An exploration of the effectiveness of emotional regulation strategies on the well-being of teachers and early years practitioners

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Overarching Abstract

Feedback from local authority early years services show that the emotional well-being of Early Years Practitioners (EYPs) is at risk due to the intense emotional labour committed within early years practice. A systematic review (SR) was conducted to identify emotional regulation strategies which are most effective in improving emotional well-being of EYPs. However, the initial stages of the SR revealed that there is a dearth of research in this area. Therefore, the SR question was adapted to investigate the effectiveness of emotional regulation strategies in improving teacher well-being. Cognitive reappraisal and mindfulness were identified as the most effective strategies within the eight studies identified. Subsequent empirical research investigated the potential of a metaphorical model entitled 'Chimp Management' (Peters, 2012) to positively affect emotional well-being in early years practice. The model provides a framework for emotional reflection and links closely with the effective strategies identified in the SR.

Fifteen self-selecting EYPs took part in semi-structured interviews to discuss the emotional impact of their role. Participants then took part in a training course about the Chimp Management model. One month post-training, practitioners were interviewed again to discuss how, when and why the model was useful or not useful in managing the emotional impact of their practice. Interpretative phenomenological analysis was used to analyse the interviews. Master themes from the pre-training interviews comprised of emotional labour across personal, professional and organisational domains. Master themes for the post- training interviews surrounding the use of the Chimp model consisted of 'self-development and enjoyment' and 'self-

regulatory strategies. Implications for the potential of applying such models within EP practice are discussed.

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Table of Contents

List of tables

List of figures

PART 1: SYSTEMATIC REVIEW: How effective are emotional regulation processes in improving teacher well-being?

Abstract

Teacher well-being is a crucial issue within both educational research and practice. The link between teacher well-being and the academic achievement of children has been well established in the literature. Furthermore, the extensive emotional labour involved in teaching has been closely linked to high rates of burnout and attrition within the profession in recent years. In order to investigate how emotional labour can be managed within the teaching profession, a systematic review was conducted to identify emotional regulation strategies which are most effective in improving teacher well-being. Cognitive reappraisal and mindfulness were identified as the most effective strategies within the eight studies identified. Expressive suppression was concluded to be least effective. However, these findings should be viewed with caution due to wide variability in weight of evidence amongst the eight studies and low effect sizes in over half of the associations tested.

1.1 Introduction

1.1.1 Preface

The following systematic review was originally intended to investigate the effectiveness of emotional regulation processes in improving the well-being of EYPs. However, as outlined in the methodology section, literature searches found insufficient research articles in this specific field. Therefore after discussion with my research commissioners it was agreed that it would be appropriate to adapt the review question to focus on school teachers; an area which provided a rich source of extant research material.

1.1.2 Teacher well-being

Teacher well-being is a crucial issue within educational research for two key reasons. First, recent literature has corroborated the relationship between teacher well-being and the academic achievement of children. When teachers feel happier and more engaged in their work, children tend to perform better in academic tasks (Briner & Dewberry, 2007; Roorda, Koomen, Spilt, & Oort, 2011; Spilt, Koomen, & Thijs, 2011). Subsequently, higher pupil performance and morale can lead to further improvements in teacher well-being and an upward trend is established (Briner & Dewberry, 2007).

Secondly, teaching is one of the professions more susceptible to work related stress and burnout (Kinman, Wray, & Strange, 2011). Of concern itself, the substantial evidence base for the relationship between teacher burnout and attrition (Galton & Macbeath, 2008; Hakanen, Bakker, & Schaufeli, 2006) further illustrates the importance of this issue. Attrition rates within the teaching profession in the United Kingdom remain high:

> *the statistics for those who began teacher training show the percentage teaching in the maintained sector five years after qualification is even lower at 52% for undergraduate routes and 57% for postgraduate* (House of Commons Education Committee, 2012, p. 35).

This results in an unstable school environment for children and a financial drain on already limited public resources (Roffey, 2012).

Hargreaves (1998) suggests the high level of teacher burnout and subsequent attrition should be attributed in part to the intense emotional labour committed within teaching practice.

