational depth is a real event for which there are unobservable mechanisms that we are trying to uncover. I also acknowledge that social reality is changing as it is being studied. I believe a measure of the frequency of relational depth can provide an approximation of what is being measured and would be useful and ethical in terms of public good in the current context (Lapid, 1989). Trochim (2001) suggests that a post-positivist epistemology may use a variety of methods and emphasises the importance of using several measures in order to understand events. Here I use multiple measures as well as observations, including qualitative and quantitative methods, which are typically used in scale development studies. As part of a critical stance, I acknowledge that like other research into social phenomena, this one will be an imperfect guide to the ‘real’ nature of relational depth and is bound to be fallible.

3.2. Design

The design for this project consists of a scale development and validation design following standard procedures (DeVellis, 2012). In this process I used three steps of scale development. In this method, step one and two serve to assess face and content validity of the scale while step three is a statistical analysis looking at the reliability, construct validity, and factor structure of the scale. The first step involved the creation and refining of an item pool through rating the items by experts on the construct of
relational depth. The second step was conducting specialised interviews to establish potential problems with the items and scale structure in non-expert participants. The last step was a statistical study used to assess internal consistency, convergent and divergent validity and applying exploratory factor analysis to refine the scale further.

3.2.1. Reliability.

Reliability is ‘the proportion of variance attributable to the true score of the latent variable’ (DeVellis, 2012, p.27). There are several methods of testing reliability. Internal consistency is a reliability test that calculates the strengths of associations between test items. Testing internal consistency can be done with Coefficient Alpha, which represents the proportion of variance of a scale attributable to a common source. It is assumed that this common source is the true score of the latent variable that is being measured (Streiner, 2003).

3.2.2. Validity.

Validity is concerned with whether the variable being measured causes the variation in the items (DeVellis, 2012). It is divided into various validity constructs, although the dominant view is that validity is a single construct. In this project we assess different types of validity: Face validity, content validity and construct validity. Face validity is the extent to which the items appear to measure what they are supposed to measure to outside observers. Content validity is the extent to which the items represent the variable being measured. Construct validity is a prominent type of validity assessing the extent to which a scale measures what it purports to measure. It is usually assessed with bringing together a number of methods: for instance convergent validity serves to show that the measure is strongly associated with another measure of a similar concept. On the other hand, divergent or discriminant validity shows that two constructs, which are unrelated are not statistically correlated.
3.2.3. Exploratory Factor Analysis.

Exploratory factor analysis (EFA) is a statistical method of multivariate analysis used to uncover the structure of a set of variables. It is used in scale development to identify latent constructs when there is no a priori hypothesis about the structure of the scale. The principal axis is a common method accounting for the covariance in the data by splitting it into specific variance (i.e. error) contributing to scores on each item and common variances made up of covariance between items, which can be modelled as arising from a shared latent factor (Joliffe, 2002).

Principal component analysis (PCA) gives a result with orthogonal components. These can then be rotated which may result in a structure that is more interpretable in terms of the item content. Rotation can be orthogonal, in which case the rotated components remain independent of one another, or it may be oblique, in which case the constraint that the components be independent of one another is removed and the process gives both a loading matrix and an inter-component correlation matrix. As the factors are assumed to be correlated, the analysis uses an oblique rotation (Fabrigar & Wegener, 2011).

There are two reasons to use EFA in this study. The first is that the size of the first component is an indication of how much of the variance across the items is shared and could originate from one linear underlying factor. As our design model for the measure is unidimensional, i.e. assuming that all the items reflect frequency of experiences of relational depth, this extends reliability analysis, which simply said how much of the item variance was in shared covariance. The second reason for using PCA is, that, as for the analysis of reliability if items are deleted and of other item statistics in the internal reliability analysis, the loading matrix and communalities can guide elimination of items to improve on the psychometric properties of the measure. The objective in such a process is to retain items that are most representative of the construct.
3.3. Item Creation and Selection

3.3.1. Creation of an Item Pool.

The first step in the development of the scale was the creation and refining of an item pool. We followed the methods of deductive scale development using a theoretical definition of relational depth as a guide for the creation of items. This approach is considered most appropriate where there exists some theory about a construct and requires an understanding of the relevant literature and of the phenomenon (DeVellis, 2012; Hinkin, Tracey, & Enz, 1997). The definition used was: ‘a state of profound contact and engagement between two people, in which each person is fully real with the Other, and able to understand and value the other’s experiences at a high level’ (Mearns and Cooper, 2005, p. xii)

The supervisory team, Prof. Mick Cooper and Dr. Joel Vos, and myself generated a list of 45 items. Three other experts, doctors in psychology who had been involved in research on relational depth were emailed (Appendix C) about the creation of a new measure to rate the frequency of moments of relational depth in therapy. In the email we explained we were brainstorming to generate as many items as possible and would be grateful if they would help us generate items that they thought would be relevant. A document with the items already generated was attached as an example. Two out of the three experts emailed back: one of them generated 60 items and the other 23 items. In total, the item pool consisted of 128 items (Appendix C).

3.3.2. Rating by Experts.

The refining of the item pool was done with a process of ‘expert rating’ (Hinkin, 2005). I created a questionnaire that I posted on the software Qualtrics with the 128
items that could be rated on three different questions (DeVellis, 2012): 1. how well each item matches the target definition, 2. how well formulated each item is for participants to fill in, and 3. how well, overall, each item is suited to the Relational Depth Frequency Scale. Items could be rated on a four-point likert scale: (1) not at all, (2) a little, (3) moderately, and (4) very well. The supervisory team and I rated the items. I also contacted four colleagues involved in other relational depth research. I explained that we were rating items according to the three criteria mentioned above (Appendix C). I included a link to the online survey and stated that it would take approximately 30 minutes to complete. In total there were seven expert raters who judged the suitability of each item to the scale.

3.3.3. Item Selection.

We wished to reduce the number of items to approximately 40 items. We decided on a cut-off point of an average of 2.9, which would leave 50 items. The cut-off at 2.9 represents the average of the three ratings by 7 experts, thus all the 50 items selected minimally suited the scale slightly below ‘moderately’. We did not choose a cut-off at 3 because this would leave too few items. Prof. Mick Cooper and I then reviewed the list of 50 items. We removed two items that had multiple clauses. We underlined words and meanings that were essentially the same; we found two items that were duplicates, and 10 items for which the wording was very similar. In total we removed 14 items, which left a scale with 36 items.

3.4. Three-step Test Interviews

The Three-Step Test Interview part of the study was used to explore the content validity of the Relational Depth Frequency Scale involving a process of item refinement.
Following analysis the scale was refined to 20 items. The results are summarised in Chapter 4.

3.4.1. Piloting the Three-Step Test Interviews.

The research team agreed on conducting a pilot test for the Three-Step Test interviews. This was done in order to gain experience of the process and ensure a satisfactory standard of delivery. The pilot took place in the director of study’s office (Prof. Cooper). I, the principal researcher, conducted the interview on the director of study who took the role of a dummy therapist participant. My co-supervisor (Dr. Vos) observed the process and offered feedback at the end of the interview.

3.4.2. Three-Step Test Interview Participants.

For this part of the study, we selected eight participants. This number of participants was sufficient for the results to yield data saturation (Hak et al, 2004). Most of the participants were not familiar with the construct of relational depth, which was desirable for this part of the study. Three participants were males and five were females, aged 26 to 90 years old, four were therapists and four were clients. The mean age was 49 years old. Six participants were from a white Caucasian ethnic background and two were from a mixed background. Three of the therapists were qualified mental health practitioners and one was still in training. Three of the therapists were humanistic in orientation and one was integrative. Two clients were counselling psychologist trainees. Two clients were not affiliated with the mental health profession. Two clients were in psychoanalytic psychotherapy, one was in Lacanian therapy and one did not know the orientation of their therapist.
3.4.3. Measure.

The Three-Step Test Interview (TSTI) is an observational instrument for pretesting and assessing the quality of self-completion questionnaires. This method was tested in several studies, which showed the TSTI helps identify problems resulting from a mismatch between theory and participants understanding of items (Hak, van der Veer, & Ommundsen, 2004; Jansen & Hak, 2005; Busse & Ferri, 2003). This procedure is also used to check that items can easily be answered. It provides a method to identify problems in scales, and is used as a diagnostic tool in validation studies of new instruments (Hak, van der Veer, & Ommundsen, 2006). The TSTI consists of *concurrent think aloud*, aimed at making the thought processes observable and collecting observational data. This is followed by a focused interview aimed at understanding gaps in observational data, and a semi-structured interview aimed at eliciting opinions and experiences. The aim is to collect data on how respondents complete questionnaires as well as impressions and experiences. Interviews are recorded for later analysis and the researcher also makes ‘real time’ notes for immediate use in the following steps.

3.4.4. Procedure.

Participants responded to an advert that contained information about the study. This advert (Appendix D) was sent via email to university students and staff, it was also advertised on social media. In this advert, potential participants were asked for anonymous and voluntary participation in an interview aimed at the development of a new scale; the interview would take up to one hour. Inclusion criteria were being 18 or above, being a therapist or a client for a minimum of six sessions in therapy, and the interview did not necessitate holding prior knowledge of relational depth.

Interviews took place at the University of Roehampton’s premises or at participants’ homes. Interviews were conducted as follows: The participant and I sat
down at a table facing a computer screen. For practical reasons and standardisation of procedures, all participants used the researcher’s laptop to complete the task. Before the start, I gave an overview of the process including some basic instructions about the different tasks, the purpose of the interview, which was to determine the suitability of the items to the new scale. I restated that interviews would be recorded and take up to one hour, that they would first need to sign a consent form, go through a demographic questionnaire, and then the interview would start. I explained that the first part of the interview would consist in completing the Relational Depth Frequency Scale online while saying aloud what they were thinking. The participants were then talked through the consent form (Appendix F). They were explained that their participation was anonymous and would be treated confidentially by the research team and that they may withdraw at any time without giving a reason. Also, if they were students, this would not affect their coursework. If they agreed to this they could tick yes, and we would start the recorder and proceed to the demographic questionnaire. They were then instructed on the task procedure according to Hak et al.’s standard procedures (2004).

After completing the demographic questionnaire, I re-explained the ‘concurrent think aloud’ and offered to do an exercise. Instructions emphasised that the purpose was to see how good or problematic scale items were, by observing participants’ thoughts and behaviour responses. They would take the scale as if I were not in the room, and say aloud what they were thinking as they would be thinking it. No explanation of thoughts were required, only the verbalisation of thoughts themselves. Participants were invited not invent thoughts to avoid silences, and only say thoughts that would come to them naturally as they were completing the questionnaire. I would be taking notes and record their thoughts and behaviours while they were completing the task. All participants agreed to do the proposed exercise before the start. The exercise was to visualise the place where they live and count up the windows. As they were counting up the windows, they would tell me what they were seeing and thinking about (Willis, 2004).
As participants did the exercise, I offered feedback such as ‘please continue talking’, ‘good, you are doing this well, please continue in this way’ or ‘please only say aloud what you are thinking, you do not need to comment on thoughts just because I am here’. We then agreed whether enough exercise had been done, and if they understood the task we proceeded to the first step of the interview. Participants read aloud the instructions and questions, and started filling the questionnaire while saying their thoughts aloud. At the end of this process, I thanked them and showed understanding if they showed signs of fatigue but explained we had to carry on to the next step while their thoughts were still in memory.

Following the ‘think aloud’ task, the second step of the interview would be for us to go back over items where there were hesitations, and fill in the thoughts that appeared not to be fully expressed. On the second part of the interview, I went back on the items where there was hesitation or I noticed participants’ thought process seemed incomplete. I then offered to have a break or continue to the last step. The last step of the interview consisted in asking specific and more in depth explanation about their response behaviour and thoughts around the scale items, including their understanding and definitions of terms, and possible paraphrasing and re-wording of items. This part of the interview also included more general questions around their attitude towards relational depth, and opinions on the scale, structural changes such as instructions and item order, and overall improvement.

To conclude the process, I asked if they had anything more to add and about their overall experience. I asked if they had any recommendation regarding the interview itself, or the Relational Depth Frequency Scale. I then thanked them for their participation. They were given a debriefing form where I recorded their unique ID number generated by the software Qualtrics at the end of the online questionnaire, which was used throughout the interview. I also kept a copy of the ID number on all the forms used to take notes during the interview. Participants were instructed that if they
wished to withdraw from the study they could contact me with their ID number (Qualtrics, 2013).

Data was later organised using a brief thematic analysis. I focused the analysis on aspects of the scale that appeared problematic for participants. Items were amended or removed as a result of qualitative analysis (Crabtree & Miller, 1999).

3.5. Online Psychometric Exploration Study

Following interviews and analysis, I proceeded to the principal investigation, which was an online psychometric exploration used to explore the construct validity, factor structure and reliability of the 20-item Relational Depth Frequency Scale. This aspect of the method required a large number of participants to take part in an online survey questionnaire.

3.5.1. Piloting the Online Questionnaire.

Before starting the process of data gathering, I piloted the online questionnaire to check for potential errors in the layout and the Qualtrics logic. I duplicated the online survey and used this separate form to conduct the pilot. I emailed my colleagues on the Counselling psychology course and asked for volunteers to give feedback on an online survey regarding its overall structure, but also welcoming their suggestions and impressions. I received feedback from three volunteers regarding the online survey. There were some errors reported in the layout and logic, which I corrected. The data collected from these three volunteers was not used in the main analysis.
3.5.2. Participants.

3.5.2.1. Sample size.

A sample of 200 has been considered adequate for a scale of 40 items (Comrey & Lee, 1973). Tinsley and Tinsley (1987) suggested a ratio of 5 to 10 subjects per item, which could be relaxed when reaching 300 subjects. More recent studies emphasize that $n$ should be at least 50 when assuming a single factor, and is not a linear function of items but of the number of factors (Worthington & Whittaker, 2006). Furthermore in most cases, a sample size of 150 observations should be sufficient to obtain an accurate solution in exploratory factor analysis, as long as item inter-correlations are reasonably strong (Guadagnoli & Velicer, 1988). According to Devellis (2012) 300 subjects is considered a good sample size.

Additionally, I calculated the a priori effect size for the smallest hypothesised effect in this study; the smallest hypothesised effect is the small correlation for the discriminant validity of the RDFS with the Self-compassion scale. I assumed a power of at least .80 and $\alpha = 0.05$. This resulted in a priori sample size of $n = 385$ (Soper, 2014).

3.5.2.2. Target populations.

The inclusion criteria for participants were: clients of age 18 and above, currently in therapy or having attended therapy in the past. Participants could be qualified therapists and therapists in training who had been practicing for a minimum of one year. The exclusion criteria for participants were: Individuals who were not clients or therapists, and individuals under 18 years of age.

I have chosen to include therapists with different levels of training requirements. I estimated that therapist level of training and experience does not impact on relational depth frequency based on prior research findings showing no relationship between level of training and the bond component of the working alliance (Mallinckrodt & Nelson, 1991), and prior findings suggesting that minimally trained or experienced paraprofessional counsellors can be as effective as professionally trained and
experienced counsellors (Strupp & Hadley, 1979; Boer, Wiersma, Russo, and van den Bosch, 2005). In addition, if level of training impacts on relational depth frequency, it will be reported in the demographics part of the study, and would not impact on the process of scale validation.

According to a prior study with a similar procedure, we estimated that the response rate may be between 15% and 43% and the non-completion rate may be around 50% (Wiggins, Eliott, & Cooper, 2012).

3.5.2.3. Sampling and recruiting.

I aimed to recruit 385 participants. To recruit this number of participants, I targeted different samples. The largest sample was the convenience or ‘open’ sample for which I used a snowball sampling method. The survey was sent via email (Appendix E) to the research team’s contacts (Prof. Mick Cooper and Gina Di Malta) to be sent further to potential participants. This ‘open sample’ survey was also posted on the Facebook and Twitter social media platforms advertising for voluntary participation in research on the quality of the therapeutic relationship. The survey was reposted five times on the two researchers’ personal Facebook pages and Twitter account, and then given a deadline to take part. Additionally, the survey was posted on different counselling and psychotherapy pages (As listed in table 1). We could not estimate response rates with this method of recruiting, the sample came from unidentified populations and the snowball sampling method involved a possible community bias (Morgan, 2008). We compensated for this by including other samples with a variety of informants such as universities, therapist directories, social media and charities.

The second sample was the ‘trainee sample’. Here the survey was sent to all the counselling psychology training courses across the United Kingdom. Five training courses agreed to forward the survey to their trainees across the three years. One training course also sent the survey to their clinical psychology trainees. We estimated that the survey was sent to about 360 trainee psychologists. The third sample targeted
BACP therapists. Here emails were sent individually to 1246 therapists across main UK cities. The fourth sample was targeting clients at a charity in central London. Emails were sent individually to 92 clients. At last the survey was sent to 40 therapists at another charity in West London.

The emails sent were adapted to each sample. For every sample, they included information about who the researchers were, the purpose of the research using terminology without jargon, the nature of participation as voluntary. Emails also included information about the survey, its length, the different questionnaires and the main investigator's contact details, the ethical approval and the survey link. Emails targeting clients had additional information regarding confidentiality. While we cannot establish exactly how many emails were received and read by participants, an estimate of response rates based on the numbers of emails sent is summarized in Table 1.

Table 1. Sampling and Response Rates

<table>
<thead>
<tr>
<th>Samples</th>
<th>Number of emails sent</th>
<th>Completed surveys</th>
<th>Response rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK psychology training courses ‘trainee’</td>
<td>360</td>
<td>49</td>
<td>14%</td>
</tr>
<tr>
<td>Convenience (social media)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘open’</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Posted on:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Main investigator’s Facebook page</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Director of study’s Facebook page</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Director of study’s Twitter page</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Roehampton psychology page</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Counselling and Psychotherapy networking page</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Psychology research group</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>237</td>
<td></td>
<td>unknown</td>
</tr>
</tbody>
</table>
Table 1. Continued

<table>
<thead>
<tr>
<th>BACP therapists across main UK cities ‘BACP’</th>
<th>1246</th>
<th>139</th>
<th>11%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Therapists at a charity ‘charity-t’</td>
<td>40</td>
<td>1</td>
<td>2.5%</td>
</tr>
<tr>
<td>Clients at a charity ‘charity-c’</td>
<td>92</td>
<td>8</td>
<td>9%</td>
</tr>
</tbody>
</table>

3.5.2.4. Participant demographics.

We had a total of 751 responses. Three (0.5%) declined to participate by not giving consent and are omitted from all analyses. 556 (74%) participants completed the demographics questionnaire and the Relational Depth Frequency Scale. 434 (58%) of the respondents finished all the online survey. Of the 434 who finished all the online survey, 358 (82%) were females and 76 (18%) were males. 375 (86%) participants were mental health practitioners while 59 (14%) participated as clients and were not affiliated with the mental health profession. Ages ranged from 18 to 90 years old, the mean age was 45 and the median was 46. To maximize the use of the available data, we included the 556 participants who had completed all demographic questions and the Relational Depth Frequency Scale in the analyses. The sample characteristics are summarized in Table 2.
### Table 2. Sample Characteristics

<table>
<thead>
<tr>
<th></th>
<th>All N = 556</th>
<th>Therapists N = 336</th>
<th>Mental health professionals N = 138</th>
<th>Laypersons N = 82</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age (mean, SD)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>48 (11)</td>
<td>43 (11)</td>
<td>43 (13)</td>
<td></td>
</tr>
<tr>
<td><strong>Gender (N, %)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>456 (82%)</td>
<td>274 (81%)</td>
<td>111 (80%)</td>
<td>71 (87%)</td>
</tr>
<tr>
<td>Male</td>
<td>100 (18%)</td>
<td>62 (19%)</td>
<td>27 (20%)</td>
<td>11 (13%)</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>502 (90%)</td>
<td>305 (91%)</td>
<td>124 (90%)</td>
<td>73 (89%)</td>
</tr>
<tr>
<td>Black/African/Caribbean/Black British</td>
<td>6 (1%)</td>
<td>4 (1%)</td>
<td>2 (1%)</td>
<td>0</td>
</tr>
<tr>
<td>Mixed ethnicity</td>
<td>16 (3%)</td>
<td>7 (2%)</td>
<td>7 (5%)</td>
<td>2 (2.5%)</td>
</tr>
<tr>
<td>Asian/Asian British</td>
<td>18 (3%)</td>
<td>15 (5%)</td>
<td>1 (&lt;1%)</td>
<td>2 (2.5%)</td>
</tr>
<tr>
<td>Other</td>
<td>14 (2.5%)</td>
<td>5 (2%)</td>
<td>4 (3%)</td>
<td>5 (6%)</td>
</tr>
<tr>
<td><strong>Religious Preference</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Christian</td>
<td>167 (30%)</td>
<td>107 (32%)</td>
<td>38 (28%)</td>
<td>22 (27%)</td>
</tr>
<tr>
<td>Buddhist</td>
<td>37 (7%)</td>
<td>21 (6%)</td>
<td>10 (7%)</td>
<td>6 (7%)</td>
</tr>
<tr>
<td>Hindu</td>
<td>3 (&lt;1%)</td>
<td>2 (&lt;1%)</td>
<td>1 (&lt;1%)</td>
<td>0</td>
</tr>
<tr>
<td>Jewish</td>
<td>10 (2%)</td>
<td>7 (2%)</td>
<td>3 (2%)</td>
<td>0</td>
</tr>
<tr>
<td>Muslim</td>
<td>4 (1%)</td>
<td>3 (1%)</td>
<td>0</td>
<td>1 (1%)</td>
</tr>
<tr>
<td>Sikh</td>
<td>1 (&lt;1%)</td>
<td>1 (&lt;1%)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Spiritual</td>
<td>106 (19%)</td>
<td>71 (21%)</td>
<td>26 (19%)</td>
<td>9 (11%)</td>
</tr>
<tr>
<td>Agnostic</td>
<td>98 (18%)</td>
<td>54 (16%)</td>
<td>20 (14%)</td>
<td>24 (29%)</td>
</tr>
<tr>
<td>Atheist</td>
<td>122 (22%)</td>
<td>67 (20%)</td>
<td>37 (27%)</td>
<td>18 (22%)</td>
</tr>
<tr>
<td><strong>Profession</strong>*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Counsellor</td>
<td>295</td>
<td>216 (64%)</td>
<td>79 (57%)</td>
<td></td>
</tr>
<tr>
<td>Psychotherapist</td>
<td>217</td>
<td>156 (46%)</td>
<td>63 (46%)</td>
<td></td>
</tr>
<tr>
<td>Clinical Psychologist</td>
<td>21</td>
<td>15 (4%)</td>
<td>6 (4%)</td>
<td></td>
</tr>
<tr>
<td>Counselling Psychologist</td>
<td>66</td>
<td>45 (13%)</td>
<td>21 (15%)</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>38</td>
<td>27 (8%)</td>
<td>11 (8%)</td>
<td></td>
</tr>
</tbody>
</table>
Table 2. Continued