1.1.3 Emotional labour in teaching

Emotional labour refers to 'the process by which workers are expected to manage their feelings in accordance with organisationally defined rules and guidelines' (Wharton, 2009, p. 147). Emotional labour is particularly prevalent within the teaching profession as part of the commitment by teachers to continually support, motivate and inspire children and young people (Isenbarger & Zembylas, 2006). One example could be the necessity to maintain the patience needed to deliver repeated and / or modified instruction to a child who finds a particular task challenging. Another example could be the need to suppress anger and frustration elicited by a poorly behaved child in order to maintain control and authority. In an organisational context, emotional labour could include the need to manage the pressure and potential anxiety involved prior to or during an Ofsted inspection. Such intense and varied forms of emotional labour within teaching practice require psychological effort and deplete mental resources (Martínez-Íñigo, Totterdell, Alcover, & Holman, 2007) placing teachers at risk of emotional exhaustion (Goldberg & Grandey, 2007) and depression

(Mann, 1997). According to Grandey (2000), consistent emotional labour over time can also erode any potential feelings of work related personal accomplishment and increase the sense of negativity towards the job and the self. Therefore, there is a clear need to investigate potential strategies to mitigate the impact of emotional labour within teaching. One such strategy may be the use of emotional regulation.

1.1.4 Emotional regulation definitions

Emotional regulation can be defined as:

- 'The processes by which individuals influence which emotions they have, when we have them, and how they experience and express these emotions' (Gross, 1998, p.275)
- 'The set of processes whereby people seek to redirect the spontaneous flow of their emotions' (Koole, 2009, p. 29)
- 'The goal directed processes functioning to influence the intensity, duration and type of emotion experienced' (Gyurak, Gross, & Etkin, 2011, p. 401)

According to Koole (2009), emotional regulation serves to address both the fulfilment of hedonic[1] needs and the facilitation of specific pre- established goals. Therefore for the purpose of this systematic review and consequent empirical research, I will use the Gyurak et al. (2011) definition as this review specifically focuses on goal-directed processes of emotional regulation (i.e. the goal to mitigate the impact of emotional labour).

[1] Hedonic needs are 'aimed at promoting pleasure and preventing pain' (Koole, 2009 p14).

1.1.5 Emotional regulation in context

Contemporary research studies on emotional regulation originated from earlier work on the format of psychological defences, coping mechanisms and mood regulation (Koole, 2009). As Gross & Thompson (2007) argue, these four constructs in tandem make up the wider construct of affect regulation (Westen, 1994). Whilst there is significant semantic overlap between these terms, it is necessary for the purpose of this systematic review to briefly highlight the distinctive nature of emotional regulation.

Whereas emotions are created as an initial response to specific stimuli, moods are normally a longer term consequence of a sequence of emotions and modify cognition more than action (Gross & Thompson, 2007). Psychological defences are interpreted as fixed individual differences (Cramer, 2000) which do not carry the flexibility of emotional regulation. Finally, coping is distinct in the sense that it focuses entirely on reducing negative affect whereas emotional regulation can focus on both the promotion of positive affect and the reduction of negative affect. Coping also refers to action taken across longer periods of time, e.g. coping with a long term illness (Gross & Thompson, 2007).

1.1.6 Emotional regulatory processes

Emotional regulation can be explicit or implicit; explicit emotional regulation occurs when a conscious effort is made to heighten desirable or suppress undesirable emotions (for example when trying to reduce anxiety before a driving test), whereas implicit emotional regulation refers to processes that occur without conscious

awareness (Gross, 2013). This systematic review examines studies focussing on either implicit or explicit emotional regulation.

Emotional regulation strategies can be either antecedent focused or response focused (Gross, 2002) . An antecedent focused strategy refers to any preparatory action taken in anticipation of a potentially emotional situation, e.g. cognitive reappraisal which involves reframing the upcoming situation in a way that changes or reduces its emotional impact (Gross & John, 2003). This is also referred to as deep acting (Cote, 2005) as such strategies can help change both the internal feelings regarding an emotional situation and the external emotional response.

A response focused strategy refers to any action taken to control an emotional response to a situation after the emotion has been fully activated, e.g. expressive suppression which involves a conscious effort to inhibit public emotions (Gross & John, 2003). Cote (2005) refers to this as surface acting as this type of strategy will help to modify the external (surface) emotional response to a situation, but not the internal thoughts or feelings regarding the situation.