<table>
<thead>
<tr>
<th>In training</th>
<th>110</th>
<th>57 (17%)</th>
<th>53 (38%)</th>
<th>-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualified</td>
<td>360</td>
<td>279 (83%)</td>
<td>85 (62%)</td>
<td>-</td>
</tr>
</tbody>
</table>

**Years Post-qualification**

<table>
<thead>
<tr>
<th>Less than one year</th>
<th>24 (7%)</th>
<th>7 (5%)</th>
<th>-</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5 years</td>
<td>94 (28%)</td>
<td>35 (25%)</td>
<td>-</td>
</tr>
<tr>
<td>5-10 years</td>
<td>68 (20%)</td>
<td>16 (12%)</td>
<td>-</td>
</tr>
<tr>
<td>10-20 years</td>
<td>59 (18%)</td>
<td>20 (14%)</td>
<td>-</td>
</tr>
<tr>
<td>Over 20 years</td>
<td>33 (9%)</td>
<td>7 (5%)</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 2. Continued

**Duration of therapy**

<table>
<thead>
<tr>
<th>Less than 6 sessions</th>
<th>33 (9%)</th>
<th>4 (3%)</th>
<th>3 (4%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-24 sessions</td>
<td>107 (32%)</td>
<td>25 (18%)</td>
<td>9 (11%)</td>
</tr>
<tr>
<td>Over 24 sessions</td>
<td>133 (40%)</td>
<td>53 (38%)</td>
<td>27 (33%)</td>
</tr>
<tr>
<td>Therapy has ended</td>
<td>63 (19%)</td>
<td>56 (40%)</td>
<td>43 (52%)</td>
</tr>
</tbody>
</table>

**Therapeutic orientation***

<table>
<thead>
<tr>
<th>Cognitive-Behavioural</th>
<th>56 (17%)</th>
<th>5 (4%)</th>
<th>17 (21%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychodynamic</td>
<td>71 (21%)</td>
<td>20 (14%)</td>
<td>9 (11%)</td>
</tr>
<tr>
<td>Person-centred</td>
<td>144 (43%)</td>
<td>24 (17%)</td>
<td>14 (17%)</td>
</tr>
<tr>
<td>Integrative</td>
<td>167 (50%)</td>
<td>44 (32%)</td>
<td>15 (18%)</td>
</tr>
<tr>
<td>Psychoanalytic</td>
<td>16 (5%)</td>
<td>16 (12%)</td>
<td>6 (7%)</td>
</tr>
<tr>
<td>I don’t know</td>
<td>-</td>
<td>2 (1.5%)</td>
<td>11 (13%)</td>
</tr>
<tr>
<td>Existential</td>
<td>75 (22%)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Systemic</td>
<td>14 (4%)</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**Other (text entry)**

<table>
<thead>
<tr>
<th>54 (16%)</th>
<th>27 (20%)</th>
<th>10 (12%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transactional analysis</td>
<td>9 (3%)</td>
<td>1 (&lt;1%)</td>
</tr>
<tr>
<td>Gestalt</td>
<td>7 (2%)</td>
<td>-</td>
</tr>
<tr>
<td>Psychosynthesis/transpersonal</td>
<td>6 (2%)</td>
<td>3 (2%)</td>
</tr>
<tr>
<td>Pluralistic</td>
<td>5 (1.5%)</td>
<td>1 (&lt;1%)</td>
</tr>
<tr>
<td>Other-Humanistic</td>
<td>4 (1%)</td>
<td>-</td>
</tr>
<tr>
<td>Solution-focused</td>
<td>1 (&lt;1%)</td>
<td>-</td>
</tr>
<tr>
<td>Relational</td>
<td>1 (&lt;1%)</td>
<td>1 (&lt;1%)</td>
</tr>
<tr>
<td>Reality therapy</td>
<td>1 (&lt;1%)</td>
<td>-</td>
</tr>
<tr>
<td>Process-experiential</td>
<td>1 (&lt;1%)</td>
<td>-</td>
</tr>
<tr>
<td>Logotherapy</td>
<td>1 (&lt;1%)</td>
<td>-</td>
</tr>
</tbody>
</table>
Table 2. Continued

<table>
<thead>
<tr>
<th>Therapy Type</th>
<th>Count</th>
<th>Percent</th>
<th>Count</th>
<th>Percent</th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypnotherapy</td>
<td>1 (&lt;1%)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Feminism</td>
<td>1 (&lt;1%)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Ecclectic</td>
<td>1 (&lt;1%)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Cognitive analytic</td>
<td>1 (&lt;1%)</td>
<td>1 (&lt;1%)</td>
<td>1 (1%)</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Brief strategic</td>
<td>1 (&lt;1%)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Art therapy</td>
<td>1 (&lt;1%)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Body oriented</td>
<td>-</td>
<td>4 (3%)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Coherence therapy</td>
<td>-</td>
<td>1 (&lt;1%)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Existential</td>
<td>-</td>
<td>10 (7%)</td>
<td>1 (1%)</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Jungian</td>
<td>-</td>
<td>2 (1.5%)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Group analytic</td>
<td>-</td>
<td>1 (&lt;1%)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Schema therapy</td>
<td>-</td>
<td>1 (&lt;1%)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Subjective-emotive therapy</td>
<td>-</td>
<td>1 (&lt;1%)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Bereavement</td>
<td>-</td>
<td>-</td>
<td>1 (1%)</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Dialectical Behaviour</td>
<td>-</td>
<td>-</td>
<td>1 (1%)</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Steinerian-biographical</td>
<td>-</td>
<td>-</td>
<td>1 (1%)</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

* Total % may be >100 as participants could endorse more than one answer per question.

3.5.3. Measures.

The measures included in the online questionnaire in order of presentation were:
The socio-demographic questionnaire (Appendix G), the Relational Depth Frequency Scale (Appendix A), the Relational Depth Inventory (Wiggins, 2010), the Working Alliance Inventory (Hatcher & Gillapsy, 2006), and the Self-Compassion Scale–Short Form (Raes, Pommier, Neff, & Van Gucht, 2011). All the responses on the questionnaire were set as ‘forced choice’ to ensure data completion. Measures were totaled using averages.

3.5.3.1. Socio-demographics.

The socio-demographic questionnaire included questions on gender, age, ethnicity, religion, gender of therapist, therapy duration including under six sessions, 6 to 24 sessions, over 24 sessions and having attended therapy in the past, whether the
respondent was a mental health professional, their level of training, whether they were participating as client or therapist. Throughout the questionnaire, participants were reminded to think about a single relationship with a client or therapist. The questionnaire also asked about the type of therapy undergone or practiced. For client participants it gave the following choices: cognitive-behavioural, psychodynamic, person-centred, integrative, psychoanalytic, unknown or other. For therapist participants, choices included cognitive-behavioural, psychodynamic, person-centred, existential, integrative, psychoanalytic, systemic or other. Therapist participants could select more than one answer and enter text for other therapies. This was done to have a more precise representation of the therapeutic orientations, however it made it too complex in the analysis, and in hindsight I may choose to collect data differently.

3.5.3.2. The Relational Depth Frequency Scale (RDFS).

The Relational Depth Frequency Scale is being developed to estimate the frequency of moments of relational depth during therapy. The RDFS begins with instructions about rating the frequency of moments represented in each item. Items follow the open statement: ‘Over the course of my therapy with my therapist (or client), there were moments where:…’. The items that follow are listed below the opening statement and rated on a 5-point Likert scale. The items include for instance: ‘I experienced a moment of deep connection’, ‘we were connected on a level that I rarely experience’, ‘I felt completely real in relation to him/her’. The 5-point Likert scale uses the frequency labels of the CORE-OM (1: ‘not at all’, 2: ‘only occasionally’, 3: ‘sometimes’, 4: ‘often’, 5: ‘most or all of the time’). In this study, the scoring of the scale was done using an average of the twenty item scores. In future uses, the RDFS scoring will be aligned to the CORE-OM scoring, by totalling the item scores and give a meaningful range with scores from 20 to 100.

3.5.3.3. The Relational Depth Inventory (RDI).

The RDI (Wiggins, 2012) begins with a question asking respondents to describe
an important event experienced during a therapy session. Then respondents are asked to rate this significant event using a 5-point liert scale (1: ‘not at all’, 2: ‘slightly’, 3: ‘somewhat’, 4: ‘very much’ 5: ‘completely’) indicating the extent to which they experienced each of the specific qualities represented by the 26 questionnaire items. The items were originally developed from 300 therapists and clients’ descriptions of their experiences of relational depth from Knox (2008) interviews. The RDI has been found to be reliable in a sample of 189 therapists and 152 clients (Cronbach’s alpha = 0.93). Two factors accounted for 47% of the variance. The RDI and WAI-SR had a moderate correlation of .34 showing adequate convergent validity. As reported in chapter 3, the RDI was found to predict outcome in terms of change in scores on different measures showing concurrent validity (Wiggins, 2011). This measure was used to assess convergent validity of the RDFS.

3.5.3.4. The Working Alliance Inventory short revised (WAI-SR).

This instrument has two versions: a 10-item therapist version and a 12-item client version and measures the therapeutic alliance assessing the three subscales of tasks, goals and bond (Munder, Wilmers, Leonhart, Linster, & Barth, 2010). The authors changed the Likert scale to five-points for it yielded better reliability results. In the client version, items 4, 6, 8 and 11 form the goal subscale. Items 1, 2, 10 and 12 form the task subscales and items 3, 5, 7 and 9 form the bond subscale. In the therapist version, items 3, 8, and 6 form the goal subscale, items 1, 4, and 10 form the task subscale, and items 2, 5, 7, and 9 form the bond subscale. I chose this short version for its good psychometrics but also to keep the questionnaire short and minimize fatigue in participants.

The WAI-SR was found to have good reliability (alpha = .80) in a sample of 88 German outpatients and 243 inpatients (Munder, Wilmers, Leonhart, Linster, & Barth, 2010). Additionally, authors found good convergent validity with the Helping Alliance Questionnaire (r > 0.64). The subscales of Goal, Task and Bond dimensions were better
discriminated than in past versions. This version had good consistency with the older version with coefficient alphas from .85 to .90 for subscales, and .91 and .92 for total score alphas (Hatcher & Gillapsy, 2006). This measure was used to assess convergent validity with the RDFS.

3.5.3.5. The Self-Compassion Scale Short Form (SCS–SF).

I included the 12-item Self-Compassion Scale–Short Form (SCS–SF) to establish discriminant validity. I consider that self-compassion is a different construct to relational depth and will not be significantly correlated to relational depth frequency. The SCS–SF has been validated in three samples and showed adequate internal consistency (Cronbach’s alpha ≥ 0.86 in all samples) with a high correlation with the long form SCS (r ≥ 0.97 all samples) (Raes, Pommier, Neff, & Van Gucht, 2011). The scale showed excellent internal consistency in a student sample (Cronbach alpha = .92; n = 391; Neff et al, 2003). This measure was included to assess divergent validity with the RDFS.

3.5.4. Procedure.

The online survey was posted on the online data collection Qualtrics (2013). Participants clicked on the survey link inserted in the email they received or on the social media platform. They viewed an information sheet about the purpose and content of the survey, they were instructed that they would have to choose to participate as a client or as a therapist and focus on a single relationship with a client or therapist. They were informed about the voluntary nature of participation and the possibility to withdraw at any time, information indicated a completion time of up to 30 minutes. After this information was given, the form included an informed consent (Appendix F) stating data protection policy and inclusion criteria including a confirmation they were 18 years old or above in order to participate in the study. Participants had to agree to the terms and conditions by ticking yes in order to proceed to the online questionnaires. If
participants ticked ‘no’ they would be redirected to an ending page. Once participants ticked yes, they proceeded to the demographics questionnaire. At each page of the questionnaire, participants were reminded with a note at the beginning of the page that they needed to refer to a single relationship with a client or therapist when answering the questions. After the demographics questionnaire, participants viewed instructions for the completion of the Relational Depth Frequency Scale, the following page included the relational depth inventory, they then viewed the Working alliance inventory, they were then warned that this would be the last questionnaire and this one would not be relevant to their therapeutic relationship and viewed the self-compassion scale.

Participants then accessed a debriefing form that included more information about the study, a unique ID number they could use to contact the researcher to withdraw from the study or request more information, and the researcher and director of study’s contact details. The form included a print button for participants to print and keep for further reference. The data was kept on the software until we finished collecting it. It was then downloaded to SPSS for analysis (Argyrous, 2000).

3.5.5. Map of the Analysis.

An inferential test approach was used and the null hypothesis of no population correlation was tested with a conventional alpha of .05. As scores were likely to be non-Gaussian in distribution the Spearman correlation coefficient was used. Additionally, a 95% CI around the observed correlations was reported which indicates not only the strength of the convergent validity correlation, but also how precisely the population value has been estimated.

3.5.5.1. A priori aims.

i. To develop a measure of relational depth: the Relational Depth Frequency Scale.

ii. To validate the Relational Depth Frequency Scale.
iii. To explore the associations between relational depth frequency and moderating variables.

### 3.5.5.2. Hypotheses.

1) I expect to find high internal consistency for the Relational Depth Frequency Scale.

2) I expect to find a single factor structure.

3) I expect to establish construct validity for the Relational Depth Frequency Scale with:
   - A large correlation for convergent validity (Cohen's d > .8)
   - A small correlation for discriminant validity (Cohen's d < .2)

4) I expect to find significant associations between the frequency of relational depth demographic variables.
   - I hypothesize that females will experience significantly greater frequency of relational depth.
   - I hypothesize that person-centred therapists will report higher frequency of relational depth than other therapists.
   - I hypothesize that therapists will experience higher frequency of relational depth than clients.
   - I hypothesize that spiritually affiliated groups will experience higher frequency of relational depth.
   - I hypothesize that the longer the duration of therapy the higher the frequency of relational depth.
   - I hypothesize that clients with a female therapist will have higher frequency of relational depth.
   - I hypothesize that clients who are mental health professionals will have higher frequency of relational depth than clients who are not.
3.5.5.3. Map of the analysis.

Content validity
Content validity was established through the process of item refinement and specialized interviews.

Reliability
Internal consistency was investigated using Cronbah's alpha and its 95% Confidence Interval (CI) reported. Note was made of whether deletion of one or more items would improve the internal consistency of the scale and this was explored in parallel with the exploration of the factor structure.

Exploratory factor analysis
To establish the factor structure of the scale and investigate how well the measure approximates to a unidimensional scale, a principal component analysis was conducted and a scree plot of the eigenvalues, and their values, were reported. Orthogonal and oblique rotations of a small number of components was explored in the light of any suggestion from the eigenvalues that the scale has more than one major component to see if light was thrown on the nature of the dimensionality. Exploration was conducted into whether the dimensionality would be more cleanly unidimensional if a few items were deleted. This was done in parallel with exploration of the effects of dropping items on the internal consistency. If a shortened scale improved the dimensionality and internal consistency, all other analyses would be re-run and reported.

Construct validity
Convergent validity was tested by exploring correlation with the RDFS and RDI, and the RDFS and WAI-SR. Correlations between each RDFS item and each of the RDI and WAI were inspected and contributed to considerations about dropping items from the RDFS.

For discriminant validity, the correlation between the RDFS and Self-compassion were
reported with its 95% CI with the expectation that the correlation would be low and the 95% CI embrace zero though a low but non-zero correlation was still taken as indicating good discriminant validity. Correlations between each RDFS item and the SCS was inspected and contributed to considerations about dropping items from the RDFS

**Demographic variable associations**

- gender and frequency of relational depth.
- gender of therapist and frequency of relational depth.
- therapist’s and client’s frequency of relational depth.
- atheist and spiritually affiliated groups.

These variables are treated as a binary. Thus I used a Mann-Whitney U test, a non-parametric test used to compare two independent samples.

- therapeutic orientation and frequency of relational depth.
- duration of therapy and the frequency of relational depth.

I used Kruskal-Wallis, a non-parametric test used to determine statistical difference between two or more variables on a dependent variable. Here the group of independent variables are either the different therapeutic orientations or the duration of therapy, and the frequency of relational depth is the dependent variable.

**3.5.5.4. Post hoc exploratory analysis.**

I hypothesised that some interesting variables e.g. religious beliefs would split the overall sample into small groups, and I did not know what the group sizes would be. However it seemed clear that there would not be strong statistical power to find anything but very strong population effects. So a number of variables are described in the result section in terms of descriptive explorations rather than pre-hoc hypotheses testing. Kruskal Wallis tests are reported but only as a cautionary procedure to help remind us that differences between quite small groups can look very large and interesting, but even with the sample size I achieved are likely to remain statistically non-significant.
Chapter 4:

Results

4.1. Three-Step Test Interview Findings

The semi-structured interviews and observations revealed a number of possible issues with the structure and design of the scale. One recurring problem was the participants’ lack of reference to the initial statement; the latter serves to put each item in a phenomenological context. As a result, participants were sometimes unsure of how to select their answers, they viewed some of the items as reflecting the quality of the whole relationship rather than representing moments within the relationship. In order to solve this problem, we made the introductory statement more visible by increasing its font. Also after the scale had been narrowed down to 20 items as opposed to its former 36 items, the introductory statement became more visible.

Another problem noted by the participants was that clients reacted to the mutual items differently than therapists. They expressed more difficulty in asserting the perceived mutuality of their feelings. One client suggested it was impossible for her to answer questions for her therapist. We edited item 6 and 18 starting with ‘we felt’ to ‘I felt we…’.

The scale evoked a small amount of distress in some clients who felt they were not experiencing relational depth in their therapy, and this made them question the quality of their therapy. In order to prevent possible distress, we changed instructions to include that there are no right or wrong answers, and people relate in different ways. We
added in the information sheet and debriefing form that the questionnaire does not assess the quality of participants’ therapy.

The ‘think aloud’ and focused interview sections revealed problems with specific items. I identified four themes in the patterns of responses as follows: ‘double-barrelled’ where the wording of the item was redundant with the opening statement, the scaling or had more than one part to an item, ‘confusions’ where the meaning of a word was understood differently by different participants or caused uncertainty, ‘repetitions’ where the same wording had been used in another or more other items, and ‘comfortableness’ where participants answered very readily suggesting such characteristics might be a given of the therapeutic relationship.

On the basis of those themes we decided to remove some of the items from the scale. We decided to remove all the items in the ‘double-barrelled’ category: Item 3 – ‘I felt connected on a level that I rarely experience’. Here ‘rarely’ is redundant with the frequency scaling. Item 15 and 18 repeat the word ‘moment’ which is part of the opening statement. Lastly, item 35 has three component parts to one item which brought confusion for all of the eight participants.

We decided to remove all of the ‘confusion’ items. These include item 2 and 7 that used the word ‘real’. Six participants out of the eight questioned the meaning of the word ‘real’ while doing the ‘think aloud’ part of the interview. We removed item 12 – ‘I felt a deep empathy between us’, this item was mostly confusing for clients who did not expect it to be their role to feel empathy for their therapists, i.e. ‘I had no empathy towards him’ (client in psychoanalytic therapy), ‘empathy was mostly coming from her’ (client in psychoanalytic therapy), ‘I cannot answer because of the mutuality of the empathy’ (Humanistic therapist). We removed item 24 – ‘I felt fully attuned to him/her’ as different participants offered different meanings for their understanding of the word ‘attuned’: i.e ‘it means engaged but not related to emotions or intimacy’ (client in
Lacanian therapy), ‘it’s unrealistic, it means feeling their feelings’ (client in unknown therapy), ‘it’s hard to be with someone if not attuned to them’ (client in psychoanalytic therapy). We removed item 27 – ‘there was a deep intimacy between us’ as it elicited strong reactions in two clients who associated ‘deep intimacy’ with physical closeness, touch, or sex. Three of the therapists, on the other hand, found that ‘deep intimacy’ reflected well ‘the aim of therapy, and not necessarily related to touch’ (humanistic therapist) although it was ‘unexpected, rare and precious’ (transpersonal therapist). This discrepancy between clients and therapists’ understanding makes the item unsuitable for the scale. We removed item 28 – ‘I felt deeply valued by him/her’ because of the connotation of ‘value’, which according to three participants seemed not to fit with the essence of relational depth, i.e. ‘not a word I would use’ (humanistic therapist), ‘deeply valued doesn’t feel as intimate, it implies a distance’ (humanistic therapist), ‘she said it was a valuable relationship’ (integrative therapist). These six items were removed because of confusions in the meaning of wording for or across participants.

We decided to remove some of the ‘repetition’ items. We removed item 8 and 16, which used the wording ‘beyond words’ as in the item 31 which was kept. We removed item 13 which used the word ‘immersed’ also used in item 20. Item 13 was also problematic among interviewees i.e. ‘immersion is like having a bath together, it’s not particularly healthy’ (client in unknown therapy), ‘I don’t like that phrase, it’s like suffocating, losing your own person’ (client in psychoanalytic therapy), ‘immersed implies lost’ (humanistic therapist), ‘immersed doesn’t sound positive’ (client in psychoanalytic therapy). We removed item 11 and 21, which used the wording ‘understanding’ as in item 22. We removed item 25 which used a similar wording to item 34.
After deliberation with my supervisor, we decided to keep all the ‘comfortableness’ items as easily answerable items for the scale. This left 20 items in the scale. The problem areas are summarized in Figure 1.

**Figure 1. TSTI Problem Areas**

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I experienced an intense connection with him/her</td>
</tr>
<tr>
<td>2</td>
<td>We felt intensely real with each other (4)</td>
</tr>
<tr>
<td>3</td>
<td>I felt we were connected on a level that I rarely experience (1)</td>
</tr>
<tr>
<td>4</td>
<td>I experienced a very profound engagement with her/him</td>
</tr>
<tr>
<td>5</td>
<td>I felt we were both completely genuine with each other (3)</td>
</tr>
<tr>
<td>6</td>
<td>I experienced what felt like true mutuality</td>
</tr>
<tr>
<td>7</td>
<td>I felt completely real in relation to him/her</td>
</tr>
<tr>
<td>8</td>
<td>I felt I was being understood beyond my words (2)</td>
</tr>
<tr>
<td>9</td>
<td>We were deeply connected to one another</td>
</tr>
<tr>
<td>10</td>
<td>We felt accepting of one another (3)</td>
</tr>
<tr>
<td>11</td>
<td>I could see we had mutual understanding</td>
</tr>
<tr>
<td>12</td>
<td>I felt a deep empathy between us (4)</td>
</tr>
<tr>
<td>13</td>
<td>I felt completely immersed in the relationship (2)</td>
</tr>
<tr>
<td>14</td>
<td>I felt a clarity of perception between us</td>
</tr>
<tr>
<td>15</td>
<td>The connection between us was much stronger than in other moments (1)</td>
</tr>
<tr>
<td>16</td>
<td>The level of our connection seemed to go beyond words alone</td>
</tr>
<tr>
<td>17</td>
<td>I felt an overall warmth between us (3)</td>
</tr>
<tr>
<td>18</td>
<td>The moment between us felt very meaningful (1)</td>
</tr>
<tr>
<td>19</td>
<td>I felt intensely present with him/her</td>
</tr>
<tr>
<td>20</td>
<td>We were immersed in the present moment</td>
</tr>
<tr>
<td>21</td>
<td>I felt completely understood (2)</td>
</tr>
<tr>
<td>22</td>
<td>There was a deep understanding between us</td>
</tr>
<tr>
<td>23</td>
<td>It felt like a shared experience</td>
</tr>
<tr>
<td>24</td>
<td>I felt fully attuned to him/her</td>
</tr>
<tr>
<td>25</td>
<td>I felt that we fully acknowledged each other (2)</td>
</tr>
<tr>
<td>26</td>
<td>I felt we deeply trusted each other (3)</td>
</tr>
<tr>
<td>27</td>
<td>I experienced a deep intimacy between us</td>
</tr>
<tr>
<td>28</td>
<td>I felt deeply valued by him/her (4)</td>
</tr>
</tbody>
</table>
I felt we connected on a human level
I experienced a deep sense of encounter
I experienced a meeting that was beyond words
I felt like we were totally in-the-moment together (2)
We felt really close to each other
I felt we truly acknowledged each other at a very deep level
I felt our relationship provided a greater depth, different to other relationships, that helped me to grow (1)
I felt we were completely open with each other

Caption for Figure 1.

(1) = removed as ‘double-barrelled’
(2) = removed as ‘repetitions’
(3) = kept as ‘comfortableness’
(4) = removed as ‘confusions’

4.2. Online Psychometric Exploration Study Results

Analyses are reported aggregating across the five sampling frame subsamples (the ‘Open’ sample, the ‘trainee’ sample, the ‘BACP’ therapist sample and the two ‘charity’ samples). 556 participants completed the whole demographics questionnaire and the Relational Depth Frequency Scale. 543 then proceeded to the WAI-SR. Out of these participants, 436 then completed the RDI. At last, 434 then completed the SCS-SF and finished the survey.

4.2.1. Reliability.

4.2.1.1. Reliability of other scales.

We conducted reliability analyses for the four other scales used in this study. The RDI showed excellent reliability with a Cronbach’s alpha of .95. For the SCF-SF, I
recoded the reverse items (1, 4, 8, 9, 11, and 12), the scale showed good reliability with a Cronbach’s alpha of .88. The WAI-SR therapist version also showed good reliability with a Cronbach’s alpha of .86 for the overall score, and .83 on the goal subscale. The task subscale had acceptable reliability (Cronbach’s alpha = .77) and the bond subscale showed poor reliability (Cronbach’s alpha = .56). The WAI-SR client version had excellent reliability (Cronbach’s alpha = .93), here the three subscales showed good reliability (Cronbach’s alpha > .80). Cronbach’s alphas, items means, variances, and 95% confidence intervals are summarized in Table 3.

Table 3. Summary of Other Scales’ Reliability

<table>
<thead>
<tr>
<th></th>
<th>N (items)</th>
<th>Cronbach’s alpha</th>
<th>95% CI lower bound</th>
<th>95% CI upper bound</th>
<th>N</th>
<th>Item Mean</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>WAI-SRt</td>
<td>10</td>
<td>.86</td>
<td>.84</td>
<td>.89</td>
<td>329</td>
<td>4.1</td>
<td>.86</td>
</tr>
<tr>
<td>goal</td>
<td>3</td>
<td>.83</td>
<td>.80</td>
<td>.86</td>
<td>329</td>
<td>3.8</td>
<td>1.1</td>
</tr>
<tr>
<td>task</td>
<td>3</td>
<td>.77</td>
<td>.72</td>
<td>.81</td>
<td>329</td>
<td>3.8</td>
<td>.93</td>
</tr>
<tr>
<td>bond</td>
<td>4</td>
<td>.56*</td>
<td>.50</td>
<td>.65</td>
<td>329</td>
<td>4.5*</td>
<td>.26*</td>
</tr>
<tr>
<td>WAI-SRc</td>
<td>12</td>
<td>.93</td>
<td>.91</td>
<td>.94</td>
<td>214</td>
<td>3.4</td>
<td>1.6</td>
</tr>
<tr>
<td>goal</td>
<td>4</td>
<td>.89</td>
<td>.86</td>
<td>.91</td>
<td>214</td>
<td>3.7</td>
<td>1.6</td>
</tr>
<tr>
<td>task</td>
<td>4</td>
<td>.83</td>
<td>.80</td>
<td>.87</td>
<td>214</td>
<td>3.4</td>
<td>1.4</td>
</tr>
<tr>
<td>bond</td>
<td>4</td>
<td>.82</td>
<td>.78</td>
<td>.86</td>
<td>214</td>
<td>3.1</td>
<td>1.9</td>
</tr>
<tr>
<td>RDI</td>
<td>26</td>
<td>.95</td>
<td>.94</td>
<td>.96</td>
<td>436</td>
<td>3.5</td>
<td>1.4</td>
</tr>
<tr>
<td>SCF-SF</td>
<td>12</td>
<td>.88</td>
<td>.86</td>
<td>.89</td>
<td>434</td>
<td>3.4</td>
<td>1.1</td>
</tr>
</tbody>
</table>

*Note was made about the lower reliability of the bond subscale of the WAI-SR therapist version, as well as the very high mean score of 4.5 and small variance of .26.

Overall all the scales showed acceptable internal consistency in our sample suggesting they could be used in the following steps of the validation of the RDFS.

4.2.1.2. Reliability of the Relational Depth Frequency Scale.

The RDFS is conceptualized as measuring a single experience, I ran a reliability analysis to test internal consistency for the 20 items of the scale and identify possible
inconsistent items in a sample of 556 therapist and client participants. Internal consistency was very high with a Cronbach’s alpha of .963, \( p < .001 \) with a 95% Confidence Interval ranging from .958 to .967. Table 4 (Appendix H) indicates that there would be a very slight drop in reliability if any item was deleted.

The item means ranged from 2.78 to 4.22 with a mean of 3.56. Items variance ranged from .89 to 1.5 with a mean of 1.14. These statistics show no evidence of floor of ceiling effects (See Table 5). Inter-item correlations ranged from .32 to .78 with mean .57. No pair of items was too highly correlated, nor were there negative correlations. Item characteristics are summarized in Table 5.

Table 5. RDFS Item Means, Standard Deviations, and Skewness

<table>
<thead>
<tr>
<th>Item</th>
<th>M</th>
<th>SD</th>
<th>Skewness</th>
</tr>
</thead>
<tbody>
<tr>
<td>RDFS16: I experienced a meeting that was beyond words</td>
<td>2.76</td>
<td>1.21</td>
<td>0.03</td>
</tr>
<tr>
<td>RDFS19: I felt we truly acknowledged each other at a very deep level</td>
<td>3.09</td>
<td>1.20</td>
<td>-0.20</td>
</tr>
<tr>
<td>RDFS18: I felt we were really close to each other</td>
<td>3.13</td>
<td>1.19</td>
<td>-0.35</td>
</tr>
<tr>
<td>RDFS05: We were deeply connected to one another</td>
<td>3.08</td>
<td>1.15</td>
<td>-0.26</td>
</tr>
<tr>
<td>RDFS15: I experienced a deep sense of encounter</td>
<td>3.25</td>
<td>1.13</td>
<td>-0.32</td>
</tr>
<tr>
<td>RDFS13: I felt we deeply trusted each other</td>
<td>3.76</td>
<td>1.12</td>
<td>-0.76</td>
</tr>
<tr>
<td>RDFS02: I experienced a very profound engagement with her/him</td>
<td>3.37</td>
<td>1.10</td>
<td>-0.49</td>
</tr>
<tr>
<td>RDFS17: I felt like we were totally in-the-moment together</td>
<td>3.21</td>
<td>1.09</td>
<td>-0.38</td>
</tr>
<tr>
<td>RDFS12: It felt like a shared experience</td>
<td>3.65</td>
<td>1.08</td>
<td>-0.62</td>
</tr>
<tr>
<td>RDFS01: I experienced an intense connection with him/her</td>
<td>3.37</td>
<td>1.08</td>
<td>-0.53</td>
</tr>
<tr>
<td>RDFS04: I experienced what felt like true mutuality</td>
<td>3.35</td>
<td>1.07</td>
<td>-0.36</td>
</tr>
<tr>
<td>RDFS20: I felt we were completely open with each other</td>
<td>3.59</td>
<td>1.06</td>
<td>-0.51</td>
</tr>
<tr>
<td>RDFS09: I felt intensely present with him/her</td>
<td>3.91</td>
<td>1.01</td>
<td>-0.96</td>
</tr>
<tr>
<td>RDFS11: There was a deep understanding between us</td>
<td>3.59</td>
<td>1.00</td>
<td>-0.44</td>
</tr>
<tr>
<td>RDFS08: I felt an overall warmth between us</td>
<td>4.14</td>
<td>0.97</td>
<td>-1.15</td>
</tr>
<tr>
<td>RDFS14: I felt we connected on a human level</td>
<td>4.22</td>
<td>0.97</td>
<td>-1.39</td>
</tr>
<tr>
<td>RDFS10: We were immersed in the present moment</td>
<td>3.65</td>
<td>0.96</td>
<td>-0.43</td>
</tr>
<tr>
<td>RDFS06: I felt we were accepting of one another</td>
<td>4.20</td>
<td>0.95</td>
<td>-1.29</td>
</tr>
<tr>
<td>RDFS03: I felt we were both completely genuine with each other</td>
<td>3.97</td>
<td>0.95</td>
<td>-0.87</td>
</tr>
<tr>
<td>RDFS07: I felt a clarity of perception between us</td>
<td>3.80</td>
<td>0.94</td>
<td>-0.77</td>
</tr>
</tbody>
</table>

Note: The Likert scale offered the frequency labels ‘not at all’ (1), ‘only occasionally’
(2), ‘sometimes’ (3), ‘often’ (4), ‘Most or all of the time’ (5). Highlighted items are the comfortableness items.

Overall, the high Cronbach’s alpha value indicates there is a lot of co-variance across the 20 items in this sample. The 95% confidence interval is very tight indicating that the large sample size has given a very precise estimate of the population value. However, this high co-variance needs not be unidimensional. Dimensionality is explored with exploratory factor analysis.

4.2.2. Exploratory Factor Analysis.

The Kaiser-Mayer-Olkin index (KMO) was .97 and the Bartlett test gave the chi-square (190) = 9026, and a significance of $p < .0005$, showing organized co-variance in the data as the very high Cronbach’s alpha value had already suggested. These values indicate that the data is suitable for a principal component analysis.

A first principal component analysis was conducted using an initial eigenvalue = 1 as a criterion of number of components to retain. This resulted in a two-component solution accounting for 66 % of the variance, with a strong first factor accounting for 59% of the variance. The scree plot of the eigenvalues, and their values, are reported in Table 6 (Appendix H). Results show a very nearly unidimensional scale. In this instance, Catell’s rule about the numbers of components in the data based on inspection of the scree plot (Appendix H) agrees with Kaiser’s rule of eigenvalues greater than one. Table 7 displays the principal component analysis item loadings (Appendix H).
<table>
<thead>
<tr>
<th>Item</th>
<th>Component 1</th>
<th>Component 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>RDFS11: There was a deep understanding between us</td>
<td>.85</td>
<td></td>
</tr>
<tr>
<td>RDFS19: I felt we truly acknowledged each other at a very deep level</td>
<td>.83</td>
<td>-.20</td>
</tr>
<tr>
<td>RDFS18: I felt we were really close to each other</td>
<td>.83</td>
<td>-.25</td>
</tr>
<tr>
<td>RDFS13: I felt we deeply trusted each other</td>
<td>.82</td>
<td>.25</td>
</tr>
<tr>
<td>RDFS17: I felt like we were totally in-the-moment together</td>
<td>.82</td>
<td>-.21</td>
</tr>
<tr>
<td>RDFS15: I experienced a deep sense of encounter</td>
<td>.81</td>
<td>-.31</td>
</tr>
<tr>
<td>RDFS05: We were deeply connected to one another</td>
<td>.81</td>
<td>-.27</td>
</tr>
<tr>
<td>RDFS12: It felt like a shared experience</td>
<td>.79</td>
<td></td>
</tr>
<tr>
<td>RDFS04: I experienced what felt like true mutuality</td>
<td>.79</td>
<td></td>
</tr>
<tr>
<td>RDFS14: I felt we connected on a human level</td>
<td>.78</td>
<td>.24</td>
</tr>
<tr>
<td>RDFS09: I felt intensely present with him/her</td>
<td>.77</td>
<td></td>
</tr>
<tr>
<td>RDFS02: I experienced a very profound engagement with her/him</td>
<td>.74</td>
<td>-.29</td>
</tr>
<tr>
<td>RDFS20: I felt we were completely open with each other</td>
<td>.73</td>
<td>.26</td>
</tr>
<tr>
<td>RDFS01: I experienced an intense connection with him/her</td>
<td>.73</td>
<td>-.31</td>
</tr>
<tr>
<td>RDFS08: I felt an overall warmth between us</td>
<td>.72</td>
<td>.19</td>
</tr>
<tr>
<td>RDFS07: I felt a clarity of perception between us</td>
<td>.72</td>
<td>.38</td>
</tr>
<tr>
<td>RDFS10: We were immersed in the present moment</td>
<td>.71</td>
<td></td>
</tr>
<tr>
<td>RDFS16: I experienced a meeting that was beyond words</td>
<td>.71</td>
<td>-.46</td>
</tr>
<tr>
<td>RDFS06: I felt we were accepting of one another</td>
<td>.68</td>
<td>.49</td>
</tr>
<tr>
<td>RDFS03: I felt we were both completely genuine with each other</td>
<td>.67</td>
<td>.37</td>
</tr>
</tbody>
</table>
Additionally, we conducted another principal component analysis using a varimax rotation with Kaiser normalization to explore the nature of the dimensionality (Table 8).

### Table 8. Component Matrix with Varimax Rotation

<table>
<thead>
<tr>
<th>Item</th>
<th>Component 1</th>
<th>Component 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>RDFS16: I experienced a meeting that was beyond words</td>
<td>.83</td>
<td>.16</td>
</tr>
<tr>
<td>RDFS15: I experienced a deep sense of encounter</td>
<td>.80</td>
<td>.34</td>
</tr>
<tr>
<td>RDFS18: I felt we were really close to each other</td>
<td>.77</td>
<td>.39</td>
</tr>
<tr>
<td>RDFS05: We were deeply connected to one another</td>
<td>.77</td>
<td>.36</td>
</tr>
<tr>
<td>RDFS01: I experienced an intense connection with him/her</td>
<td>.74</td>
<td>.28</td>
</tr>
<tr>
<td>RDFS19: I felt we truly acknowledged each other at a very deep level</td>
<td>.74</td>
<td>.43</td>
</tr>
<tr>
<td>RDFS02: I experienced a very profound engagement with her/him</td>
<td>.74</td>
<td>.31</td>
</tr>
<tr>
<td>RDFS17: I felt like we were totally in-the-moment together</td>
<td>.73</td>
<td>.41</td>
</tr>
<tr>
<td>RDFS06: I felt we were accepting of one another</td>
<td>.15</td>
<td>.83</td>
</tr>
<tr>
<td>RDFS07: I felt a clarity of perception between us</td>
<td>.26</td>
<td>.77</td>
</tr>
<tr>
<td>RDFS13: I felt we deeply trusted each other</td>
<td>.42</td>
<td>.75</td>
</tr>
<tr>
<td>RDFS03: I felt we were both completely genuine with each other</td>
<td>.23</td>
<td>.73</td>
</tr>
<tr>
<td>RDFS14: I felt we connected on a human level</td>
<td>.40</td>
<td>.71</td>
</tr>
<tr>
<td>RDFS20: I felt we were completely open with each other</td>
<td>.35</td>
<td>.69</td>
</tr>
<tr>
<td>RDFS08: I felt an overall warmth between us</td>
<td>.39</td>
<td>.64</td>
</tr>
<tr>
<td>RDFS11: There was a deep understanding between us</td>
<td>.57</td>
<td>.63</td>
</tr>
<tr>
<td>RDFS04: I experienced what felt like true mutuality</td>
<td>.51</td>
<td>.60</td>
</tr>
<tr>
<td>RDFS12: It felt like a shared experience</td>
<td>.53</td>
<td>.59</td>
</tr>
<tr>
<td>RDFS09: I felt intensely present with him/her</td>
<td>.54</td>
<td>.55</td>
</tr>
<tr>
<td>RDFS10: We were immersed in the present moment</td>
<td>.49</td>
<td>.52</td>
</tr>
</tbody>
</table>
Another principal component analysis with Oblimin rotation with Kaiser normalization was then used to explore the correlation between the two factors (Table 9). This analysis retrieved the same factor structure as with the orthogonal rotation in terms of allocation of items to components. The correlation between the two rotated components was .67.

Table 9. Pattern matrix with Oblimin Rotation

<table>
<thead>
<tr>
<th>Item</th>
<th>Component 1</th>
<th>Component 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>RDFS16: I experienced a meeting that was beyond words</td>
<td>.93</td>
<td></td>
</tr>
<tr>
<td>RDFS15: I experienced a deep sense of encounter</td>
<td>.86</td>
<td></td>
</tr>
<tr>
<td>RDFS01: I experienced an intense connection with him/her</td>
<td>.83</td>
<td></td>
</tr>
<tr>
<td>RDFS02: I experienced a very profound engagement with her/him</td>
<td>.80</td>
<td></td>
</tr>
<tr>
<td>RDFS05: We were deeply connected to one another</td>
<td>.80</td>
<td></td>
</tr>
<tr>
<td>RDFS18: I felt we were really close to each other</td>
<td>.77</td>
<td></td>
</tr>
<tr>
<td>RDFS19: I felt we truly acknowledged each other at a very deep level</td>
<td>.70</td>
<td></td>
</tr>
<tr>
<td>RDFS17: I felt like we were totally in-the-moment together</td>
<td>.66</td>
<td></td>
</tr>
<tr>
<td>RDFS06: I felt we were accepting of one another</td>
<td></td>
<td>.98</td>
</tr>
<tr>
<td>RDFS03: I felt we were both completely genuine with each other</td>
<td></td>
<td>.82</td>
</tr>
<tr>
<td>RDFS07: I felt a clarity of perception between us</td>
<td></td>
<td>.80</td>
</tr>
<tr>
<td>RDFS13: I felt we deeply trusted each other</td>
<td></td>
<td>.71</td>
</tr>
<tr>
<td>RDFS14: I felt we connected on a human level</td>
<td></td>
<td>.71</td>
</tr>
<tr>
<td>RDFS20: I felt we were completely open with each other</td>
<td></td>
<td>.70</td>
</tr>
<tr>
<td>RDFS08: I felt an overall warmth between us</td>
<td></td>
<td>.54</td>
</tr>
<tr>
<td>RDFS11: There was a deep understanding between us</td>
<td>.41</td>
<td>.51</td>
</tr>
<tr>
<td>RDFS04: I experienced what felt like true mutuality</td>
<td></td>
<td>.48</td>
</tr>
<tr>
<td>RDFS10: We were immersed in the present moment</td>
<td></td>
<td>.47</td>
</tr>
<tr>
<td>RDFS12: It felt like a shared experience</td>
<td></td>
<td>.47</td>
</tr>
<tr>
<td>RDFS09: I felt intensely present with him/her</td>
<td>.41</td>
<td>.42</td>
</tr>
</tbody>
</table>

In summary: both orthogonal and oblique rotations suggest two components.
with the same allocation of items to components. The high inter-component correlation in the oblique rotation suggests that these are correlated dimensions of variation. The size of the secondary loadings suggests that the items do not map completely purely to the dimensions, however the secondary loadings are not that high: only two above .4 in the oblique rotation. The two components may represent a ‘Moments of relational depth’ category and an ‘Enduring relational depth’ category (Table 11). These two categories were not clearly defined. They are explored further in the discussion section.