1.1.7 Systematic review

As Roffey (2012) stated, much research on teacher wellbeing has centred on analysis of deficit, such as how intense emotional labour can lead to burnout and has affected attrition rates. This systematic review and subsequent empirical research are designed to focus on the emotional regulation strategies that may be put in place to better manage emotional labour and improve teacher well-being.

1.2 Method

This systematic review was conducted following the seven stage process put forward by Petticrew and Roberts (2006) These steps are outlined in Table 1 below:

Table 1: 7 stages of a systematic review

Stage	
1	Clearly define the systematic review question.
2	Determine the types of studies required to answer the review question.
3	Carry out a comprehensive literature search.
4	Screen the studies found using inclusion criteria to identify studies for in-depth review.
5	Describe the studies to 'map' the field and code for quality and relevance.
6	Synthesise studies' findings.
7	Report outcomes of the systematic review.

(Petticrew and Roberts, 2006)

The review will now be presented using this seven stage framework.

1.2.1 Stage 1 – Clearly define the systematic review question

At the beginning of my current EP placement, I had a meeting with the Early Years and Childcare (EYC) team to discuss potential areas of research within the Early Years sector. One of the main topics of discussion was the current high referral rate due to concerns about behaviour. The team shared their belief that the prevalence of behavioural needs in EY settings was having a significant impact on the emotional wellbeing of EYPs. The emotional strain of managing young children with severe behavioural needs was discussed and the team shared their views that practitioners

were in need of more guidance on how to regulate negative and stressful emotions. Therefore, it was agreed that it would be useful to address the following question in a systematic review: How effective are emotional regulation processes in improving the well-being of EYPs?

1.2.2 Stage 2 - Determine the type of studies required to answer the review question

Quantitative studies with randomised control or pre-post test designs are the most appropriate studies for assessing the effectiveness of an intervention (Petticrew & Roberts, 2006). Therefore, studies of these types have been targeted in this systematic review.

1.2.3 Stage 3 – Carry out a comprehensive literature search

I searched the following electronic databases between 15th September and 22nd November 2013: Scopus, Web of Knowledge, Psyc Articles, Psyc Info (via Ovid), ERIC and British Education Index. I initially carried out these searches using combinations of the search terms in Table 2. I used the Boolean search term 'OR' to link the target population and intervention terms. I did this to ensure searches were time efficient and track-able over the scoping period.

Table 2: Search terms (1)

Target population terms	"Early years professionals", "early years practitioners", "early years teachers", "early childhood teachers", "kindergarten".
Intervention terms	"Emotional regulation".
Outcome terms	"Emotional well-being", "professional well-being".

During this initial scoping stage, a large number of studies was identified relating to the development of teaching methods designed to support emotional wellbeing of young children whereas this review focuses on the wellbeing of staff. I therefore adapted the outcome term field to <'professional well-being' NOT 'professional development'> to better suit the review's purpose.

1.2.4 Stage 4 - Screen the studies found using inclusion criteria to identify studies for in-depth review.

I screened all article titles to identify and subsequently disregard studies unrelated to the review question. The abstracts of studies with relevant titles were then screened and inclusion criteria (given below) applied to identify studies for possible inclusion in the in-depth review.

1st set of inclusion criteria

Participants	Early years practitioners
Settings	Early years educational settings
Study design	Quantitative studies which investigate the impact of emotional self – regulation processes on the wellbeing of early years practitioners
Language	Studies in English
Publication	Studies that are presented in peer reviewed journals
Date range	2005-2015

Upon entering the initial search terms into the chosen databases, only three articles were found, spread across the databases as follows:

Table 3: Studies found (1)

British Education Index	1
ERIC	0
Psyc Info & Psyc Articles	0
Web of Knowledge	2
Scopus	0

Of the articles found, only one could be included in the in-depth review after applying the inclusion criteria. It was clear there was a significant gap in the literature within this research topic. My research commissioners and I agreed that it would be useful to adapt the review question to investigate the effects of emotional regulation strategies on the well-being of school age teachers. We also agreed that the findings of the review would then be used to guide an empirical research study centred on EYPs. We decided this on the basis that emotional labour is prevalent across teaching practices as part of the organisational commitment to support, motivate and inspire children and young people (Isenbarger & Zembylas, 2006). Subsequently, I included 'teacher' as a population search term, adapting the original systematic review question to: 'How effective are emotional regulation processes in improving the well-being of school age teachers?