Table 11. ‘Moments’ and ‘Enduring relational depth’ Components

<table>
<thead>
<tr>
<th>Component 1: Moments of relational depth</th>
<th>Component 2: Enduring relational depth</th>
</tr>
</thead>
<tbody>
<tr>
<td>RDFS16: I experienced a meeting that was beyond words</td>
<td>RDFS06: I felt we were accepting of one another</td>
</tr>
<tr>
<td>RDFS15: I experienced a deep sense of encounter</td>
<td>RDFS07: I felt a clarity of perception between us</td>
</tr>
<tr>
<td>RDFS18: I felt we were really close to each other</td>
<td>RDFS13: I felt we deeply trusted each other</td>
</tr>
<tr>
<td>RDFS05: We were deeply connected to one another</td>
<td>RDFS14: I felt we connected on a human level</td>
</tr>
<tr>
<td>RDFS01: I experienced an intense connection with him/her</td>
<td>RDFS20: I felt we were completely open with each other</td>
</tr>
<tr>
<td>RDFS19: I felt we truly acknowledged each other at a very deep level</td>
<td>RDFS08: I felt an overall warmth between us</td>
</tr>
<tr>
<td>RDFS02: I experienced a very profound engagement with her/him</td>
<td>RDFS11: There was a deep understanding between us</td>
</tr>
<tr>
<td>RDFS17: I felt like we were totally in-the-moment together</td>
<td>RDFS04: I experienced what felt like true mutuality</td>
</tr>
<tr>
<td></td>
<td>RDFS12: It felt like a shared experience</td>
</tr>
<tr>
<td></td>
<td>RDFS09: I felt intensely present with him/her</td>
</tr>
<tr>
<td></td>
<td>RDFS10: We were immersed in the present moment</td>
</tr>
</tbody>
</table>
Both the reliability analysis and principal component analysis suggest that all items contribute to a meaningful relational depth frequency score in terms of reliability and that the variation is nearly, but not quite, unidimensional. The two subscales were labelled ‘Moments of relational depth’ (N = 556, M = 3.15, SD = .97) and ‘Enduring relational depth’ (N = 556, M = 3.82, SD = .79).

### 4.2.3. Construct Validity.

#### 4.2.3.1. Construct validity of the RDFS.

Construct validity was tested using two measures for convergent validity, and one measure for discriminant validity. Exploration of convergent validity was found using correlations of the RDFS and the RDI, and of the RDFS and the WAI-SR. Exploration of discriminant validity was done using a correlation between the RDFS and the SCS-SF. Spearman correlation coefficients with the 95% CI are reported in Table 12a.

<table>
<thead>
<tr>
<th></th>
<th>RDI</th>
<th>WAIt total</th>
<th>WAIt goals</th>
<th>WAIt tasks</th>
<th>WAIt bond</th>
<th>WAIts total</th>
<th>WAIts goals</th>
<th>WAIts tasks</th>
<th>WAIts bond</th>
<th>SCS-SF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spearman Rho</td>
<td>.68</td>
<td>.68</td>
<td>.77</td>
<td>.69</td>
<td>.41*</td>
<td>.52</td>
<td>.43</td>
<td>.46</td>
<td>.44</td>
<td>.17</td>
</tr>
<tr>
<td>95% CI upper bound</td>
<td>.73</td>
<td>.76</td>
<td>.84</td>
<td>.77</td>
<td>.52</td>
<td>.59</td>
<td>.33</td>
<td>.37</td>
<td>.35</td>
<td>.27</td>
</tr>
<tr>
<td>95% CI lower bound</td>
<td>.62</td>
<td>.57</td>
<td>.70</td>
<td>.59</td>
<td>.29</td>
<td>.44</td>
<td>.52</td>
<td>.52</td>
<td>.53</td>
<td>.07</td>
</tr>
<tr>
<td>N</td>
<td>436</td>
<td>214</td>
<td>214</td>
<td>214</td>
<td>214</td>
<td>329</td>
<td>329</td>
<td>329</td>
<td>329</td>
<td>434</td>
</tr>
<tr>
<td>P &lt;</td>
<td>.0005</td>
<td>.0005</td>
<td>.0005</td>
<td>.0005</td>
<td>.0005</td>
<td>.0005</td>
<td>.0005</td>
<td>.0005</td>
<td>.0005</td>
<td>.0005</td>
</tr>
</tbody>
</table>
As Table 12a shows, the convergent correlations were reassuringly strong and statistically significant (RDI, rho = .68, p < .0005; WAIc, rho = .68, p < .0005; WAIt, rho = .52, p < .0005), although the divergent correlation is statistically significant, it is much smaller (SCS-SF, rho = .17). The correlation does not embrace zero but is low enough to indicate acceptable discriminant validity.

4.2.3.2. Construct validity of the RDFS subscales.

The ‘Enduring relational depth component’ correlated highly with the ‘Moments of relational depth’ subscale (Spearman’s rho = .78). The construct validity for each subscale is reported in Table 12b and Table 12c.

Table 12b. Construct validity of the ‘Moments of relational depth’ subscale

<table>
<thead>
<tr>
<th></th>
<th>RDI</th>
<th>WAIc total</th>
<th>WAIc goals</th>
<th>WAIc tasks</th>
<th>WAIt total</th>
<th>WAIt goals</th>
<th>WAIt tasks</th>
<th>WAIt bond</th>
<th>SCS-SF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spearman Rho</td>
<td>.68</td>
<td>.61</td>
<td>.69</td>
<td>.63</td>
<td>.37</td>
<td>.39</td>
<td>.32</td>
<td>.34</td>
<td>.15</td>
</tr>
<tr>
<td>95% CI upper bound</td>
<td>.73</td>
<td>.71</td>
<td>.77</td>
<td>.72</td>
<td>.49</td>
<td>.48</td>
<td>.41</td>
<td>.44</td>
<td>.43</td>
</tr>
<tr>
<td>95% CI lower bound</td>
<td>.62</td>
<td>.50</td>
<td>.59</td>
<td>.52</td>
<td>.23</td>
<td>.29</td>
<td>.22</td>
<td>.25</td>
<td>.24</td>
</tr>
<tr>
<td>N</td>
<td>436</td>
<td>214</td>
<td>214</td>
<td>214</td>
<td>329</td>
<td>329</td>
<td>329</td>
<td>329</td>
<td>434</td>
</tr>
<tr>
<td>P &lt;</td>
<td>.0005</td>
<td>.0005</td>
<td>.0005</td>
<td>.0005</td>
<td>.0005</td>
<td>.0005</td>
<td>.0005</td>
<td>.0005</td>
<td>.001</td>
</tr>
</tbody>
</table>
### Table 12c. Construct validity of the ‘Enduring relational depth’ subscale

<table>
<thead>
<tr>
<th></th>
<th>RDI total</th>
<th>WAIC total</th>
<th>WAIC goals</th>
<th>WAIC tasks</th>
<th>WAIC bond</th>
<th>WAIt total</th>
<th>WAIt goals</th>
<th>WAIt tasks</th>
<th>WAIt bond</th>
<th>SCS-SF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spearman Rho</td>
<td>.61</td>
<td>.69</td>
<td>.79</td>
<td>.69</td>
<td>.42</td>
<td>.55</td>
<td>.46</td>
<td>.50</td>
<td>.46</td>
<td>.16</td>
</tr>
<tr>
<td>95% CI upper bound</td>
<td>.67</td>
<td>.77</td>
<td>.85</td>
<td>.77</td>
<td>.53</td>
<td>.68</td>
<td>.55</td>
<td>.58</td>
<td>.55</td>
<td>.26</td>
</tr>
<tr>
<td>95% CI lower bound</td>
<td>.54</td>
<td>.59</td>
<td>.71</td>
<td>.60</td>
<td>.29</td>
<td>.47</td>
<td>.37</td>
<td>.42</td>
<td>.36</td>
<td>.06</td>
</tr>
<tr>
<td>N</td>
<td>436</td>
<td>214</td>
<td>214</td>
<td>214</td>
<td>329</td>
<td>329</td>
<td>329</td>
<td>329</td>
<td>434</td>
<td></td>
</tr>
<tr>
<td>P</td>
<td>&lt; .0005</td>
<td>&lt; .0005</td>
<td>&lt; .0005</td>
<td>&lt; .0005</td>
<td>&lt; .0005</td>
<td>&lt; .0005</td>
<td>&lt; .0005</td>
<td>&lt; .0005</td>
<td>&lt; .0005</td>
<td>&lt; .001</td>
</tr>
</tbody>
</table>

Construct validity for each subscale was similar to the construct validity for the overall RDFS. As would be expected, the ‘Moments of relational depth’ subscale converged slightly more with the RDI (rho = .68 as opposed to rho = .61 for the ‘Enduring relational depth’ subscale), whereas the ‘Enduring relational depth’ subscale converged slightly more with the WAI-SR (e.g. WAI-SR client, rho = .69 as opposed to rho = .61 for the ‘Moments of relational depth’ subscale). All correlations were statistically significant (p < .0005); here the divergent correlations with the SCS-SF were also significant (p < .001) with rho = .15 for the ‘Moments of relational depth’ subscale and rho = .16 for the ‘Enduring relational depth’ subscale, which are also much smaller and indicate acceptable discriminant validity.
4.2.4. Associations in Demographic Variables.

4.2.4.1. Gender and Frequency of relational depth.

**RDFS scores and Gender**

The overall sample consisted of males and females, the options offered ‘other’ but no one who completed the questionnaire used it. Comparison of men ($n = 100$, $M = 3.54$, $SD = .70$) and women's scores ($n = 455$, $M = 3.56$, $SD = .84$) on the RDFS was non-significant, Mann-Whitney $U = 21506$, $p = .39$. The mean difference is .015 with a lower bound 95% CI of -.17 and upper bound of .14.

**Client scores depending on the gender of their therapist**

Once again all therapists described by client participants were either male or female. Comparison of clients' RDFS scores depending on whether they reported on a relationship with a male therapist ($n = 65$, $M = 3.19$, $SD = 1.07$) or on a relationship with a female therapist ($n = 154$, $M = 3.48$, $SD = 0.97$) showed no statistically significant difference, Mann-Whitney $U = 4262$, $p = .08$. The mean difference was .28 with a lower bound 95% CI of -.57 and upper bound of .008.

4.2.4.2. Therapeutic orientation and frequency of relational depth.

**Clients’ scores depending on their therapist's therapeutic orientation**

A Kruskal Wallis test was used. There was no statistically significant difference between clients' RDFS scores by reported orientation: Cognitive-behaviour therapy ($n = 22$, $M = 3.00$, $SD = 1.21$), Psychodynamic ($n = 29$, $M = 3.00$, $SD = 1.04$), Person-centred ($n = 38$, $M = 3.47$, $SD = 1.04$), Integrative ($n = 59$, $M = 3.60$, $SD = .86$), Psychoanalytic ($n = 22$, $M = 3.61$, $SD = 0.86$), unknown ($n = 13$, $M = 3.11$, $SD = 1.21$) and Other ($n = 37$, $M = 3.49$, $SD = .85$). Kruskal Wallis, Chi-square = 11.2, 6 df, $p = .08$ (Figure 3).
Figure 3. **Boxplots of Clients’ RDFS Scores Depending on Therapeutic Orientation**

Therapists’ scores according to their therapeutic orientation

Therapists were allowed to tick more than one therapeutic orientation. Thus I treated each therapeutic orientation as a separate dichotomy, hence the N values here can total up to more than the total sample size and no overall Kruskal-Wallis test can be done. Therapists’ mean scores based on therapeutic orientation ticked was as follows, Cognitive-behaviour therapy \( (n = 56, M = 3.61, SD = .66) \), Psychodynamic \( (n = 71, M = 3.52, SD = .70) \), Person-centred \( (n = 144, M = 3.67, SD = .66) \), Integrative \( (n = 367, M = 3.60, SD = .65) \), Psychoanalytic \( (n = 16, M = 3.11, SD = 0.74) \), Existential \( (n = 75, M = 3.65, SD = .60) \), Systemic \( (n = 14, M = 3.18, SD = .61) \) and Other \( (n = 54, M = 3.67, SD = .64) \).

4.2.4.3. **Duration of therapy and frequency of relational depth.**

Therapists’ scores depending on duration of therapy

The options allowed here included ordinal variables and ‘having finished therapy’. Kruskal Wallis test indicates that length of therapy is significantly associated
with therapists’ frequency of relational depth (Chi-square = 12.2, 3 df, \( p = .007 \)). The longer the therapy, the higher the frequency of relational depth: Therapists who had fewer than 6 sessions (\( n = 33, M = 3.28, SD = .68 \)), 6-24 sessions (\( n = 107, M = 3.64, SD = .64 \)), over 24 sessions (\( n = 133, M = 3.72, SD = .65 \)). Therapists who had finished therapy reported the highest frequency of relational depth (\( n = 63, M = 3.77, SD = .58 \)).

**Clients’ scores depending on duration of therapy.**

Therapy length was also a significant predictor of frequency of relational depth for clients (Kruskal Wallis Chi-square = 15.1, 3 df, \( p = .002 \)). Here, clients who had fewer than 6 sessions (\( n = 7, M = 3.41, SD = .78 \)) had higher frequency of relational depth than clients who had 6-24 sessions (\( n = 34, M = 3.24, SD = .89 \)). Clients who were still in therapy and had over 24 sessions (\( n = 80, M = 3.74, SD = .84 \)) had the highest frequency of relational depth. Clients who had finished a course of therapy reported the lowest frequency of relational depth (\( n = 99, M = 3.16, SD = 1.00 \)).

### 4.2.4.4. Therapists’ and clients’ frequency of relational depth.

**Therapist participants’ scores vs. client participants’ scores.**

Therapists’ frequency of relational depth (\( n = 336, M = 3.66, SD = .65 \)) was significantly higher than clients’ (\( n = 220, M = 3.39, SD = 1 \)). The mean difference was .27 and the 95% CI was lower bound .12 and upper bound .41 (Mann-Whitney \( U = 32350 \), \( p = .01 \)).

**Non-mental health professional clients vs. mental health professional clients’ scores.**

There was no significant difference between bona fide clients (\( n = 82, M = 3.32, SD = 1.17 \)) and clients who were mental health professionals (\( n = 138, M = 3.43, SD = .89 \)). Mann-Whitney \( U = 5504 \), \( p = .74 \).

### 4.2.4.5. Other associations with frequency of relational depth.

**Atheists vs. other spiritual or religious groups’ scores.**
There was no significant difference between atheists and other declarations of spiritual and religious beliefs; Mann-Whitney U = 23776, p = .085 (See Table 13).

Table 13. Descriptives of Religious Preference

<table>
<thead>
<tr>
<th>Q13 What is your religious preference?</th>
<th>Mean</th>
<th>N</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Christian</td>
<td>3.50</td>
<td>167</td>
<td>.88</td>
</tr>
<tr>
<td>Buddhist</td>
<td>3.76</td>
<td>37</td>
<td>.78</td>
</tr>
<tr>
<td>Hindu</td>
<td>3.22</td>
<td>3</td>
<td>.92</td>
</tr>
<tr>
<td>Jewish</td>
<td>3.54</td>
<td>10</td>
<td>.62</td>
</tr>
<tr>
<td>Muslim</td>
<td>3.49</td>
<td>4</td>
<td>.71</td>
</tr>
<tr>
<td>Sikh</td>
<td>3.55</td>
<td>1</td>
<td>.</td>
</tr>
<tr>
<td>Spiritual</td>
<td>3.75</td>
<td>106</td>
<td>.79</td>
</tr>
<tr>
<td>Agnostic</td>
<td>3.52</td>
<td>98</td>
<td>.79</td>
</tr>
<tr>
<td>Atheist</td>
<td>3.48</td>
<td>122</td>
<td>.73</td>
</tr>
</tbody>
</table>

Trainees vs. Qualified practitioners’ scores

Qualified practitioners (n = 278, M = 3.71, SD = .62) showed a significantly higher frequency of relational depth than trainees who participated as therapists (n = 57, M = 3.42, SD = .75). Mann-Whitney U = 6315, p = .016.

Practitioner’s experience

There was no significant difference between the numbers of years in practice (less than one year, one to five years, five to ten years, ten to twenty years and over twenty years) in relational depth frequency; Kruskal Wallis, Chi-square = 3.14, 4df, p = .53.
Table 14. Descriptives of Practitioners’ Experience

<table>
<thead>
<tr>
<th>Q30 How many years post qualification have you been practicing?</th>
<th>Mean</th>
<th>N</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>less than a year</td>
<td>3.65</td>
<td>24</td>
<td>.70</td>
</tr>
<tr>
<td>1-5 years</td>
<td>3.63</td>
<td>94</td>
<td>.61</td>
</tr>
<tr>
<td>5-10 years</td>
<td>3.75</td>
<td>68</td>
<td>.60</td>
</tr>
<tr>
<td>10-20 years</td>
<td>3.77</td>
<td>59</td>
<td>.57</td>
</tr>
<tr>
<td>over 20 years</td>
<td>3.82</td>
<td>33</td>
<td>.69</td>
</tr>
</tbody>
</table>

4.3. Post-Hoc Analysis

4.3.1. Descriptive Check on the Robustness of Psychometric Findings.

4.3.1.1. Reliability of the RDFS in six samples.

In order to check the robustness of the scale, I conducted reliability analyses in six sub-samples: males therapists, female therapists, male clients (mental health professionals), female clients (mental health professionals), male clients (laypeople), female clients (laypeople). Table 15 summarizes the reliability of the RDFS across the six sub-samples.

Table 15. Reliability of the RDFS in Six Samples

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Cronbach’s alpha</th>
<th>95% CI lower bound</th>
<th>95% CI upper bound</th>
<th>Item Mean</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male therapists</td>
<td>62</td>
<td>.93</td>
<td>.91</td>
<td>.95</td>
<td>3.56</td>
<td>.14</td>
</tr>
<tr>
<td>Female therapists</td>
<td>334</td>
<td>.95</td>
<td>.94</td>
<td>.95</td>
<td>3.69</td>
<td>.18</td>
</tr>
<tr>
<td>Male clients (mental health professionals)</td>
<td>27</td>
<td>.97</td>
<td>.95</td>
<td>.98</td>
<td>3.46</td>
<td>.18</td>
</tr>
<tr>
<td>Female clients (mental health professionals)</td>
<td>111</td>
<td>.97</td>
<td>.96</td>
<td>.98</td>
<td>3.43</td>
<td>.18</td>
</tr>
<tr>
<td>Male clients (laypeople)</td>
<td>11</td>
<td>.97</td>
<td>.94</td>
<td>.99</td>
<td>3.67</td>
<td>.17</td>
</tr>
<tr>
<td>Female clients (laypeople)</td>
<td>70</td>
<td>.98</td>
<td>.97</td>
<td>.99</td>
<td>3.27</td>
<td>.16</td>
</tr>
</tbody>
</table>
4.3.1.2. *Construct validity in six samples.*

Similarly I conducted an analysis of convergent validity with the RDI across the six sub-samples. Statistics are summarized in Table 16.

Table 16. *Convergent validity in six samples*

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Spearman’s Rho</th>
<th>95% CI lower bound</th>
<th>95% CI upper bound</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male therapists</td>
<td>47</td>
<td>.55</td>
<td>.29</td>
<td>.75</td>
<td>&lt; .0005</td>
</tr>
<tr>
<td>Female therapists</td>
<td>212</td>
<td>.59</td>
<td>.50</td>
<td>.67</td>
<td>&lt; .0005</td>
</tr>
<tr>
<td>Male clients</td>
<td>22</td>
<td>.67</td>
<td>.35</td>
<td>.86</td>
<td>= .001</td>
</tr>
<tr>
<td>(mental health</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>professionals)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female clients</td>
<td>97</td>
<td>.77</td>
<td>.64</td>
<td>.86</td>
<td>&lt; .0005</td>
</tr>
<tr>
<td>(mental health</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>professionals)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male clients</td>
<td>7</td>
<td>.88</td>
<td>.4</td>
<td>1</td>
<td>= .008</td>
</tr>
<tr>
<td>(laypeople)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female clients</td>
<td>51</td>
<td>.83</td>
<td>.67</td>
<td>.92</td>
<td>&lt; .0005</td>
</tr>
<tr>
<td>(laypeople)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.3.1.3. *Another test of discriminant validity: RDFS and age.*

As we do not expect a strong correlation between age and relational depth frequency, the age variable can be used as an additional measure of divergent validity (additional to the SCS-SF). Age showed a small positive correlation with RDFS scores suggesting that older participants had slightly higher scored of relational depth frequency (See Figure 4: N = 556, rho = .16, p < .0005).
4.3.2. Post-hoc Associations.

4.3.2.1. Clients in person-centred therapy.

After looking at the mean scores for clients in different modalities, and also as a reference to the literature where relational depth emerges from the person-centred modality, I decided to conduct a post-hoc analysis to identify differences between the person-centred model and other modalities.
<table>
<thead>
<tr>
<th></th>
<th>Statistic</th>
<th>95% Confidence Interval</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Lower</td>
<td>Upper</td>
</tr>
<tr>
<td><strong>Mental health</strong> professional clients</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td>3.35</td>
<td>3.17</td>
<td>3.52</td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>114</td>
<td>105</td>
<td>122</td>
</tr>
<tr>
<td><strong>SD</strong></td>
<td>0.91</td>
<td>0.81</td>
<td>1.01</td>
</tr>
<tr>
<td><strong>Person-centred</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td>3.83</td>
<td>3.58</td>
<td>4.07</td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>24</td>
<td>16</td>
<td>33</td>
</tr>
<tr>
<td><strong>SD</strong></td>
<td>0.66</td>
<td>0.40</td>
<td>0.84</td>
</tr>
<tr>
<td><strong>Non-mental health</strong> professional clients</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td>3.42</td>
<td>3.16</td>
<td>3.69</td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>68</td>
<td>61</td>
<td>74</td>
</tr>
<tr>
<td><strong>SD</strong></td>
<td>1.13</td>
<td>0.97</td>
<td>1.25</td>
</tr>
<tr>
<td><strong>Person-centred</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td>2.80</td>
<td>2.12</td>
<td>3.50</td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>13</td>
<td>7</td>
<td>20</td>
</tr>
<tr>
<td><strong>Std. Deviation</strong></td>
<td>1.32</td>
<td>0.94</td>
<td>1.52</td>
</tr>
</tbody>
</table>

Mental health professionals participating as clients scored significantly higher on relational depth frequency when reporting on a relationship with a person-centred therapist (Mann-Whitney U= 928.5, \( p = .01 \)).

On the other hand, clients who were non-mental health professionals showed the opposite trend, and appear to score lower on relational depth frequency when reporting on a relationship with a person-centred therapist as opposed to clients reporting on a relationship with a therapist in other modalities. However this association was not statistically significant (Mann-Whitney U = 312.5, \( p = .096 \)).
Table 18. Descriptives of Laypeople clients According to Orientation

<table>
<thead>
<tr>
<th>Question</th>
<th>Mean</th>
<th>N</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q24 To the best of your knowledge, what is the therapeutic orientation of your therapist?</td>
<td>Mean</td>
<td>N</td>
<td>SD</td>
</tr>
<tr>
<td>Cognitive-behavioural</td>
<td>3.12</td>
<td>17</td>
<td>1.23</td>
</tr>
<tr>
<td>Psychodynamic</td>
<td>3.14</td>
<td>9</td>
<td>.95</td>
</tr>
<tr>
<td>Person-centred</td>
<td>2.83</td>
<td>14</td>
<td>1.28</td>
</tr>
<tr>
<td>Integrative</td>
<td>3.46</td>
<td>15</td>
<td>1.24</td>
</tr>
<tr>
<td>Psychoanalytic</td>
<td>4.27</td>
<td>6</td>
<td>.39</td>
</tr>
<tr>
<td>I don't know</td>
<td>3.25</td>
<td>11</td>
<td>1.28</td>
</tr>
<tr>
<td>Other- please specify</td>
<td>3.80</td>
<td>10</td>
<td>.89</td>
</tr>
</tbody>
</table>

4.3.2.2. Therapists who included the person-centred model.

There was no significant difference in RDFS scores between therapists who had included the person-centred model as one of their orientations \( n = 144, M = 3.67, SD = .66 \) vs. those who had not \( n = 192, M = 3.66, SD = .65 \). Mann-Whitney U = 13560, \( p = .76 \)

4.3.2.3. ‘Spiritual’ and ‘atheist’.

At last, independently of other religious affiliations, participants who selected ‘spiritual’ \( n = 106, M = 3.75, SD = .79 \) as opposed to those who selected ‘atheist’ \( n = 122, M = 3.48, SD = .73 \) had significantly higher scores of frequency of relational depth (Mann-Whitney U = 4920, \( p = .002 \)).
In this section findings are reviewed and interpreted first in a summary of the main findings in answer to the research questions. Then the RDFS psychometrics are compared to other related scales and specifically to the RDI. The frequency of relational depth is described and demographics associations are reviewed in the light of previous findings, where the question of a difference between therapists and clients in their frequency of relational depth is addressed. Two components have emerged from the analysis and open exploration avenues. Finally limitations of this study are reviewed, possibilities for further research, and implications for practice are suggested.

5.1. Summary of Findings

5.1.1. Content Validity.

The process of item creation, selection and interviews served to ensure the scale had content and face validity. After a pool of 128 items was created, a group of seven experts rated the items in terms of their suitability to the Relational Depth Frequency Scale. Items were removed to suit the scale just below moderately. This left a scale with 36 items.

Three step test interviews served to uncover potential problems in the scale based on observational data and semi-structured interviews. Some problems were
identified in the scale structure, pattern of responses and content of the items. Changes were made to correct structural problems. Some of the items were potentially problematic according to four themes including ‘repetition’, ‘double-barrelled’, ‘confusion’ and ‘comfortableness’. We removed items accordingly to ensure that the scale had adequate content and face validity. As a result, there were 20 items at the start of the psychometric study. Furthermore, while interviews had a clear purpose in terms of item refinement and identifying structural and content problems, they also revealed a wealth of impressions and complexity in participants’ reactions that we would expect are characteristic of experiences of relational depth.

5.1.2. Reliability.

Reliability of the RDFS was established using Cronbach’s alpha. The scale had high internal consistency with a Cronbach’s alpha of .96 in a sample of 556 therapists and clients. All the items contributed to internal consistency across the whole sample. None of the items could be considered duplicate or too similar. Furthermore, none of the items were too easy or too difficult to answer.

5.1.3. Dimensionality.

The scale had a strong first factor, which accounted for 59% of the variance suggesting relational depth can be understood as a single construct. In addition, the orthogonal and oblique rotations of the data revealed that relational depth comprises two dimensions, which are highly correlated ($r = .67$). The two dimensions were not entirely clearly defined but were in line with previous theory of relational depth and were labelled: ‘Moments of relational depth’ and ‘Enduring relational depth’ (Mearns & Cooper, 2005). The bi-dimensionality of relational depth is explored further in the discussion.
5.1.4. Construct Validity.

The scale showed good construct validity, which was tested with measures of convergent and divergent validity. The Relational Depth Frequency Scale showed good convergent validity with both the Relational Depth Inventory (rho = .68) and the two versions of the WAI-SR: the WAI-SR therapist version (rho = .52) and the WAI-SR client version (rho = .68), suggesting the RDFS is related to these constructs but not the same. It also had acceptable divergent validity where scores were compared to scores of self-compassion (rho = .17). This small correlation was significant. This went against our expectations that RDFS and Self-compassion are divergent constructs. The significance is in part due to the large sample size. One possible interpretation of this result is that a ‘successful’ therapy, which may be characterized by relational depth would also be associated with more self-compassion. Despite the significance of this association, the correlation is much lower than the prior therapeutic relationship constructs. The result can be taken as acceptable to measure divergent validity.

The two subscales of relational depth also showed good construct validity. The ‘Moments of relational depth’ subscale showed good convergent validity with both the Relational Depth Inventory (rho = .68) and the WAI-SR client version (rho = .61), and adequate convergent validity with the WAI-SR therapist version (rho = .39). The subscale also had acceptable divergent validity with the Self-compassion scale (rho = 15). Similarly, the ‘Enduring relational depth’ subscale showed good convergent validity with the RDI (rho = .61), the client version of the WAI-SR (rho = .69), and the therapist version of the WAI-SR (rho = .55). The subscale had acceptable divergent validity with the Self-compassion scale (rho = .16).

5.1.5. Associations in Demographic Variables.

There was no significant difference between male and female frequency of relational depth. There was no significant difference between clients’ frequency of
relational depth depending on the gender of their therapist. There was no significant difference between therapy modalities for clients. Therapists experienced significantly higher frequency of relational depth than clients. There was no difference between the various spiritual and religious groups. There was no difference between mental health professional clients and non-mental health professional clients. Duration of therapy was significantly associated with frequency of relational depth in therapists and clients, in different ways. These associations and other post-hoc associations are further explored in the light of the literature.

5.1.6. Post-hoc Analyses.

Additionally, I conducted post hoc analyses to explore the scale robustness and further demographics associations. The robustness of the Relational Depth Frequency Scale was assessed with reliability and validity analyses in six sub-samples. Internal consistency was the highest in the non-mental health professional female client sub-sample (Cronbach’s alpha = .98). Internal consistency was also very high in the non-mental health professional male client, the mental health professional female client and the mental health professional male client sub-samples (Cronbach’s alpha = .97). Internal consistency dropped slightly in therapist sub-samples: the female therapist sub-sample had an internal consistency of .95, while the male therapist sub-sample had an internal consistency of .93. These numbers still reflect excellent internal consistency across the six sub-samples.

I then followed the same procedure for convergent validity with the relational depth inventory. This time, convergent validity was the highest for the non-mental health professional male clients (rho = .88), meaning in this sample the two scales are highly correlated and assess two very similar construct. Convergent validity was also very high in the non-mental health professional female client sub-sample (rho = .83); similarly it was high in the mental health professional female sub-sample (rho = .77)
and in the mental health professional male client sub-sample (rho = .67). Convergent validity with the RDI was slightly lower but still relatively high in the female therapist sub-sample (rho = .59) and the male therapist sub-sample (rho = .55).

A comparison with age offered another measure of divergent validity as a post-hoc analysis. The association was also small and acceptable for divergent validity (rho = .16) but showed that older participants did tend to have slightly higher frequency of relational depth. This small trend is not surprising if we consider therapists are also on a path of growth, and thus likely to become more congruent with age.

Overall it would appear that while reliability and convergent validity are good, they are slightly lower in therapist sub-samples than in client sub-samples. It is possible that for clients reporting on a single moment characterised with relational depth is associated with higher relational depth frequency over the course of therapy than for therapists. As this association appears to be the highest in the non-mental health professional client sub-sample, it is also possible that mental health professionals and mostly therapists tend to discriminate more than non-mental health professionals, probably due to their more specialized knowledge of therapy.

Post-hoc demographics associations showed that clients who were also mental health professionals had significantly higher frequency of relational depth when they reported on a relationship with a person-centred therapist when compared to clients who were in other therapies. At last, participants who self-identified as ‘spiritual’, experienced higher frequency of relational depth than ‘atheists’.

5.2. Comparison of the Relational Depth Frequency Scale

Psychometrics to Related Measures

The RDFS showed good psychometric properties. The reliability of the RDFS was higher than the reliability of scales measuring similar constructs. In our sample, it
had a reliability of .96, while the therapist version of the WAI-SR had a reliability of .86, and the client version had a reliability of .93, the RDI had a reliability of .95. The psychometrics and methods used in the development of the RDFS are compared to two related measures.

5.2.1. The Relational Depth Frequency Scale and Therapeutic Presence Inventory.

The Therapeutic Presence Inventory (TPI), developed by Geller, Greenberg and Watson (2010), is a comparable measure to the RDFS investigating an aspect of the Rogerian relationship and using similar methods. The inventory is a self-report measure of in-session process and experience of therapeutic presence, based on a 7-point Likert scale. It had a reliability of .94 in a client sample and .88 in a therapist sample of 358. This difference in reliability in therapist and client sub-samples is comparable to our findings where the reliability of the RDFS was slightly lower in therapist sub-samples than in client sub-samples. Like the RDFS, the construct validity was established through item reduction and convergent validity with a measure of the therapeutic relationship (the BLRI). The item pool was reduced from 31 items to 21 as rated by 9 expert therapists, as opposed to 128 items to 20 as rated by 7 expert therapists and refined through interviews with clients and therapists. Convergent validity of the TPI was .59 with the empathy subscale, .41 with the congruence subscale, .34 with the level of regard subscale, and .20 with the unconditionality subscale. This convergence is lower than the RDFS had with the RDI (rho = .68), but the convergence of the TPI and empathy subscale is higher than the convergence of the RDFS with the therapist version of the WAI-SR (rho = .52). As opposed to the RDFS, there was no evidence of divergent validity for this measure, and no evidence of content validity from a client’s perspective. Therapists and clients’ scores on their respective TPI versions showed a small correlation of .20. The TPI was considered unidimensional with a single factor
structure supporting the validity of the construct of therapeutic presence, this factor accounted for 50.01% of the variance, this is less than the first factor found for the RDFS which accounted for 58.98% of the variance. This suggests the RDFS could be considered a psychometrically unidimensional construct. This comparison supports that the RDFS can be considered a reliable and valid measure of relational depth frequency. It may be possible to use these two measures in future research as measures of convergent validity.

5.2.2. The Relational Depth Frequency Scale and Relational Depth Inventory.

Conceptually, the RDI is the closest measure to the RDFS. The main difference between these measures is one of focus. The RDI is focused on assessing relational depth in a moment, while the RDFS is focused on assessing relational depth over the course of therapy. In their developments of the RDI, Wiggins, Eliott and Cooper (2012) found a reliability of .93. They found a convergent validity of .34 with the WAI-SR, which is similar to the convergent validity of the RDFS and WAI-SR. In this version of the RDI, two factors were extracted both accounting for 47 % of the variance, which were labelled: ‘therapist genuineness’ and ‘transcendence’. This suggested that the RDI does not measure a unidimensional construct.

Both measures have advantages and limitations and could offer a different perspective on relational depth. The advantages of the RDI are that it may be easier for participants to recall phenomenological experience if they have identified a single event in therapy. Furthermore, there is a possibility that presence of relational depth in a single event could reflect a stance or an ability to experience relational depth altogether, this seemed to be likely for non-mental health professional clients for whom correlations of the RDFS and RDI were above .80.

One disadvantage of the RDI is that the dimensions it measures were not clearly
supported by theory or clearly defined as suggested by its factor structure and its range of items. Another disadvantage revealed in our survey was that it may increase participant dropout, as the highest participant dropout occurred when they reached the RDI in our online survey. We infer that this is because the questionnaire requires a text entry of a significant event, which is more time-consuming for participants. While allowing the entry of qualitative data brings richer results, it may be less practical for large-scale studies such as outcome studies. Finally, one disadvantage with the RDI is that by focusing on a specific moment it may not inform about the overall levels of relational depth, although unlikely, it is possible that someone could have a very deep moment of connection that may not extend beyond this moment even within a single session. The opposite problem may also be true: participants are free to choose any moment that is significant to them and may choose a moment that is unrelated to relational depth, yet they may still have experienced relational depth in other moments.

The RDFS, on the other hand, assesses relational depth in the relationship over the course of therapy. The advantage of the RDFS is that it has fewer items and is easier to complete for participants. Despite less rich data, it enables the creation of associations with variables and lends itself to large-scale studies. Furthermore, the dimensions found in the RDFS may be more representative of the construct of relational depth as a single variable with two related aspects to it.

One drawback may be a lack of meaning in the RDFS frequency labels, as it may be difficult for participants to quantify the number of relational depth moments they had over the course of therapy. Thus, it would seem that both scales used in combination could offer richer information on relational depth, including the nature of moments and how the experience of a single moment relates to the depth of the overall relationship. Also the RDI, despite not giving an average of relational depth in the session, may be most useful as a measure of relational depth after each session to rate the presence of relational depth reached in a significant moment in that session, while
the RDFS may be most useful after therapy has ended or at different stages in therapy to measure the frequency of relational depth over a longer period of time.

5.3. Frequency of Relational Depth and Demographic Associations in the Light of Pre-Existing Findings

Leaving aside the potential difficulty to ascribe a clear meaning to frequency labels, in this study they were as follows (1) ‘not at all’, (2) ‘only occasionally’, (3) ‘sometimes’, (4) ‘often’, (5) ‘most or all of the time’. Overall, the average frequency of relational depth across all 556 participants over the course of therapy fell between ‘sometimes’ and ‘often’, and ranged from ‘only occasionally’ to ‘often’. Similarly, Leung (2008) had found clients and therapists rated the frequency of moments of relational depth at the mid-range of his 7-point Likert scale, around ‘sometimes’. Wiggins, Eliott, and Cooper (2012) found that relational depth was present in 8% of significant events, which would be rarer; however these significant events were selected randomly.

5.3.1. Therapists vs Clients.

5.3.1.1. Difference in overall frequency of relational depth.

First, therapists experienced higher frequency of relational depth than clients did. Therapists reported a frequency closer to ‘often’, while clients were closer to ‘sometimes’. This is similar to prior findings by Wiggins (2010) where she found that therapists score higher on the RDI than clients, however in this study therapists and clients did not differ on the dichotomized relational depth index, this potentially suggested that the difference between clients and therapists in terms of relational depth
presence may be related to intensity of the experience as opposed to presence and absence.

Our results of varying frequency could be due to therapists having various relationships to choose from and selecting a significant one for the purpose of the questionnaire, whereas clients would have fewer or in many cases only a single one. In effect, it is likely that therapists would choose to reflect on a relationship that is more significant to them and where they may have experienced more relational depth. Another interpretation of this result has to do with a desirability bias, which is likely to be higher in therapists who have a desire to show their positive attributes and emphasise the quality of the therapeutic relationship, which they know is central to their work; therapists would generally want to be positive about their work.

Despite these, there is also a possibility that therapists do experience relational depth more often than clients. In effect, we know from the literature that therapists and clients due to their respective roles in the therapeutic relationship experience relational depth somewhat differently (Knox, 2008; McMillian & McLeod, 2006). Here results suggest that in some instances, the experience of relational depth may not be shared by therapist and client. This may raise a question around congruence as in this instance therapist and client congruence may not match. This is in line with Rogers’s original theory, where the therapist is seen as the one who is congruent, while the client is in a state of incongruence (Rogers, 1961).

Additionally, one factor contributing to this difference could be linked to the role differential in the therapeutic relationship. It is possible that the therapist who is in the role of the healer would be more able to trust her inner resources and recognise experiences of relational depth. In addition, Rogers (1957) (cited in Anderson & Cissna, 1997) in a dialogue with Buber referred to power differential as always present, yet he also suggested that when a relationship is experienced from ‘the inside’ client and therapist could experience a mutual encounter. The role of the therapist would make it
safer for them to trust their experience and acknowledge an encounter at relational depth. For clients, on the other hand, the role of the therapist could convey an external position of power, which may potentially make it riskier to acknowledge a mutual encounter. As in McMillian and McLeod (2006) and Knox (2008), it is likely that experiences of relational depth vary slightly due to respective roles of the client and therapist. The present study also suggests that they may vary in intensity and that therapists could be better able to recognise their experiences of relational depth.

5.3.1.2. Differences in experience: goals, tasks and bond.

Correlations between the WAI-SR subscales and the RDFS scores also showed differences between therapists and clients. While for therapists the three subscales of goals, tasks and bond showed a moderate correlation, clients’ relational depth frequency was highly correlated with goals and tasks, and only moderately with bond (Hatcher and Gillapsy, 2006). At first, this result appeared surprising because on the face of the labels, bond would seem more closely related to RDFS than the goal and task subscales. However after looking more closely at the items, the goal and task subscale items appear to emphasise mutuality, and outcome, whereas bond appears to be about ‘liking’, which is perhaps more different from the relational depth variable. Hatcher and Gillapsy (2006) also emphasized that the items they had selected from the original WAI included only the goal items that involved mutual participation of client and therapist. This aspect of perceived mutuality may be what stands out as a common thread between RDFS and the goal subscale. Yet this does not explain the difference between therapists and clients in terms of the correlations of the task and goal subscales with RDFS scores.

It would seem that for therapists, goals, tasks and bond are all equally as important for them to experience relational depth in therapy, whereas for clients goals and tasks are more important for the frequency of their experiences of relational depth. Therefore, it may be important to emphasize that a depth of connection is more likely to
happen for clients when they feel their therapist hears them, not only on a personal level but also when working on mutually agreed goals and tasks. Having shared goals and collaborating on tasks may be a way for clients to feel heard and create relational depth beyond just ‘liking’ or ‘being liked’ by their therapist. This finding also points towards an incongruence in the therapeutic work, in that therapists may want to emphasize bond or expect a depth of connection by simply ‘being with’ their clients, whereas clients experience more of a depth of connection when they perceive a therapist as being involved and attuned to them in trying to help them achieve their goals. The emphasis on goals and tasks is reflected in Tangen and Cashwell’s (2016) study where they proposed that relational depth is grounded in structure and techniques as opposed to solely an elusive numinous encounter. Interestingly, this may also take us back to the debate on whether the Rogerian (1961) conditions are indeed sufficient for therapeutic change. According to these findings, we could infer that, potentially, therapists tend to view or experience the core conditions as more sufficient than clients do if relational depth is a form of psychological growth.

5.3.1.3. Duration of therapy.

Duration of therapy was a significant predictor of relational depth frequency in both therapists and clients. Wiggins (2010) had not found a significant effect of duration of therapy using the RDI, however she based her analysis on clients and therapists as a single sample, the same grouping in our analysis was non-significant as well. This is because, unexpectedly, clients and therapists show opposing trends in their frequency of relational depth depending on duration of therapy.

For therapists, the longer the therapy, the higher frequency of relational depth. Therapists who had fewer than six sessions had experienced relational depth only ‘sometimes’, the frequency grew consistently over the number of sessions and they reported having experienced it ‘often’ when therapy had ended. This finding potentially informs about an evolution of the frequency of relational depth moments over
chronological time and agrees with a hypothesis that one can enter into an enduring relationship characterised with relational depth (Mearns & Cooper, 2005). Therapists who had chosen a relationship with a client that had ended and referred to the past reported the highest frequency of relational depth. This latter point may be, in part, because therapists selected a relationship with a client that overall stood out for them, and which remained significant after it had ended.

Clients showed a different trend that was also significant. Clients who were in the first six sessions reported experiencing relational depth significantly more often than clients in their 6th to 24th sessions, clients who were in a course of therapy over 24 sessions had the highest frequency of relational depth and reported experiencing it near ‘often’. On the other hand clients who had finished a course of therapy, although we do not know how long it lasted, had the lowest frequency of relational depth scoring around ‘sometimes’. The high frequency of relational depth in the first six sessions may be linked to the intensity of a new relationship being created; for clients this could be one of the first healing relationships. Furthermore, the therapeutic setting is intense and unusual for clients who may be experiencing it for the first time as opposed to their therapists who are used to forming new therapeutic relationships. The beginning of the relationship may be a testing time characterised by alliance ruptures and repairs leading to the possibility of a relationship (Safran, Muran, Eubanks-Carter, 2011).

With more sessions, clients are likely to have settled into the relationship, hence why they experience lower levels of relational depth, at this stage they may be confronted with disappointments when realising their therapist is a human being with flaws, or face more of a realistic understanding of what can be expected from therapy.

When a relationship goes beyond 24 sessions, relational depth frequency is at its highest. Potentially, the existing depth of the relationship could have kept clients in therapy up to this point. Alternatively, it is possible that for clients, having over 24 sessions is more conducive to relational depth experience, and may be a threshold to
forming more of an enduring relationship in which they are able to ‘let go’. Finally, clients who remembered a therapy they had in the past reported the lowest frequency of relational depth. Here clients may not have had a choice of a relationship to pick from as they may have had only one therapy, hence the lower scores. This result could also suggest that for clients, the memory of relational depth, and therapeutic relationship fades with time. In order for these findings to be more conclusive, they would need to be tested by administering the RDFS at different stages of therapy.

5.3.2. Non-Mental Health Professional Clients (Laypeople).

The two samples of client participants, those who were mental health professionals and those who were laypeople, reported very similar frequency of relational depth: a little more than ‘sometimes’. Apart from the qualitative research by Knox (2008) there has been little research looking at relational depth in clients who are not affiliated with the mental health profession. While many users of therapy are also mental health professionals (Orlinsky & Ronnestad, 2005), making the overall sample mostly representative of clients and therapists, laypeople clients are a population of specific interest because they are likely to experience therapy in a different way. There is particular interest for relational depth because such experience could be the result of a bias where therapists already put an emphasis on the relationship and may desire to perceive it as more meaningful than it actually is. This research suggests there are no differences in the frequency of relational depth in clients who are affiliated to the mental health professions and those who are non-affiliated.