Table 4: Search terms (2)

Target population terms	"Early years teacher", "early childhood teacher", "kindergarten teacher" "teacher".
Intervention terms	"Emotional regulation".
Outcome terms	"Emotional well-being", "professional well-being".

2nd set of inclusion criteria

Participants	School age teachers
Settings	Primary schools, secondary schools
Study design:	Quantitative studies which investigate the impact of emotional self – regulation processes on the wellbeing of early years practitioners and teachers
Language:	Studies in English
Publication:	Studies that are presented in peer reviewed journals
Time	2005-2015

Upon entering the 2nd set of search terms into the chosen databases, 126 articles were found, spread across the databases as follows:

Table 5: Studies found (2)

British Education Index	2
ERIC	24
PsycInfo / PsycArticles	89
Web of Knowledge	11
Scopus	0

Subsequently, only 4 of the 126 articles found could be included in the in-depth review after applying the inclusion criteria. In order to find more studies related to my review topic, I deleted the intervention search term 'emotional regulation'. Emotional regulation can encompass many forms and it was clear that including the specific phrase 'emotional regulation' as an intervention term in my search was constricting the review's scope. By deleting this intervention term I was able to hand search a

wider range of studies related to the emotional wellbeing of teachers and manually identify studies that matched my inclusion criteria.

Table 6: Search terms (3)

Target population terms	"Early years teacher", "early childhood teacher", "kindergarten teacher" "teacher".
Outcome terms	"Emotional well-being", "professional well-being".

3rd set of inclusion criteria

Participants	School age teachers
Settings	Primary schools, secondary schools
Study design:	Quantitative studies which investigate the impact of emotional self – regulation processes on teacher well-being
Language:	Studies in English
Publication:	Studies that are presented in peer reviewed journals
Time	1995-2015

Upon entering the 3rd set of search terms into the chosen databases, 1139 articles were discovered. These articles were spread across the databases as follows:

Table 7: Articles found (3)

British Education Index	15
ERIC	91
Psyc Info / Psyc Articles	777
Web of Knowledge	233
Scopus	23

The articles found were hand searched and an additional four articles were identified as relevant for the in-depth review based on the inclusion criteria and the definition of emotional regulation put forward by Gyurak, Gross, & Etkin (2011) referred to on page 4:

'the goal directed processes functioning to influence the intensity, duration and type of emotion experienced'.

By referring closely to this definition, I was able to identify the research articles which examined the effectiveness of emotional regulation processes in achieving the goal of improving teaching well-being. By adding these four articles to the four previously found within the second search (see page 11), eight articles in total were available for the in-depth review.

1.2.5 Stage 5 - Describe the studies to 'map' the field and code for quality and relevance.

The eight articles are described in Tables 8a and 8b. Table 8a outlines the studies examining the effects of emotional regulation interventions on the emotional well-being of teachers. Table 8b outlines the studies examining the effects of specific teacher characteristics (related to emotional regulation) on the emotional well-being of teachers.

The format of the tables have been adapted from Cole (2008, p. 33) providing the same outline information as in the original article. In some articles, the effect size was not provided. Therefore in such articles Cohen's d was calculated using the mean scores and standard deviations.

Table 8a: Summary of studies involving 'interventions'

Study	Participants (number)	Context	Design	Independent measure	Dependent variable
Benn, Akiva, Arel, and Roeser (2012) Mindfulness training effects for parents and educators of children with special needs	70 teachers.	Special education services in a mid-Western city	Randomised control design.	SMART (Stress Management and Relaxation Techniques) program (Cullen & Wallace, 2010). The training comprised of 36 hours of didactic activities and group work related to mindfulness practices.	Stress *measured via* S. Cohen, Kamarck, and Mermelstein's (1983) Perceived Stress Scale. Anxiety *measured via* State subscale of the State–Trait Anxiety Inventory (STAI) for Adults (Kendall, Finch, Auerbach, Hooke, & Mikulka, 1976). Depression *measured via* Centre for Epidemiological Studies Depression (CES-D) Scale (Radloff, 1977). Negative and positive affect *measured via* Watson, Clark, and Tellegen's (1988) 20-item Positive and Negative Affect schedule.

Study	Participants (number)	Context	Design	Independent measure	Dependent variable
Jennings, Snowberg, Coccia, and Greenberg (2011) Improving classroom learning environments by cultivating awareness and resilience in education (CARE): Results of two pilot studies.	74 elementary school educators. 31 participants were used in Study 1, 43 were used in Study 2).	Elementary schools in an urban region of North East America.	Pre-post-test design.	CARE (Cultivating Awareness and Resilience in Education intervention). CARE is designed to promote empathy and compassion. It introduces 'caring practice' and 'mindful listening.'	Positive and negative affect *measured via* Watson, Clark, and Tellegen's (1988) 20-item Positive and Negative Affect schedule. Depressive symptoms *measured via* the Centre for Epidemiologic Studies Depression Scale (CES-D) (Radloff, 1977). Task related hurry and general hurry *measured via t*he Time Urgency Scale (TUS) (Landy, Rastegary, Thayer, & Colvin, 1991).

Study	Participants (number)	Context	Design	Independent measure	Dependent variable
Roeser et al. (2013) Mindfulness training and reductions in teacher stress and burnout: Results from two randomised, waitlist-control field trials.	113 elementary and secondary school teachers.	Elementary schools in Western Canada and Western US.	Randomised waitlist control trial.	Mindfulness training package. The training employed a variety of pedagogical approaches and activities all designed to foster mindfulness to help cope with stress.	Occupational stress *measured via s*even items drawn from an inventory of teacher stress (Lambert, McCarthy, & Abbott-Shim, 2001). Burnout *measured via the* Maslach Burnout Inventory (Maslach et al., 2001). Anxiety symptoms *measured via the* State subscale of the State–Trait Anxiety Inventory for Adults (Kendall, Finch, Auerbach, Hooke, & Mikulka, 1976). Depression symptoms *measured via* the Beck Depression Inventory (Beck, Steer, & Brown, 1996).

Study	Participants (number)	Context	Design	Independent measure	Dependent variable
Gold et al. (2010) Mindfulness-based stress reduction for primary school teachers.	11 primary school teachers.	Suburban primary schools in the United Kingdom.	Pre-post-test design.	Mindfulness-based stress reduction training package (MSBR). MBSR is based on training attention through straightforward secular, meditation techniques. It seeks to change our relationship with stressful thoughts and events, by decreasing emotional reactivity and enhancing cognitive appraisal.	Depression, anxiety and stress levels *measured via* the Depression Anxiety Stress Scales (Henry and Crawford 2005; Lovibond and Lovibond 1995)

Table 8b: Summary of studies involving 'teacher characteristics'

Study	Participants (number)	Context	Design	Independent measure	Dependent variable
Swartz and McElwain (2012) Pre service teachers' emotion related regulation and cognition: Associations with teachers' responses to children's emotions in early childhood classrooms.	24 pre service early childhood teachers.	A large US mid-western university.	Cross-sectional design.	Reappraisal strategies and suppression behaviours *measured via* 10-item Emotion Regulation questionnaire (Gross & John, 2003). Teachers' beliefs of children's emotions and perspective taking *measured via* 40-item caregivers' beliefs about feelings questionnaire (Hyson & Lee, 1996).	Teachers' responses to children's emotions (supportive and non - supportive responses to children's positive and negative emotions) *measured via* narrative observations of pre service teachers' responses to children's emotional displays (4 occasions for each participant).

Tsouloupas, Carson, Matthews, Grawitch, and Barber (2010) Exploring the association between teachers' perceived student misbehaviour and emotional exhaustion: the importance of teacher efficacy beliefs and emotion regulation	610 elementary, middle and high school teachers.	4 school districts in the US (3 in the South East, 1 in the Mid-West).	Cross-sectional design.	Teacher perceptions of student misbehaviour, cognitive reappraisal and expressive suppression *measured via* a reduced version of the Emotional Regulation questionnaire (Gross & John, 2003).	Emotional exhaustion *measured via a r*educed four-item version of the emotional exhaustion subscale from the Maslach Burnout Inventory – Educators Survey (Maslach, Jackson, & Schwab, 1996)
Brackett, Palomera, Mojsa-Kaja, Reyes, and Salovey (2010) Emotion-regulation ability, burnout and job satisfaction among British secondary school teachers.	123 secondary school teachers.	3 secondary schools in Kent, England.	Cross-sectional design.	Emotion-regulation ability (ERA). Measured by the Mayer–Salovey –Caruso Emotional Intelligence Test (Mayer, Salovey & Caruso, 2002).	Job satisfaction *measured via a* 15-item self-report survey by Travers and Cooper (1993). Personal accomplishment, depersonalisation and emotional exhaustion *measured via* the Maslach Burnout Inventory-Educators Survey (Maslach, Jackson & Leiter, 1996).