Some of the qualitative research on relational depth focused on clients who were mental health professionals and one of the reasoning behind this was that it enabled them to extract richer data because mental health professionals had means of expression and vocabulary to reflect on such experiences (McMillian & McLeod, 2006). This premise was confirmed in this study as non-mental health professional clients were
found to be less likely to discriminate on the different relationship measures as shown with higher associations between the RDFS and other relationship measures, as well as the RDFS items themselves as shown with higher internal consistency than other participant samples.

Knox (2008) found in her qualitative study that mental health professional clients seemed to report more relational depth than laypeople. The current finding challenges this previous finding. Also, it potentially suggests that the use of a scale may in fact be positive where clients who are laypeople may in some cases not have the words to express relational depth experiences, yet they could relate to such experience when filling out the Relational Depth Frequency Scale. Perhaps counter-intuitively, because a scale is usually seen as reductionist, here it could have been giving a voice to clients and their experience.

5.3.3. Gender.

The average frequency of relational depth for both male and female participants overall was between ‘sometimes’ and ‘often’. Prior findings on relational depth have shown a slight gender effect where females were more likely to rate relational depth experiences higher than males (Wiggins, 2010). More specifically, this was the case using relational depth presence ratings but not when assessed with the RDI. Leung (2008) in his online study found no significant difference between females’ and males’ frequency of relational depth. In this study, female participants and male participants had very similar scores of frequency of relational depth. In our methods, self-selection and the male sample size being much smaller may have slightly affected this result, and we can expect that males who self-selected to participate in a study on the quality of the therapeutic relationship may be more open to experiences of relational depth.

Additionally, gender of therapist was not a moderator of relational depth frequency. Clients who had female therapists had slightly higher relational depth
frequency than clients who had male therapists but these results were non-significant. This is different from Cooper’s analogue study (2012) where he found clients with female therapists experienced a higher connection in a single 20-minute session. In our study, clients experienced it between ‘sometimes’ and ‘often’ over the course of therapy with female therapists as opposed to only ‘sometimes’ for clients with male therapists, despite not showing a significant difference. Overall, results in our study suggest that gender does not impact on the frequency of relational depth in therapy.

5.3.4. Therapeutic Orientation.

5.3.4.1. Client RDFS scores based on their reports of therapist orientation.

Therapy modality was not a moderator of relational depth frequency. Descriptions of therapy orientation showed that clients in cognitive-behaviour therapy, psychodynamic, and unknown therapies reported experiencing relational depth ‘sometimes’, while clients in person-centred, integrative, psychoanalytic or other therapies reported experiencing relational depth between ‘sometimes’ and ‘often’. The non-significance in these results was different from Leung’s (2008) study where he found a difference between humanistic and psychodynamic psychotherapies.

Post-hoc analyses were used to explore differences between clients who were mental health professionals and those who were laypeople and the effects of the person-centred model on frequency of relational depth. Interestingly they scored differently depending on the therapeutic orientation they reported for their therapist. Clients who were mental health professionals had significantly higher frequency of relational depth when reporting on a person-centred therapist as opposed to all other modalities grouped together. In this case it would seem, this client group potentially had an allegiance to the person-centred model where they could only select a single answer for the therapeutic orientation of their therapist. Perhaps their high levels of relational depth made them
associate their therapist to being person-centred because of their knowledge of the modality. Another possibility is that they had chosen person-centred therapists because they were already oriented towards relational therapies and more open to relational depth. This would converge with previous findings relating to success when matching a client to their preferred therapeutic orientation (Swift & Callahan, 2009). It also suggests it is important to inform clients of the various types of therapies that are available to them. We cannot conclude that the person-centred model is associated with higher frequency of relational depth because this was not the case for the non-mental health professional client sub-group.

In fact, clients who were not mental health professionals showed the opposite trend, although it was not significant. Here while the number of participants was smaller to find differences in therapeutic orientations ($n = 82$), the trend was surprising. The highest frequency was found for psychoanalytic therapy, where the frequency was between often and most or all of the time (there were only six clients in this modality), while the lowest scores were found in the person-centred modality where relational depth was experienced less than sometimes (for 14 clients). Psychoanalytic therapy is known to lead to intense feelings for clients, where the client is faced with a seemingly neutral therapist calling for transference (Freud, 1912). It seems the six non-mental health professional clients in this sample experienced this intensity as a form of sustained relational depth. One interpretation is that the items on the Relational Depth Frequency Scale are inclusive of experiences that may be different but clients do not discriminate between them. This appears in line with the various theories on depth experiences, which advance different constructs that in essence could be very similar (Rowan, 1998).

The low frequency scores in person-centred therapy for non-mental health professional clients could have various interpretations. In this case, clients would be likely to report therapists’ self-labels of therapeutic orientation and to have less
knowledge of what these labels mean. First, it is possible that therapists who label
themselves as ‘person-centred’ are more likely to be purist classical person-centred
therapists, and such emphasis could affect a therapist’s congruence, as they would try to
follow the rules of the model and be more rigid. Finally, some person-centred
practitioners suggest that relational depth departs from a classical person-centred model
offering the core conditions, as it potentially involves more ‘engagement’ and some
directivity on the part of the therapist (Wilders, 2012). Overall, more research is needed
and conducting qualitative research may be useful to interpret these results.

5.3.4.2. Therapists’ RDFS scores based on self-reports of orientation.

Therapists’ own therapeutic orientation was not a moderator of their relational
depth frequency. Therapists who included cognitive-behaviour, psychodynamic, person-
centred, integrative, existential, and other as modalities, experienced relational depth
between ‘sometimes’ and ‘often’. Therapists who included psychoanalytic or systemic
only experienced it ‘sometimes’. Therapeutic orientation as a predictor of relational
depth frequency could not be analysed as planned for therapists. In effect, therapeutic
orientation of therapists was assessed with open self-descriptions including choosing as
many orientations as they wanted and the possibility of adding their orientation in a text
box. While this method had the potential to offer a richer description of therapeutic
modality, it made it difficult to analyse. Thus the data was analysed post hoc in terms of
allegiance to the person-centred model, looking at differences between therapists who
had selected the person-centred model and those who had not. Frequency of relational
depth was unrelated to therapist allegiance to the person-centred model, which could
suggest that the frequency of relational depth for therapists is more trans-modal than it
is based on a person-centred model. Alongside this, Leung (2008) had found no
significant difference in therapist relational depth between humanistic, psychodynamic
and mainly cognitive-behavioural modalities. It seems this part of the method and
results stand out in that they emphasise that therapeutic orientation for therapists is
complex and perhaps more individual than a self-report questionnaire can reflect, with most therapists choosing more than one orientation, and many choosing ‘integrative’.

5.3.5. Practitioner’s Experience.

Relational depth frequency increased gradually with a practitioners’ experience with self-reports of between ‘sometimes’ and ‘often’ for those having under one year’s experience and near ‘often’ for therapists with over 20 years experience. Practitioners’ experience as self-reported by therapist participants did not have a significant impact on relational depth frequency. It appeared that scores were higher with the more years of experience, however this was only a trend in the current sample of 278 therapists. This is different from Leung’s (2008) study where he had found a significant association between a therapist’s experience and frequency of relational depth. At the time, it is possible that therapists with more experience were more likely to identify relational depth. However, since Leung’s study in 2008, relational depth as a therapeutic factor has become better known of young therapists and therapists in training, therefore while there is still a trend of experience being linked to higher frequency of relational depth, it would seem therapists with less experience can now identify experiences of relational depth. This suggests that research and training around relational depth could enhance a therapist’s ability to perceive and acknowledge their experience of it. This possibility was reflected in Tangen and Cashwell’s (2016) findings, where participants argued that relational depth is trainable when there is a capacity or a desire for it. Overall, it would seem that therapists with more experience have been able to reach relational depth through experience, but as relational depth is becoming well known, it is likely that this difference is becoming smaller.
5.3.6. Trainee Psychologists.

Trainees’ reports of relational depth frequency were the lowest and closest to only ‘sometimes’. Being a trainee was associated with significantly lower frequency of relational depth when compared with qualified practitioners. It seems likely that trainees who are in the process of learning new theory, monitoring themselves and being monitored through their coursework, may be more self-conscious and less congruent than qualified practitioners. Furthermore, at the beginning of their career they may shy away from the type of closeness and intimacy associated with relational depth. This finding is consistent with Tangen and Cashwell’s (2016) study where they theorized about counsellors’ development following a concept mapping of factors influencing relational depth. They advanced that while the transpersonal realm potentially led individuals to becoming counsellors, they would move to an instrumental position when in training in order to learn new skills. They would later return to their original transpersonal position (Rowan & Jacob, 2002). It is then that they are able to integrate the three positions (instrumental, authentic and transpersonal), and are more likely to be able to experience relational depth. According to this theory, the findings make sense, trainees would be preoccupied with the instrumental position as they are learning new theory and trying to ‘apply’ it. As a result, they would be less available to connect deeply to clients.

5.3.7. Spirituality.

In terms of religious affiliation, participants who self-reported as Buddhist or Spiritual were closer to experiencing relational depth ‘often’, while other religious affiliations and atheists were scoring between ‘sometimes’ and ‘often’. Post-hoc findings showed that while pertaining to a religious group was not associated with higher frequency of relational depth, individuals who report being ‘spiritual’ did have significantly higher frequency of relational depth than ‘atheists’. While atheists may be
less likely to recognize numinous experiences, religious people are likely to ascribe the numinous to a specific meaning or rules they follow. In terms of relational depth, the numinous experience is associated to the relationship, or the relational encounter between two human beings. Thus it appears that spiritual individuals who are open to the numinous but have no hard rules around these experiences may be more likely to receive or be open to relational depth. From this interpretation, it is possible to intuit why relational depth may be beneficial for human beings beyond therapy: if they are able to ascribe a relational meaning to a numinous experience, it could potentially help them be at peace and cooperate rather than be caught in conflicts over forms of identities (Wyatt, 2010).

5.4. Two Dimensions of Relational Depth: ‘Moments’ and ‘Enduring’

The Relational Depth Frequency Scale was nearly unidimensional with a first component, which had eight times the amount of variance of the second one (11.80/1.46 = 8.08). However we found a small second component. The two components of the RDFS were not clearly defined but appeared to reflect more of a relational quality and more of a numinous quality of relational depth. As the scale was based on a phenomenological context due to the introductory statement referring to ‘moments’ over the course of therapy, the two dimensions unclearly reflected the two aspects of the definition of relational depth: ‘Moments of relational depth’ and ‘Enduring relational depth’ (Mearns & Cooper, 2005). To this day, some of the research had reported on the quality of the enduring relationship (McMillan & McLeod, 2006; Mearns & Schmid, 2006), and some on moments of relational depth (Knox, 2008; Wiggins, 2011). Yet it is still unclear how these aspects of relational depth are interlinked and represent the variable of relational depth. According to Mearns and Cooper (2005), the repetition of moments of relational depth could lead to an enduring quality of relational depth in the
relationship. In the original writings, moments of relational depth represented a phenomenological view of relational depth, while the enduring quality of relational depth represented more of an integration, or gestalt of the rogerian core conditions as expressed and received in the therapeutic relationship.

Items that loaded on the category ‘Moments of relational depth’ included:
RDFS16: I experienced a meeting that was beyond words, RDFS15: I experienced a deep sense of encounter, RDFS05: We were deeply connected to one another, RDFS01: I experienced an intense connection with him/her, RDFS19: I felt we truly acknowledged each other at a very deep level, RDFS02: I experienced a very profound engagement with her/him, RDFS17: I felt like we were totally in-the-moment together, and RDFS18: I felt we were really close to each other. They seem to represent an amorphous and wordless experience characterised by intensity in the present moment.

Items that loaded on the category ‘Enduring relational depth’ included:
RDFS06: I felt we were accepting of one another, RDFS13: I felt we deeply trusted each other, RDFS03: I felt we were both completely genuine with each other, RDFS14: I felt we connected on a human level, RDFS20: I felt we were completely open with each other, RDFS08: I felt an overall warmth between us, RDFS11: There was a deep understanding between us, RDFS04: I experienced what felt like true mutuality, RDFS12: It felt like a shared experience, RDFS07: I felt a clarity of perception between us, RDFS09: I felt intensely present with him/her, and RDFS10: We were immersed in the present moment. These items representing enduring relational depth appear to have more of a relational significance. In this sense, enduring relational depth may be about the crystallisation of relational depth, or the symbolisation of the relationship as one that is profound, deep and meaningful. Both types of relational depth may happen within moments, but the latter may not only be restricted to moments.

The two subscales were highly correlated and both contributed to overall relational depth, but some of the loadings appeared to make the two categories unclear.
For instance, item RDFS18: ‘I felt we were really close to each other’, which loaded on ‘Moments of relational depth’ could appear more relational than about a momentary intensity, therefore may fit better onto the ‘Enduring relational depth’. Similarly, items RDFS09: ‘I felt intensely present with him/her’, RDFS10: ‘We were immersed in the present moment’, and RDFS07: ‘I felt a clarity of perception between us’, which loaded on ‘Enduring relational depth’ could appear more phenomenological than relational. These categories are not clearly defined maybe in part because they emphasise a difference in perspective as opposed to a difference in a tangible reality.

One way to understand the two aspects of relational depth may be in terms of Maslow’s peak and Csikszentmihalyi’s flow. Like the two dimensions of relational depth, these experiences have been conceptualised as different occurrences of the same experience. Peak experiences, characterised as arising in moments, were intense, rare, exciting, deeply moving, elevating, and generating an advanced form of perceiving reality (Maslow, Frager & Cox, 1970, p.164). They appear similar to the ‘Moments of relational depth’ dimension. Flow on the other hand appears more alike ‘Enduring relational depth’ for it is less intense but characterised by an enduring connection to activities undertaken or to the present moment (Csikszentmihalyi, 1999).

Recent research on interpersonal flow (Snow, 2010) brings further insight and a potential alignment with the ‘Enduring relational depth’ dimension. Categories for co-flow included having one’s perspective broadened by the other person (e.g. like items RDFS11: There was a deep understanding between us or RDFS07: I felt a clarity of perception between us), feeling a shared sense of identity (e.g. like item RDFS14: I felt we connected on a human level), not feeling self-conscious with each other (e.g. like items RDFS20: I felt we were completely open with each other, RDFS06: I felt we were accepting of one another), having total concentration on the shared activity (e.g. RDFS10: We were immersed in the present moment), and intrinsic enjoyment (e.g. RDFS08: I felt an overall warmth between us). Other categories of interpersonal flow
include not worrying about what outsiders think, feeling able to respond almost instantly to presenting situations as a pair, and time passing differently than normal. These may also be implicit in ‘Enduring relational depth’ although as the scale was created within a therapeutic context, there is less of an action orientation or awareness of the outside. Time passing differently has been reported before in relational depth experiences (Knox, 2008; Cooper, 2005) but is not reflected in the RDFS items.

This structure for the scale also partially fits Wiggins, Eliott and Cooper’s (2012) most recent version of the Relational Depth Inventory. The structure was not clearly defined but they settled for a two-factor structure accounting for 47% of the variance. Here, their labels were based on the items with the highest loadings. The first factor on the RDI was ‘therapist genuineness/availability’ and included items that were easier to answer. This factor may be similar to the RDFS second factor: the ‘Enduring relational depth’ dimension. All ‘comfortableness items’ as labelled during the Three-Step Test interviews, represented easily answerable items and loaded on this category. The second factor on the RDI was labelled ‘transcendence’ where there were items with lower scores and suggested such experience would be rarer in significant events. This factor seems to fit the ‘Moments of relational depth’ dimension in this study.

5.5. Limitations

The study has design limitations and the information that can be obtained is limited and subject to tentative interpretations. The analysis and scale format also have limitations and the potential to be improved in future developments.
5.5.1. Study Limitations.

The study has limitations in terms of design, biases, and the information that can be obtained with the new scale. One obvious limitation of the research design is the use of quantitative methods to assess a phenomenological construct. We can certainly expect to be missing on some of the complexity of relational depth in this study. In the light of critical realist and critical pragmatist epistemologies, there has been prior acknowledgment that findings resulting from this study are limited.

A second limitation in terms of the design is a concern with self-selecting bias. In effect, the title and topic of the online survey called for participation in a study on the quality of the therapeutic relationship. The advertisement is likely to have attracted participants who were already relationally-oriented. This has potentially created a bias in the sampling where the frequency of relational depth could be higher than in the general population of therapists and clients. While this was a drawback, there were also benefits such as it possibly attracted more participants, also deception was minimized. One way to guard against this sampling bias would be to use a more neutral wording in participant advertisement and instructions.

In terms of the psychometrics of the scale, there is a possibility that a social desirability bias would have positively affected the reliability results. Although an online study does not call for a strong desirability bias, it is still likely that therapists would want to see their therapeutic relationship as a positive one. Controlling for reliability in client samples where social desirability bias would be less likely to occur, suggested that the scale still had high reliability.

Another limitation touches upon the level of precision used in measuring the frequency of relational depth. Frequency may be difficult to assess with precision and may be remembered differently if participants are still in therapy or if they have finished a course of therapy. Similarly, a 7-point Likert scale could have offered more precision. A question behind this is whether it would be realistic to attempt to measure
the frequency of relational depth with this level of precision. For the current study the potential cost of dropout outweighed the perceived benefits and usefulness of having a more precise scale.

Additionally, one limitation is that the scale may be measuring a participant’s current feeling about their relationship with their therapist. In effect, as opposed to the RDI, the scale does not trigger autobiographical memory, but rather a more general schematic memory. Thus while the scale is asking to recall the amount of events where they felt relational depth, it is unlikely the thought process is to recall events. It is more likely that it is to recall a general feeling. In this sense, it is possible that for participants, the scale may be measuring the overall depth of the relationship as it is remembered when filling the scale.

Another limitation relating to the above touches upon considerations that the RDFS has been developed from a humanistic theoretical ground. While the content is holistic and aimed at representing a human experience that goes beyond modality, it is possible that some therapists do not see their modality represented in the items. Perhaps there are characteristic ways of practicing in some therapeutic models, which may elicit relational depth but would take a different form. This may in part explain why psychoanalytic therapists had considerably lower scores on their frequency of relational depth as opposed to clients in psychoanalytic therapy. Overall this raises a question around the trans-modality of the construct and whether the scale can be representative of non-Rogerian therapeutic relationships.

Similarly, the instrument is designed for individual therapy. Some clinicians may be interested in the frequency of relational depth as it relates to groups. There have been theories emerging around group relational depth (Wyatt, 2010). A group scale may be a further step in the developments of the Relational Depth Frequency Scale.
5.5.2. Limitations in the Analyses.

The analysis of the dimensionality of the scale was limited in that it was based solely on an inductive method. Exploratory Factor Analysis enabled to explore the scale structure without a predetermined hypothesis. The following step will be to confirm the bi-dimensionality of the RDFS using Confirmatory Factor Analysis on a new sample of therapists and clients. This analysis will enable a confirmation of the current model and theory.

The analysis of therapeutic orientation was also limited in this study. Here therapists were allowed to choose more than one therapeutic orientation; this made the data too complex to carry out the planned Kruskal-Wallis analyses. Part of the complexity in the data obtained may have been a reflection of the current context where therapy modality has taken on a broader meaning. This issue could be prevented by using a standard scale of therapeutic orientation to cluster some of the orientations.

Finally, one limitation in the analysis was around the duration of therapy variable. The intervals for duration of therapy were chosen randomly. For participants who had ended therapy, there was no possibility of knowing how long their course of therapy had been. As a result, interpretations from these analyses were limited. For future analyses, it may be most useful to add a box on the RDFS form where participants could enter an approximation of their number of sessions, this would enable the researcher to calculate a frequency ratio and establish the frequency of relational depth more precisely.

5.5.3. Limitations in the Scale Format.

There may be limitations in terms of the current scale format. The 20-item scale had very strong internal reliability and coverage. This brought a question around the possibility of shortening the scale. While the reliability is stronger with 20 items, it is
high enough to be able to drop some of the items. In the light of a critical pragmatic epistemology, it could be useful to shorten the scale to spare time for participants. There is also a possibility of creating two short forms, which would enable researchers to choose from what they find most useful for their purpose.

Prof. Cooper and I explored creating a shorter scale and re-ran the analyses. We removed items on the basis of different psychometric criteria. We looked at a combination of the highest means, highest skewness, lowest standard deviations, and those that would least affect reliability if removed. This resulted in a 12-item scale, which still had excellent internal consistency and construct validity, the scale had a single component accounting for over 66% of the variance. Removing items involved a small drop in reliability, but in the light of a critical pragmatist epistemology, had the potential to be more useful. We then consulted with Dr. Chris Evans who is a psychometric specialist and he advised that shortening the scale using ‘metrics’ could not be justified at this point and ought to be done with more rigorous methods (i.e. RASCH analysis). With consideration to time, we decided to keep the 20-item scale for the purpose of the doctoral thesis and leave the RDFS12 for future developments.

5.6. Further Research

The scale has multiple uses for further research, and can be used to fulfil numerous and various research interests. One of its uses for further research mentioned throughout this study is looking at the impact of frequency of relational depth on outcomes. This would bring new information on the therapeutic relationship qualities associated with outcome. The RDFS could be administered to clients and therapists at different stages of therapy to test whether it is predictive of outcome as measured by an index of improvement of outcome measures administered at the start and termination of therapy (for instance the GAD-7, PHQ-9 or CORE-OM). Additionally, it would be
important to replicate Wiggins’s (2011) outcome study findings, looking at whether RDFS scores contribute to outcome above and beyond working alliance as measured by the WAI-SR. This replication would involve using the WAI-SR as a predictor of outcome rather than looking at simultaneous correlations. Then multiple regression analyses could be used to assess the contribution of RDFS on outcome when controlling for WAI-SR.

Another potential research may involve conducting semi-structured interviews with clients to classify the presence and absence of the moderating factors of relational depth found in this study and other studies (Knox, 2008; Tangen & Cashwell, 2016). The second step would be to administer the RDFS to test levels of relational depth over therapy. This may bring additional information around the conditions predictive of relational depth. Provided factors are confirmed in such design, this research could be taken further into an experimental design or randomized control trials to test the RDFS and outcome measures in different test groups. One group would be tested under conditions grouping the current factors associated with relational depth, while the other group would be the control group. This would confirm whether the moderating factors of relational depth are predictors of relational depth, and whether such conditions can be controlled in therapy.