Chang (2013) Towards a theoretical model to understand teacher emotions and teacher burnout in the context of student misbehaviour: Appraisal, regulation and coping.	492 elementary, middle and high school teachers.	Midwest elementary, middle and high schools.	Cross-sectional design.	Mediating effect of emotional regulation (cognitive reappraisal and expressive suppression). 10 item emotion regulation scale (Gross & John, 2003).	Teacher burnout measured via the modified Maslach Burnout Inventory Educator Survey (Schaufeli and Salanova, 2007).

The eight studies selected for in – depth review are all relatively recent, conducted between 2010 and 2013. Six were carried out in the United States with two carried out in the United Kingdom. The sample sizes of the eight studies ranged from 11 to 492 with a median sample size of 94.

Of the eight studies, four examined the effectiveness of external interventions relating to the emotional self - regulation processes introduced in mindfulness training packages. The others examined the effects of pre-existing emotional self - regulation processes and abilities utilised by the participating teachers such as cognitive reappraisal and expressive suppression. All studies included one or more measures of emotional well – being as dependent variables, aside from Swartz and McElwain (2012) which measured the responses of teachers to emotional outbursts of children.

Two of the eight studies used a randomised control trial design, four used a cross-sectional design whilst the remaining two used a repeated measures pre and post-test. All studies utilised subscales from questionnaires to measure dependent variables apart from Swartz and McElwain (2012) who utilised narrative observations.

In summary, the eight studies measured the effects of three emotional regulation variables (mindfulness, cognitive reappraisal and expressive suppression) on different aspects of well-being. The results are outlined in Table 9 below:

Table 9: Results of studies

Independent measure	Dependent measure	Study	Significant result	Effect Size (Cohen's d)
Mindfulness	Stress	Benn et al (2012)	Not significant post-test, significant result ($p < .01$) at 2 month follow up	- 0.79 at 2 month follow up
		Roeser et al (2013)	Significant result ($p < .01$) post-test and at 3 month follow up	d = - 0.57 post-test; - 0.73 at 3 month follow up
		Gold et al (2010)	Significant result ($p < .05$)	Not available and impossible to calculate with statistics provided
	Burnout	Roeser et al (2013)	Significant result ($p < .01$) post-test, significant result ($p < .01$) at 3 month follow up	d = - 0.76 post-test; - 0.68 at 3 month follow up
	Anxiety	Benn et al (2012)	Significant result ($p < .05$) post-test and at 6 month follow up	d = - 0.52 post-test; - 0.75 at 2 month follow up
		Gold et al (2010)	Not significant	-
		Roeser et al (2013)	Significant result ($p < .01$) post-test and at 3 month follow up	d = -0.71 post-test; - 1.10 at 3 month follow up
	Depression	Benn et al (2012)	Significant result ($p < .05$) post-test, not significant at 2	d = -0.51 post-test; -0.27 at 2 month follow up

Independent measure	Dependent measure	Study	Significant result	Effect Size (Cohen's d)
			month follow up	
		Jennings et al (2011)	Not significant	-
		Gold et al (2010)	Significant result ($p < .02$)	Not available and impossible to calculate with statistics provided
		Roeser et al (2013)	Significant result ($p < .01$) post-test and at 3 month follow up	d = -1.06 post-test; -1.56 at 3 month follow up
	Negative affect	Benn et al (2012)	Not significant post-test, significant result ($p < .05$) at 2 month follow up	- 0.48 at 2 month follow up
		Jennings et al (2011)	Not significant	-
	Positive affect	Benn et al (2012)	Not significant at post-test or 2 month follow up	-
	Task related hurry	Jennings et al (2011)	Significant result ($p < .01$)	d = -0.24
	General hurry	Jennings et al (2011)	Significant result ($p < .10$)[2]	d = -0.27
	Personal growth	Benn et al (2012)	Significant result ($p < .05$) post-test, significant result ($p < .01$) at 2 month follow up	d = 0.48 post-test; 0.64 at 2 month follow up
	Self-compassion	Benn et al	Significant	d = 0.40 post-

[2] The use of significance level p<.10 within Jennings et al (2012) is taken into account within quality assessment later in this review (see Table N11 in Appendix 1).

Independent measure	Dependent measure	Study	Significant result	Effect Size (Cohen's d)
		(2012)	result ($p < .05$) post-test, not significant at 2 month follow up	test; 0.37 at 2 month follow up
Cognitive reappraisal	Teacher supportive responses to children's negative emotional outbursts	Swartz & Mcelwain (2011)	Significant result ($p < .001$)	$\beta = 0.64$
	Teacher non-supportive responses to children's positive emotional outbursts	Swartz & Mcelwain (2011)	Significant result ($p < .05$)	$\beta = -0.42$
	Emotional exhaustion	Tsouloupas et al (2010)	Significant result ($p < .01$)	$\beta = - 0.10$
	Burnout	Chang (2013)	Not significant	-
Expressive Suppression	Teacher supportive responses to children's negative outbursts	Swartz & Mcelwain (2011)	Not significant	-
	Teacher non-supportive responses to children's positive outbursts	Swartz & Mcelwain (2011)	Not significant	-
	Emotional exhaustion	Tsouloupas et al (2010)	Significant result ($p < .01$)	$\beta = 0.12$
	Burnout	Chang (2013)	Significant result ($p < .05$)	$\beta = 0.18$
Emotion regulation ability (cognitive reappraisal and expressive suppression)	Job satisfaction	Brackett et al (2010)	Significant result ($p < .01$)	$\beta = 0.26$
	Personal accomplishment	Brackett et al (2010)	Significant result ($p < .01$)	$\beta = 0.25$
	Emotional exhaustion	Brackett et al (2010)	Not significant	-
	Depersonalisation	Brackett et al (2010	Not significant	-

Two different measures of effect size were used within the eight studies; Cohen's d and standardised path coefficient. According to parameters put forward by Hattie (2009) for Cohen's d, .20 should be classified as a 'small' effect size, .40 as a 'medium' effect size and .60 as a 'large' effect size. According to parameters put forward by Kline (2005) for standardised path coefficient, .10 should be classified as a 'small' effect size, .30 as a 'medium' effect size and .50 as a 'large' effect size. These parameters will be used to classify the effect sizes within the 8 studies when reporting the outcomes of this systematic review.

All studies demonstrated at least one significant effect of an emotional regulation strategy on an aspect of teacher well-being ($p < .10$ or stronger). Of the thirty associations tested throughout the eight studies between emotional regulation and aspects of teacher well-being, nineteen effects were significant in improving aspects of teacher well-being. Four of these significant results had a large effect size, seven a medium effect size and eight a small effect size. However, two of these effects indicated that an emotional regulation strategy had a negative impact on teacher well-being - expressive suppression on emotional exhaustion (Tsouloupas et al., 2010) and expressive suppression on burnout (Chang, 2013).

EPPi (Evidence for Policy and Practice Information) quality assessment

The 8 studies were then analysed using the EPPi Weight of Evidence (WOE) tool[3].

Three separate criteria were assessed using the tool:

a) Trustworthiness of the study based on quality assessment
b) Appropriateness of the research design and analysis for addressing the systematic review question
c) Relevance of the study focus for addressing the systematic review question

[3] www.eppi.ioe.ac.uk/cms/

Following the assessment of the 8 studies, each study was given a 'low', 'medium' or 'high' WOE for Questions A, B and C of the EPPi tool. It should be acknowledged that whilst every effort is made to adhere to EPPi guidance, the assessment is a subjective process and interpretations may differ depending on the reviewer. The full quality analysis using the EPPi WOE tool can be found in Appendix 1.

EPPi WOE (A). Quality assessment judgement.

The following judgements were made based on responses to the questions N1 to N12 within the EPPi WOE tool when applied to each study. Rationale behind the responses is offered in Appendix 1.

Table 10: EPPi WOE (A) Judgements

Research Article	**Judgement**
Benn et al (2012)	Medium
Brackett et al (2010)	Medium
Chang (2013)	Medium
Gold et al (2009)	Low
Jennings et al (2011)	Low
Roeser et al (2013)	High
Swartz & McElwain (2012)	Medium
Tsouloupas et al (2009)	Low

EPPi WOE (B). Appropriateness of research design for addressing systematic review question.