5.7. Implications for Practice

The RDFS can be a useful measure of process for counselling psychologists given the importance of the therapeutic relationship in the field. The measure allows therapists and clients to assess the quality of their relationship and implement change as they reflect on their process. It may be used in review sessions as a form of feedback. As revealed in the Three-Step Test interviews, the content of the scale can be thought
provoking and intimate. Sharing this intimate content could be a way to review important moments, and bring client and therapist closer.

Some of the clinical implications resulting from the present and future research may inform areas of self-development for therapists. As we’ve seen in this study, one of them may include working towards the integration of Rowan and Jacob’s (2002) three positions in training courses. This may involve emphasising the importance of shared goals, as well as allowing an authentic affective bond and a space for a spiritual dimension. This study emphasised that clients’ perceived levels of mutual agreement around tasks and goals with their therapists was associated with higher frequency of relational depth. Thus, elements of meta-communication in therapy where therapists and clients communicate and agree on mutual goals and how to achieve them is likely to enhance their connection. Other areas of development would be prioritising congruence and genuineness over an allegiance to a therapeutic model.

Research resulting from experimental designs where factors are found to predict relational depth and outcome could bring areas of development that are more targeted. Also, in the instance that relational depth is found to have an association with outcome beyond the working alliance, it may promote new ways of relating therapeutically, or new ways of understanding the therapeutic relationship.

5.8. Reflexivity

It is difficult to put into words what the time and dedication spent on this project has meant for me. The greatest learning was undoubtedly personal, one of commitment and perseverance through difficulty, which has made me reach new depths within myself. My knowledge and understanding of relational depth has also evolved in several ways. Here I will recount the main shifts in my conceptual understanding that resulted from this project.
Firstly, I experienced a personal shift in my epistemological stance. What had first motivated the creation of another scale of relational depth was a belief based on logical deduction: Quantifying relational depth over the course of therapy could inform about the association of relational depth with outcome. While the RDI had shown an association with outcome, my epistemological assumption meant that it took me some time to recognise the plausibility of this finding. While the RDI probably touches upon how much a person views what is significant to them in the world through a relational depth lens, the RDFS approximates a quantification of relational depth over the course of therapy. After this project has ended and understanding the limitations of a positivist stance, I am better able to see why the RDI can also be associated with outcome. Like in CBT, a simple shift in one’s worldview and understanding of events can lead to change.

Another learning about relational depth was a shift from a transpersonal vision to a more holistic meaning. My first interest in relational depth came along with the discovery of a transpersonal dimension in me. I believed these moments of connection were instants of clarity where humans could feel connected to something beyond them. This belief gave me meaning and I let myself be guided by this new vision. In this project, finding that relational depth was associated with having mutual goals shifted my vision of the concept orienting it towards human collaboration. While I discovered an instrumental dimension in relational depth, I also acknowledged an instrumental dimension in the world and in me.

Finally, the project also concretised the two dimensions of relational depth. This finding had left me curious and I was hoping to come back to it for later contemplation. I was confronted with it during my Viva voce examination where the discussion led on to a clearer conceptual understanding of the ‘Enduring’ and ‘Moment’ dimensions of relational depth. I can relate my former lack of commitment to a more complex understanding of relational depth to a fear of the project coming to an end. It was an important learning in this project. One analogy may be that once relational depth
becomes symbolised into enduring relational depth, it might at some point in time also bring a sense of loss.

Overall, I feel privileged to have had the time and resources to dedicate to this project. It was humbling to witness the depth of work necessary for each small step in its realisation. I enjoyed the collaboration with my supervisory team immensely and it gave me confidence in confronting the personal fears that have to be faced when committing to a research idea. I am left with humility and gratitude for the possibility of having had this experience.
Chapter 6:

Summary

The aim of this project was the creation and validation of a scale to measure the frequency of relational depth in therapy. The scale was examined using Three-Step Test interviews, and a psychometric exploration study. The 20-item scale had each item contributing to its high reliability; it was convergent with the RDI and the WAI-SR and divergent with a measure of self-compassion. The scale had two dimensions representing moments and enduring relational depth. Limitations included the length of the scale and possible interpretations that can be obtained from it. In this sample, there may have been a self-selection bias also contributing to higher frequency results.

The exploration of demographic associations highlighted differences between clients and therapists. Therapists had higher frequency of relational depth than clients. They also had different patterns of frequency depending on the duration of therapy. Furthermore, clients tended to experience more collaboration on tasks and goals when experiencing more relational depth in therapy. This association was not as strong for therapists for whom goals, tasks and bond were equivalent moderators of relational depth.

Another finding resulted from the possibility of conducting analyses on a sufficiently large sample of laypeople clients. This is the first quantitative study on relational depth that has been able to clearly target such population. Non-mental health professional clients do not differ from mental health professional clients in their frequency of relational depth. Further analyses revealed that laypeople clients tended to discriminate less between the different aspects of the therapeutic relationship. Also, their frequency of relational depth was not moderated by the therapeutic orientation of
their therapist as opposed to mental health professional clients who had significantly higher frequency of relational depth when in person-centred therapy.

Another moderator of higher relational depth frequency was being a qualified therapist as opposed to being a trainee. As the association with age was small and years of professional experience did not have a significant impact on relational depth frequency, the lower relational depth while in training can be understood as a consequence of the training process, requiring taking an instrumental position before a more holistic position can be attained. Finally, one factor associated with higher relational depth frequency was being ‘spiritual’ (but not religious), as opposed to ‘atheist’. This may suggest that spiritual individuals who are not affiliated to a religious group could more readily ascribe a relational quality to their numinous experience.

The development of the RDFS is important for its potential implications in research and practice. One of them may be its use as a measure of the therapeutic relationship in outcome studies. The scale could be used to inform areas of development for therapists. In the light of the results, such implications may involve the possibility of therapist training courses on relational depth, involving the integration of Rogers’ (1957) core conditions with an emphasis on collaboration around tasks and goals.

The contribution of the Relational Depth Frequency Scale is also one that touches upon a relational turn in a wider context. It enables the scientific study and dissemination of findings around a construct and experience that may be life enhancing. Such scientific endeavour involving the possibility of viewing the world through a relational lens seems important in response to world challenges. It has the potential to carry individuals beyond identity characteristics such as nationality, race, or religion, enhance a vision of togetherness, and point towards a path of human cooperation.
References


Bordin, E. (1979). The generalizability of the psychoanalytic concept of the working alliance. *Psychotherapy, 16*


experiential therapies work: A review of the research on counseling, psychotherapy and related practices, 188-214.


Proctor, G. (2010). Boundaries or mutuality in therapy: is mutuality really possible or is therapy doomed from the start? *Psychotherapy and Politics International, 8*(1), 44-58.


Snow, K. Y. (2010). Work relationships that flow: Examining the interpersonal flow experience, knowledge sharing, and organizational commitment. The claremont graduate university.


Stiles, W., Barkham, M., Mellor-Clark, J., & Connell, J. (2007). Effectiveness of Cognitive-Behavioural, Person-Centred and Psychodynamic Therapies in UK Primary Care


Appendix A: Relational Depth Frequency Scale

Relational Depth Frequency Scale
Guidance on use
Gina Saskjia Di Malta, University of Roehampton, 2017
Gina.dimalta@roehampton.ac.uk

Background
The Relational Depth Frequency Scale is a simple measure designed to estimate how frequently a client or therapist experienced relational depth over the course of therapy.


Definition
Relational depth is ‘a state of profound contact and engagement between two people, in which each person is fully real with the Other, and able to understand and value the other’s experiences at a high level’ (Mearns and Cooper, 2005, p. xii).

The Dimensions of Relational Depth
In theory and research, relational depth has been conceptualised both as a one-dimensional construct and as a two-dimensional construct. It was characterised by its occurrence in moments and its enduring quality in the relationship. Moments of relational depth are discrete subjective events characterised by the depth and intensity of experiencing in an encounter. Enduring relational depth represents an integration of Rogers’s (1957) core conditions as mutually experienced in the therapeutic relationship. These two aspects of relational depth are interrelated and both contribute to overall relational depth.

The Relational Depth Frequency Scale can be used as a unidimensional scale or a two-dimensional scale. Its two validated subscales reflect the two dimensions of relational depth: ‘Moments of relational depth’ and ‘Enduring relational depth’.

Using the Relational Depth Frequency Scale
The Relational Depth Frequency Scale can be used in therapy at any point during treatment or once treatment has ended. The scale can be taken individually or collaboratively between clients and therapists. A version of the scale also exists for relationships outside of therapy.

Note: Relational depth is not an aim in therapy. There is no right or wrong answer, as individuals relate differently. However if you are interested in the experience of relational depth, there are practices one can do to increase presence and facilitate relational depth. Some exercises can be found in Knox, R., Murphy, D., Wiggins, S., & Cooper, M. (Eds.). (2012). Relational depth: New perspectives and developments. Palgrave Macmillan.

Scoring
The overall scale is scored by adding item scores for each statement. This results in a score ranging from 20 to 100.

The subscales can also be scored to assess the two dimensions of relational depth:
The 'Moments of Relational depth' subscale is scored by adding scores for items 1, 2, 5, 15, 16, 17, 18, and 19. This results in a score ranging from 8 to 40.

The 'Enduring relational depth' subscale is scored by adding scores for items 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, and 20. This results in a score ranging from 12 to 60.

**Interpretation**

**Interpretation of scores for overall relational depth:**

- Scores ranging from 20 to 40 mean individuals have experienced relational depth not at all to rarely in the relationship.
- Scores ranging from 40 to 60 mean that individuals have experienced relational depth only occasionally to some of the time.
- Scores ranging from 60 to 80 mean individuals have experienced relational depth sometimes to often.
- Scores ranging from 80 to 100 mean individuals have experienced relational depth often to most of the time.

**Interpretation of scores for 'Moments of relational depth':**

- Scores ranging from 8 to 16 mean individuals have experienced moments of relational depth not at all to rarely in the relationship.
- Scores ranging from 16 to 24 mean that individuals have experienced moments of relational depth only occasionally to some of the time.
- Scores ranging from 24 to 32 mean individuals have experienced moments of relational depth sometimes to often.
- Scores ranging from 32 to 40 mean individuals have experienced moments of relational depth often to most of the time.

**Interpretation of scores for 'Enduring relational depth':**

- Scores ranging from 12 to 24 mean individuals have experienced enduring relational depth not at all to rarely.
- Scores ranging from 24 to 36 mean that individuals have experienced enduring relational depth only occasionally to some of the time.
- Scores ranging from 36 to 48 mean individuals have experienced enduring relational depth sometimes to often.
- Scores ranging from 48 to 60 mean individuals have experienced enduring relational depth often to most of the time.

**Permission**

The Relational Depth Frequency Scale is not copyrighted in any way and you are welcome to use it without any formal permission. Please do let us know about your experiences of using the scale, or any findings from its use. Also, if you revise the scale or the procedure for its use, please make this clear in any publications. Any publications or reports should also reference the original source:


**References**


Relational Depth Frequency Scale (RDFS therapist version)

Below is a list of items representing experiences people might have in therapy.

Please think of your relationship with your client and select how frequently you have experienced the moments described in each item.

There is no right or wrong answer, individuals relate differently.

Each item follows the statement:

‘Over the course of therapy with my client, there were moments where…’

1. I experienced an intense connection with him/her
   
   Not at all  Only occasionally  Sometimes  Often  Most or all of the time

2. I experienced a very profound engagement with her/him
   
   Not at all  Only occasionally  Sometimes  Often  Most or all of the time

3. I felt we were both completely genuine with each other
   
   Not at all  Only occasionally  Sometimes  Often  Most or all of the time

4. I experienced what felt like true mutuality
   
   Not at all  Only occasionally  Sometimes  Often  Most or all of the time

5. We were deeply connected to one another
   
   Not at all  Only occasionally  Sometimes  Often  Most or all of the time

6. I felt we were accepting of one another
   
   Not at all  Only occasionally  Sometimes  Often  Most or all of the time

7. I felt a clarity of perception between us
   
   Not at all  Only occasionally  Sometimes  Often  Most or all of the time

8. I felt an overall warmth between us
   
   Not at all  Only occasionally  Sometimes  Often  Most or all of the time

9. I felt intensely present with him/her
   
   Not at all  Only occasionally  Sometimes  Often  Most or all of the time
<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>10. We were immersed in the present moment</td>
<td>Not at all</td>
<td>Only occasionally</td>
<td>Sometimes</td>
<td>Often</td>
<td>Most or all of the time</td>
</tr>
<tr>
<td>11. There was a deep understanding between us</td>
<td>Not at all</td>
<td>Only occasionally</td>
<td>Sometimes</td>
<td>Often</td>
<td>Most or all of the time</td>
</tr>
<tr>
<td>12. It felt like a shared experience</td>
<td>Not at all</td>
<td>Only occasionally</td>
<td>Sometimes</td>
<td>Often</td>
<td>Most or all of the time</td>
</tr>
<tr>
<td>13. I felt we deeply trusted each other</td>
<td>Not at all</td>
<td>Only occasionally</td>
<td>Sometimes</td>
<td>Often</td>
<td>Most or all of the time</td>
</tr>
<tr>
<td>14. I felt we connected on a human level</td>
<td>Not at all</td>
<td>Only occasionally</td>
<td>Sometimes</td>
<td>Often</td>
<td>Most or all of the time</td>
</tr>
<tr>
<td>15. I experienced a deep sense of encounter</td>
<td>Not at all</td>
<td>Only occasionally</td>
<td>Sometimes</td>
<td>Often</td>
<td>Most or all of the time</td>
</tr>
<tr>
<td>16. I experienced a meeting that was beyond words</td>
<td>Not at all</td>
<td>Only occasionally</td>
<td>Sometimes</td>
<td>Often</td>
<td>Most or all of the time</td>
</tr>
<tr>
<td>17. I felt like we were totally in-the-moment together</td>
<td>Not at all</td>
<td>Only occasionally</td>
<td>Sometimes</td>
<td>Often</td>
<td>Most or all of the time</td>
</tr>
<tr>
<td>18. I felt we were really close to each other</td>
<td>Not at all</td>
<td>Only occasionally</td>
<td>Sometimes</td>
<td>Often</td>
<td>Most or all of the time</td>
</tr>
<tr>
<td>19. I felt we truly acknowledged each other at a very deep level</td>
<td>Not at all</td>
<td>Only occasionally</td>
<td>Sometimes</td>
<td>Often</td>
<td>Most or all of the time</td>
</tr>
<tr>
<td>20. I felt we were completely open with each other</td>
<td>Not at all</td>
<td>Only occasionally</td>
<td>Sometimes</td>
<td>Often</td>
<td>Most or all of the time</td>
</tr>
</tbody>
</table>

Thank you for completing this form

© licensed under the Creative Commons Attribution-NoDerivatives 4.0 International licence
Relational Depth Frequency Scale (RDFS client version)

Below is a list of items representing experiences people might have in therapy.

Please think of your relationship with your therapist and select how frequently you have experienced the moments described in each item.

There is no right or wrong answer, individuals relate differently.

Each item follows the statement:

‘Over the course of therapy with my therapist, there were moments where…’

1. I experienced an intense connection with him/her
   1. Not at all 2. Only occasionally 3. Sometimes 4. Often 5. Most or all of the time

2. I experienced a very profound engagement with her/him
   1. Not at all 2. Only occasionally 3. Sometimes 4. Often 5. Most or all of the time

3. I felt we were both completely genuine with each other
   1. Not at all 2. Only occasionally 3. Sometimes 4. Often 5. Most or all of the time

4. I experienced what felt like true mutuality
   1. Not at all 2. Only occasionally 3. Sometimes 4. Often 5. Most or all of the time

5. We were deeply connected to one another
   1. Not at all 2. Only occasionally 3. Sometimes 4. Often 5. Most or all of the time

6. I felt we were accepting of one another
   1. Not at all 2. Only occasionally 3. Sometimes 4. Often 5. Most or all of the time

7. I felt a clarity of perception between us
   1. Not at all 2. Only occasionally 3. Sometimes 4. Often 5. Most or all of the time

8. I felt an overall warmth between us
   1. Not at all 2. Only occasionally 3. Sometimes 4. Often 5. Most or all of the time

9. I felt intensely present with him/her
   1. Not at all 2. Only occasionally 3. Sometimes 4. Often 5. Most or all of the time
10. We were immersed in the present moment

Not at all  Only occasionally  Sometimes  Often  Most or all of the time

11. There was a deep understanding between us

Not at all  Only occasionally  Sometimes  Often  Most or all of the time

12. It felt like a shared experience

Not at all  Only occasionally  Sometimes  Often  Most or all of the time

13. I felt we deeply trusted each other

Not at all  Only occasionally  Sometimes  Often  Most or all of the time

14. I felt we connected on a human level

Not at all  Only occasionally  Sometimes  Often  Most or all of the time

15. I experienced a deep sense of encounter

Not at all  Only occasionally  Sometimes  Often  Most or all of the time

16. I experienced a meeting that was beyond words

Not at all  Only occasionally  Sometimes  Often  Most or all of the time

17. I felt like we were totally in-the-moment together

Not at all  Only occasionally  Sometimes  Often  Most or all of the time

18. I felt we were really close to each other

Not at all  Only occasionally  Sometimes  Often  Most or all of the time

19. I felt we truly acknowledged each other at a very deep level

Not at all  Only occasionally  Sometimes  Often  Most or all of the time

20. I felt we were completely open with each other

Not at all  Only occasionally  Sometimes  Often  Most or all of the time

Thank you for completing this form

© licensed under the Creative Commons Attribution-NoDerivatives 4.0 International licence
Appendix B: Ethical approval

**Ethics Application**
**Applicant:** Gina Di Malta  
**Title:** The development and validation of the Relational Depth Frequency Scale  
**Participant facing title:** Scale development study: Relational Depth  
**Reference:** PSYC 15/164  
**Department:** Psychology

I am pleased to confirm that the risk assessment for your project has been reviewed and approved by the Head of Health, Safety and Environment. Under the procedures agreed by the University Ethics Committee I am therefore pleased to advise you that your Department has confirmed that all conditions for approval of this project have now been met. We do not require anything further in relation to this application.

Please note that on a standalone page or appendix the following phrase should be included in your thesis:

**The research for this project was submitted for ethics consideration under the reference PSYC 15/164 in the Department of Psychology and was approved under the procedures of the University of Roehampton's Ethics Committee on 20.05.15.**

Please advise us if there are any changes to the research during the life of the project. Minor changes can be advised using the Minor Amendments Form on the Ethics Website, but substantial changes may require a new application to be submitted.

Many thanks,

Jan

**Jan Harrison**  
Ethics Officer, Research Office, Department of Academic Enhancement  
University of Roehampton | London | SW15 5PJ  
jan.harrison@roehampton.ac.uk | www.roehampton.ac.uk  
Tel: +44 (0) 20 8392 5785
Appendix C: Item pool and rating

Email Communication for the Item pool

Dear colleague,

I am a doctoral student at the University of Roehampton. I received your contact details from Professor Cooper. I am contacting you as we are working on a new relational depth project. We are in the process of developing a new measure, which is about rating the frequency of moments of relational depth in therapy. At this stage, we are brainstorming items and trying to generate as many items as possible. We would be really grateful if you would like to help us generate items that you think might be relevant.

I am attaching a document with the items we have generated so far. Thank you and I hope to hear back from you soon.

Kind Regards
Gina

Email communication for expert ratings

Dear colleague,

I was wondering if you would accept to help us on the development of the Relational Depth Frequency Scale? At this stage, we are rating items according to three different factors: how well each item matches the target definition, how well formulated each item is for participants to fill in, and how well, overall, each item is suited to the Relational Depth Frequency Scale. It would take approximately 30 minutes. This is the link to the survey: [weblink]

I look forward to hearing back from you,
Thank you,
Kind Regards
Gina

Item ratings

<table>
<thead>
<tr>
<th>128 Items</th>
<th>Overall average item rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>I experienced an intense connection with him/her</td>
<td>3.38</td>
</tr>
<tr>
<td>We felt intensely real with each other</td>
<td>3.14</td>
</tr>
<tr>
<td>I felt a kind of magic happen between us</td>
<td>2.38</td>
</tr>
<tr>
<td>I felt a moment of deep connection with him/her</td>
<td>3.29</td>
</tr>
<tr>
<td>I felt we were connected on a level that I rarely experience</td>
<td>2.95</td>
</tr>
<tr>
<td>I experienced a very profound engagement with her/him</td>
<td>3.14</td>
</tr>
<tr>
<td>I felt we were immersed in love</td>
<td>2.14</td>
</tr>
<tr>
<td>I felt we were both completely genuine with each other</td>
<td>3.05</td>
</tr>
<tr>
<td>I experienced what felt like true mutuality</td>
<td>2.95</td>
</tr>
<tr>
<td>I felt whole in relation to him/her</td>
<td>2.61</td>
</tr>
<tr>
<td>I felt completely real in relation to him/her</td>
<td>2.90</td>
</tr>
<tr>
<td>I felt I was being understood beyond my words</td>
<td>3.00</td>
</tr>
<tr>
<td>I experienced profound mutual love</td>
<td>2.38</td>
</tr>
<tr>
<td>We were deeply connected to one another</td>
<td>3.24</td>
</tr>
<tr>
<td>We felt a deep care for each other</td>
<td>2.81</td>
</tr>
<tr>
<td>We felt accepting of one another</td>
<td>3.05</td>
</tr>
</tbody>
</table>
It felt like we were in a different dimension.
It seemed as if we existed only in that moment.
It felt like we were in a bubble together.
Everything else between us seemed to fade away.
We had something that felt like a shared insight.
I felt in a kind of symbiosis.
The flow between us made me feel like we were as one.
I could see we had mutual understanding.
We had a moment in which we 'let go' in relation to one another.
We were fully real with each other.
There was a feeling of oneness.
It felt like a unique experience between us.
I felt a deep empathy between us.
I felt completely immersed in the relationship.
There was a shared focus.
I felt a clarity of perception between us.
The connection between us was much stronger than in other moments.
We were both able to be absolutely freely ourselves.
There seemed to be a mutual understanding of each other.
I felt that we really cared about each other.
I felt we really knew each other.
I felt that I really knew him/her.
The level of our connection seemed to go beyond words alone.
Everything seemed to have a greater depth of quality to it.
I felt very deeply connected to him/her.
I felt we were both alert.
I felt fully attentive to him/her.
I felt completely accepted by him/her.
I felt an overall warmth between us.
I felt we were connected.
I experienced a feeling of blending together.
I experienced a sense of union with him/her.
I felt like we were one person.
I felt that the boundaries between us had been dissolved.
I felt like we fused together.
I experienced a sense of interlinking together.
I experienced a strong sense of reciprocity.
I had a sense of mystical connection.
I had a rare sense of connection together.
There was a sense of calm and stillness between us.
Time slowed down for us.
We seemed to be in a mystical place.
There was a sense of power between us.
I felt wholly known by him/her.
I felt really safe with him/her.
There was a union between us.
We were able to be completely open with each other.
There were no defences affecting the way I saw her/him.
There was an open flow of communication between us.
The boundaries between us seemed to dissolve.
I felt deeply understood by him/her.
The moment between us felt very meaningful.
It suddenly felt very exciting between us.
The time seemed to stand still between us.
The space between us felt unusually holding.
I had an insight that came from the mutuality of our experience.
Suddenly there came a flow of love in the space between us.
It felt like there was another energy between us.
I felt intensely present with him/her.
I felt we were co-creating.
<table>
<thead>
<tr>
<th>Experience</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>We were immersed in the present moment</td>
<td>3.19</td>
</tr>
<tr>
<td>I felt completely understood</td>
<td>3.14</td>
</tr>
<tr>
<td>I fully understood him/her</td>
<td>2.67</td>
</tr>
<tr>
<td>There was a deep understanding between us</td>
<td>3.01</td>
</tr>
<tr>
<td>It felt like a shared experience</td>
<td>3.00</td>
</tr>
<tr>
<td>We shared a new insight</td>
<td>2.76</td>
</tr>
<tr>
<td>We shared a connection beyond words</td>
<td>3.15</td>
</tr>
<tr>
<td>I felt fully attuned to him/her</td>
<td>3.05</td>
</tr>
<tr>
<td>I felt that we fully acknowledged each other</td>
<td>2.95</td>
</tr>
<tr>
<td>I felt able to be vulnerable with him/her</td>
<td>2.86</td>
</tr>
<tr>
<td>There was a heart to heart meeting</td>
<td>2.71</td>
</tr>
<tr>
<td>We were co-creating something</td>
<td>2.48</td>
</tr>
<tr>
<td>I felt we deeply trusted each other</td>
<td>3.05</td>
</tr>
<tr>
<td>We were both immersed in the present moment</td>
<td>3.10</td>
</tr>
<tr>
<td>There was a sense of peace between us</td>
<td>2.86</td>
</tr>
<tr>
<td>I felt my therapist knew me completely and totally accepted me</td>
<td>3.00</td>
</tr>
<tr>
<td>I experienced a deep intimacy between us</td>
<td>3.19</td>
</tr>
<tr>
<td>I felt deeply valued by him/her</td>
<td>3.05</td>
</tr>
<tr>
<td>I felt connected to the whole of myself</td>
<td>2.52</td>
</tr>
<tr>
<td>I felt profoundly connected to him/her</td>
<td>2.81</td>
</tr>
<tr>
<td>I felt we were completely genuine with each other</td>
<td>3.10</td>
</tr>
<tr>
<td>I felt we connected on a human level</td>
<td>2.95</td>
</tr>
<tr>
<td>I felt changed by the connection between us</td>
<td>2.79</td>
</tr>
<tr>
<td>I experienced a heart-to-heart connection</td>
<td>2.67</td>
</tr>
<tr>
<td>I felt a strong sense of intimacy</td>
<td>2.90</td>
</tr>
<tr>
<td>I experienced a deep sense of encounter</td>
<td>3.00</td>
</tr>
<tr>
<td>I felt like we completely understood each other</td>
<td>2.86</td>
</tr>
<tr>
<td>I lost all sense of time in the moment</td>
<td>2.81</td>
</tr>
<tr>
<td>I experienced a meeting that was beyond words</td>
<td>3.05</td>
</tr>
<tr>
<td>I felt like we were totally in-the-moment together</td>
<td>3.10</td>
</tr>
<tr>
<td>I experienced a deep sense of stillness</td>
<td>2.67</td>
</tr>
<tr>
<td>I felt that we were both coming from the core of our being</td>
<td>2.86</td>
</tr>
<tr>
<td>I experienced a sense of flow between us</td>
<td>2.62</td>
</tr>
<tr>
<td>We just seemed to connect</td>
<td>2.62</td>
</tr>
<tr>
<td>I felt there was an intense connection</td>
<td>2.95</td>
</tr>
<tr>
<td>we felt in tune with each other</td>
<td>2.81</td>
</tr>
<tr>
<td>there was a sense of mutual exchange</td>
<td>2.52</td>
</tr>
<tr>
<td>We felt really close to each other</td>
<td>2.91</td>
</tr>
<tr>
<td>We seemed to know what the other was thinking</td>
<td>2.48</td>
</tr>
<tr>
<td>I felt a sense of awe in relation to him/her</td>
<td>2.38</td>
</tr>
<tr>
<td>there was a sense of mutuality</td>
<td>2.67</td>
</tr>
<tr>
<td>There was a sense of ‘I know that you know that I know’</td>
<td>2.62</td>
</tr>
<tr>
<td>I felt wholly validated by him/her</td>
<td>2.81</td>
</tr>
<tr>
<td>he/she helped me connect with hidden parts of myself</td>
<td>2.66</td>
</tr>
<tr>
<td>I felt we truly acknowledged each other at a very deep level</td>
<td>3.19</td>
</tr>
<tr>
<td>There was a core to core meeting</td>
<td>2.67</td>
</tr>
<tr>
<td>The level of our connection seems to go beyond words alone</td>
<td>3.14</td>
</tr>
<tr>
<td>Everything seemed to have a greater depth of quality to it</td>
<td>2.57</td>
</tr>
<tr>
<td>I felt free to say things that I have never expressed before</td>
<td>2.81</td>
</tr>
<tr>
<td>I felt completely accepted, cared for and deeply respected by my therapist</td>
<td>2.95</td>
</tr>
<tr>
<td>I felt our relationship provided a greater depth, different to other relationships, that helped me to grow</td>
<td>2.91</td>
</tr>
<tr>
<td>I felt we were completely open with each other</td>
<td>2.95</td>
</tr>
</tbody>
</table>
Appendix D: Advertising for TSTI

As part of my doctoral research project, I am looking for therapists and clients to participate in a hour long interview for the development of a scale of Relational depth in psychotherapy. I would be very grateful for your participation. This study has been developed by psychotherapy and counselling researchers at the University of Roehampton, UK. The aim of this research is to develop an instrument that can assess the frequency of relational depth moments in therapy.

Relational depth is defined as "A state of profound contact and engagement between two people, in which each person is fully real with the Other, and able to understand and value the other’s experiences at a high level." Interviews will be to elicit your reactions to the scale items to determine the suitability of the items to the scale. First, you will be taking a short demographics questionnaire online, then you will fill out the Relational Depth Frequency Scale. The interview consists of three parts: thinking aloud as you fill out the Relational Depth Frequency Scale online, then a focused interview to explain your thoughts around the scale items, and at last an open interview to enquire about your opinion on the scale. Interviews will be audio recorded. No one, other than the researchers, will see your individual responses, and they will be treated safely and confidentially.

The benefit of taking part in this research is that you can help contribute towards the development of a new measure of relational depth. Taking part can be interesting to you in helping you reflect on your own therapy, and relationship with your therapist or client.

The disadvantage of taking part in this study is that there may be a small likelihood that thinking about your therapy evoke some distressing feelings. If this occurs, you can contact the Principal Investigator of the study, Gina Di Malta (contact details below), who can help you identify the most appropriate source of support. There is no payment involved in taking part in this study. You can withdraw from the interview at any time.

This project has been approved under the procedures of the University of Roehampton’s Ethics Committee under the reference Psyc 15/164 on the 20.05.2015. Data from this study will be stored in anonymised format for an indefinite period of time. It will be used for one or more journal articles, and may also be used for other educational or teaching purposes. In any publications, your individual responses will not be identifiable in any way.

If you're interested to take part, or have any questions regarding this study, please contact the principal investigator:

Gina S. Di Malta
dimaltag@roehampton.ac.uk
+44 (0) 7871683006

if you would like to contact an independent party, you can contact:

Head of Department Contact Details: Diane Bray, Holybourne Avenue, Department of Psychology, University of Roehampton, London SW15 4JD,
d.bray@roehampton.ac.uk, 0208 392 3741
Or Director of study Contact Details: Mick Cooper, Holybourne Avenue, Department of Psychology, University of Roehampton, London SW15 4JD,
mick.cooper@roehampton.ac.uk, 0208 392 374
Appendix E: Advertising for online study template

Quality of therapeutic relating survey

The University of Roehampton (London, UK) is currently conducting research into the quality of the therapeutic relationship. Through this work, we are hoping to develop a tool that can measure significant moments in therapy. The research team is Prof. Mick Cooper, Dr Joel Vos and myself.

If you are willing to help us with this research, we would be very grateful if you could complete the survey at:
https://roehamptonpsych.az1.qualtrics.com/SE/?SID=SV_1zieRN25ofOZvFz
Following an information sheet, consent form, and basic demographic questionnaire, you will be asked to respond to three questionnaires about the therapeutic relationship, in the role of either a therapist or as a client.

The answers you provide to this survey are entirely anonymous, and will not be shared in any way with your psychotherapist or counsellor.
This project has been approved under the procedures of the University of Roehampton’s Ethics Committee (Psyc 15/164).

If you have any questions regarding this study, please contact Gina Di Malta, doctoral student, University of Roehampton. dimaltag@roehampton.ac.uk 07871683006.

Kind regards

Gina
APPENDIX F: Consent forms

PARTICIPANT CONSENT FORM
Three-step test interview for the development and validation of the Relational Depth Frequency Scale

Brief Description of Research Project:
In this study, we aim at developing a new scale for relational depth. This part of the scale development consists in interviews of four therapists and four clients to determine the suitability of the items to the scale. Interviews will take place at the University of Roehampton premises or the participants’ home, interviews are audio recorded and take up to one hour.

Investigator Contact Details:
Gina S. Di Malta
Holybourne Avenue
Department of Psychology
University of Roehampton
London SW15 4JD
dimaltag@roehampton.ac.uk
+44 (0) 7871683006

Consent Statement:
I agree to take part in this research, and am aware that I am free to withdraw at any point without giving a reason, although if I do so I understand that my data might still be used in a collated form. I understand that the information I provide will be treated in confidence by the investigator and that my identity will be protected in the publication of any findings, and that data will be collected and processed in accordance with the Data Protection Act 1998 and with the University’s Data Protection Policy.

Name ………………………………………

Signature …………………………………

Date ………………………………………

Please note: if you have a concern about any aspect of your participation or any other queries please raise this with the investigator (or if the researcher is a student you can also contact the Director of Studies). However, if you would like to contact an independent party please contact the Head of Department.

If you wish to withdraw from the study, please contact the investigator with the ID number which appears on the Debriefing Form. The data may still be used/published in an aggregate form.

For University of Roehampton students there is no compulsion or academic pressure to take part in the project. Should a student decline to participate or subsequently withdraw, their course marks will not be adversely affected.

Director of Studies Contact Details:  Head of Department Contact Details:
Mick Cooper  Diane Bray
Holybourne Avenue  Holybourne Avenue
Department of Psychology  Department of Psychology
University of Roehampton  University of Roehampton
London SW15 4JD  London SW15 4JD
mick.cooper@roehampton.ac.uk  d.bray@roehampton.ac.uk
0208 392 3741  0208 392 3741
Quality of the Therapeutic Relationship Survey

Thank you for visiting our survey site.

The survey is open to:
- clients over 18 years old
- psychotherapists, counsellors, counselling and clinical psychologists
- trainee psychologists who have been practicing for a minimum of one year.

This study has been developed by psychotherapy and counselling researchers at the University of Roehampton, UK. The aim of this research is to investigate the quality of the therapeutic relationship in therapy.

To achieve this, we would be grateful if you could complete the following survey. It should take no more than 30 minutes. For the purposes of this survey we will ask you to complete the questionnaires either as a therapist or as a client.

The survey includes basic demographic questions, the working alliance inventory, the relational depth inventory, and the Relational Depth Frequency Scale. To fill in these questionnaires, you will have to focus on a single relationship with a client or therapist (no personal identification is required). At last the survey includes a short self-compassion scale.

No one, other than the researchers, will see your individual responses, and they will be treated as entirely anonymous. No names or identifying characteristics are collected.

The benefits of taking part in this research is that it can be interesting to you and help you reflect on your own therapy, and relationship with your therapist or client.

The disadvantage of taking part in this study is that there may be a small likelihood that thinking about your therapy evokes some distressing feelings. If this occurs, you can contact the Principal Investigator of the study, Gina Di Malta (contact details below), who can help you identify the most appropriate source of support.

Please note that the questionnaires in this survey do not assess the quality of your therapy.

There is no payment involved in taking part in this study. You can withdraw from this study at any time by simply exiting the survey.

This project has been approved under the procedures of the University of Roehampton’s Ethics Committee under the reference Psyc 15/164 on the 20.05.2015.

Data from this study will be stored in anonymised format for an indefinite period of time. It will be used for one or more journal articles, and may also be used for other educational or teaching purposes. In any publications, your individual responses will not be identifiable in any way.

If you have any questions regarding this study, please contact the principal investigator:
I agree to take part in this research, and am aware that I am free to withdraw at any point without giving a reason, although if I do so I understand that my data might still be used in a collated form. I understand that the information I provide will be treated in confidence by the investigator, that my identity will be protected in the publication of any findings, and that data will be collected and processed in accordance with the Data Protection Act 1998 and with the University’s Data Protection Policy. I confirm that I am 18 years old or older.

Yes
No
Appendix G: Socio-demographic questionnaire

Q1 What is your gender?
   Male
   Female
   Other

Q2 What is your age?

Q3 Which of the following best represents your ethnicity?
   White
   Black/African/Carabeen/Black British
   Mixed ethnicity
   Asian/Asian British
   Other ethnic group

Q4 What is your religious preference?
   Christian
   Buddhist
   Hindu
   Jewish
   Muslim
   Sikh
   Spiritual
   Agnostic
   Atheist

Q5 Are you a mental health practitioner (e.g. psychotherapist, counsellor, psychiatrist, psychologist, social worker) in training or in practice?
   yes
   No

Display This Question:
If Are you a mental health practitioner (e.g. psychotherapist, counsellor, psychiatrist, psychologist, social worker) in training or in practice? yes Is Selected

Q6 What is your profession (as trainee or practitioner)? (Tick all that apply)
   Counsellor
   Psychotherapist
   Clinical psychologist
   Counselling psychologist
   other- please specify

Display This Question:
If Are you a mental health practitioner (e.g. psychotherapist, counsellor, psychiatrist, psychologist, social worker) in training or in practice? yes Is Selected

Q7 Are you in training or qualified practitioner?
In training
A qualified practitioner

Display This Question:
If Are you in training or qualified practitioner? A qualified practitioner Is Selected

Q8 How many years post qualification have you been practicing?
   less than a year
   1-5 years
   5-10 years
   10-20 years
   over 20 years

Q9 For the purposes of completing this survey, we ask you to participate either as a client or a therapist. Are you participating in this survey as a client or a therapist? (please choose one)
   I am completing this survey as a therapist
   I am completing this survey as a client

Display This Question:
If For the purposes of completing this survey, we ask you to participate either as a client or a the... I am completing this survey as a client Is Selected

Q10 With respect to being a client and for the completion of the following questionnaires, we would like you to focus on your current or most recent relationship with a psychotherapist or counsellor.

Is this therapist male or female?
   My therapist is male
   My therapist is female
   Other

Display This Question:
If For the purposes of completing this survey, we ask you to participate either as a client or a the... I am completing this survey as a client Is Selected

Q11 How many sessions have you had with this therapist?
   I am currently seeing this therapist- I have had less than 6 sessions
   I am currently seeing this therapist- I have had 6-24 sessions
   I am currently seeing this therapist- I have had over 24 sessions
   I attended psychotherapy in the past

Display This Question:
If For the purposes of completing this survey, we ask you to participate either as a client or a the... I am completing this survey as a client Is Selected

Q12 To the best of your knowledge, what is the therapeutic orientation of your therapist?
   Cognitive-behavioural
Display This Question:

If For the purposes of completing this survey, we ask you to participate either as a client or a the... I am completing this survey as a therapist Is Selected

Q13 What is your therapeutic orientation? You may select more than one answer.
   Cognitive-behavioural
   Psychodynamic
   Person-centred
   Existential
   Integrative
   Psychoanalytic
   Systemic
   Other- please specify

Display This Question:

If For the purposes of completing this survey, we ask you to participate either as a client or a the... I am completing this survey as a therapist Is Selected

Q14 For the purpose of this survey and following questionnaires, we will ask you to focus on a specific client of your choosing. Is this client male or female?
   My client is male
   My client is female
   Other

Display This Question:

If For the purposes of completing this survey, we ask you to participate either as a client or a the... I am completing this survey as a therapist Is Selected

Q15 How many sessions have you had with this client?
   I am currently seeing this client- I have had less than 6 sessions
   I am currently seeing this client- I have had 6-24 sessions
   I am currently seeing this client- I have had over 24 sessions
   I saw this client in the past
### Appendix H: Principal Component Analysis Tables and figure

#### Table 4. RDFS Item Total Correlation and Alpha if Item Deleted

<table>
<thead>
<tr>
<th>Item Code</th>
<th>Item Description</th>
<th>Corrected Item-Total Correlation</th>
<th>Cronbach's Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>RDFS03</td>
<td>I felt we were both completely genuine with each other</td>
<td>.64</td>
<td>.962</td>
</tr>
<tr>
<td>RDFS06</td>
<td>I felt we were accepting of one another</td>
<td>.65</td>
<td>.962</td>
</tr>
<tr>
<td>RDFS07</td>
<td>I felt a clarity of perception between us</td>
<td>.68</td>
<td>.962</td>
</tr>
<tr>
<td>RDFS08</td>
<td>I felt an overall warmth between us</td>
<td>.69</td>
<td>.962</td>
</tr>
<tr>
<td>RDFS10</td>
<td>We were immersed in the present moment</td>
<td>.68</td>
<td>.962</td>
</tr>
<tr>
<td>RDFS16</td>
<td>I experienced a meeting that was beyond words</td>
<td>.68</td>
<td>.962</td>
</tr>
<tr>
<td>RDFS20</td>
<td>I felt we were completely open with each other</td>
<td>.70</td>
<td>.962</td>
</tr>
<tr>
<td>RDFS01</td>
<td>I experienced an intense connection with him/her</td>
<td>.70</td>
<td>.961</td>
</tr>
<tr>
<td>RDFS02</td>
<td>I experienced a very profound engagement with her/him</td>
<td>.72</td>
<td>.961</td>
</tr>
<tr>
<td>RDFS04</td>
<td>I experienced what felt like true mutuality</td>
<td>.76</td>
<td>.961</td>
</tr>
<tr>
<td>RDFS09</td>
<td>I felt intensely present with him/her</td>
<td>.74</td>
<td>.961</td>
</tr>
<tr>
<td>RDFS12</td>
<td>It felt like a shared experience</td>
<td>.76</td>
<td>.961</td>
</tr>
<tr>
<td>RDFS14</td>
<td>I felt we connected on a human level</td>
<td>.75</td>
<td>.961</td>
</tr>
<tr>
<td>RDFS05</td>
<td>We were deeply connected to one another</td>
<td>.78</td>
<td>.96</td>
</tr>
<tr>
<td>RDFS11</td>
<td>There was a deep understanding between us</td>
<td>.83</td>
<td>.96</td>
</tr>
<tr>
<td>RDFS13</td>
<td>I felt we deeply trusted each other</td>
<td>.80</td>
<td>.96</td>
</tr>
<tr>
<td>RDFS15</td>
<td>I experienced a deep sense of encounter</td>
<td>.79</td>
<td>.96</td>
</tr>
<tr>
<td>RDFS17</td>
<td>I felt like we were totally in-the-moment together</td>
<td>.79</td>
<td>.96</td>
</tr>
<tr>
<td>RDFS18</td>
<td>I felt we were really close to each other</td>
<td>.80</td>
<td>.96</td>
</tr>
<tr>
<td>RDFS19</td>
<td>I felt we truly acknowledged each other at a very deep level</td>
<td>.81</td>
<td>.96</td>
</tr>
</tbody>
</table>
Table 6. Principal Component Analysis Eigenvalues

<table>
<thead>
<tr>
<th>Component</th>
<th>Initial Eigenvalues</th>
<th>Total</th>
<th>% of Variance</th>
<th>Cumulative %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>11.80</td>
<td>58.98</td>
<td>58.98</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>1.46</td>
<td>7.31</td>
<td>66.30</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>0.75</td>
<td>3.74</td>
<td>70.04</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>0.65</td>
<td>3.24</td>
<td>73.29</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>0.59</td>
<td>2.95</td>
<td>76.24</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>0.54</td>
<td>2.69</td>
<td>78.93</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>0.49</td>
<td>2.45</td>
<td>81.38</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>0.44</td>
<td>2.20</td>
<td>83.58</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>0.39</td>
<td>1.97</td>
<td>85.55</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>0.37</td>
<td>1.87</td>
<td>87.42</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>0.36</td>
<td>1.79</td>
<td>89.21</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>0.31</td>
<td>1.53</td>
<td>90.74</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>0.30</td>
<td>1.44</td>
<td>92.18</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>0.27</td>
<td>1.36</td>
<td>93.54</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>0.25</td>
<td>1.27</td>
<td>94.81</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>0.23</td>
<td>1.16</td>
<td>95.97</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>0.22</td>
<td>1.11</td>
<td>97.08</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>0.22</td>
<td>1.09</td>
<td>98.17</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>0.19</td>
<td>0.95</td>
<td>99.12</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>0.17</td>
<td>0.87</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Figure 2. Scree Plot