In order to assess this issue, I investigated which research design is deemed most appropriate for assessing the effectiveness of an intervention, treatment or strategy. Three different research designs were used across the eight studies included in the systematic review. The three designs used were randomised control trial, repeated measures pre-post-test and cross-sectional.

The randomised control trial (RCT) is considered the most appropriate design for this purpose (Ho, Peterson, & Masoudi, 2008; Petticrew & Roberts, 2006). In RCT's, participants are randomly allocated to either an intervention or control group. The random allocation reduces the risk of confounding variables affecting the study's validity as the effects of any variables other than the intervention itself should be evenly spread across the control and intervention groups. Therefore, any studies in this systematic review using a RCT will be given a 'high' ranking for the EPPi WOE (B).

A cross-sectional research design is the least appropriate design for this purpose. In cross-sectional designs, a causal relationship between intervention and outcome cannot be established. Therefore, any studies in this systematic review using a cross – sectional design will be given a 'low' ranking for the EPPi WOE (B).

The remaining research design is the repeated measures pre and post-test. It is possible to establish a causal relationship with this design, however the effect of confounding variables cannot be ruled out. Therefore, any studies in this systematic review using a repeated measures pre and post-test design will be given a 'medium' ranking for the EPPi WOE (B).

Table 11: EPPi WOE (B) Judgements

Research Article	**Design**	**Judgement**
Benn et al (2012)	Randomised control trial	High
Brackett et al (2010)	Cross – sectional	Low
Chang (2013)	Cross – sectional	Low
Gold et al (2009)	Repeated measure pre and post test	Medium
Jennings et al (2011)	Repeated measure pre and post test	Medium
Roeser et al (2013)	Randomised control trial	High
Swartz & McElwain (2012)	Repeated measure pre and post test	Medium
Tsouloupas et al (2009)	Cross – sectional	Low

EPPi WOE (C). Relevance of topic to systematic review question.

In order to assess this issue, I compared both the independent and dependent variables examined in my chosen studies to those in my systematic review question. Seven of the eight studies focused on dependent variables closely related to teacher well-being (e.g. stress, burnout, job satisfaction). In addition, three of these seven studies assessed the effectiveness of the core emotional regulation strategies put forward by Gross (2013) i.e. cognitive reappraisal (an antecedent focused regulation) and expressive suppression (response focused regulation). I have given these three studies a 'high' rating for relevance. Four of these seven studies assess the effectiveness of mindfulness training packages which directly facilitate the process of emotional regulation, for example by increasing emotional awareness (Hill & Updegraff, 2012). I have given these four studies a 'medium' rating for relevance. The one remaining study of the eight (Swartz & McElwain, 2012) assessed the effectiveness of core emotional regulation strategies but focused on a dependent variable related to teaching performance. Therefore, I have also given this study a 'medium' rating for relevance.

Table 12: EPPi WOE(C) Judgements

Research Article	**Judgement**
Benn et al (2012)	Medium
Brackett et al (2010)	High
Chang (2013)	High
Gold et al (2009)	Medium
Jennings et al (2011)	Medium
Roeser et al (2013)	Medium
Swartz & McElwain (2012)	Medium
Tsouloupas et al (2009)	High

EPPi WOE (D) (Overall)

After addressing the EPPi tool's questions A, B and C, an overall judgement (D) was made about the WOE for the eight studies included in the review. The overall judgement was also classified as either 'low', 'medium' or 'high' (see Table 13).

Table 13: Eppi WOE (D) Judgements

Research Article	EPPi A	EPPi B	EPPi C	EPPi D (Overall)
Benn et al (2012)	Medium	High	Medium	Medium
Brackett et al (2010)	Medium	Low	High	Medium
Chang (2013)	Medium	Low	High	Medium
Gold et al (2009)	Low	Medium	Medium	Low
Jennings et al (2011)	Low	Medium	Medium	Medium
Roeser et al (2013)	High	High	Medium	High
Swartz & McElwain (2012)	Medium	Medium	Medium	Medium
Tsouloupas et al (2009)	Low	Low	High	Low

Two studies provided an low overall WOE (Gold et al., 2010; Tsouloupas et al., 2010); five studies provided a medium overall WOE (Benn et al., 2012; Brackett et al., 2010; Chang, 2013; Jennings et al., 2011; Swartz & McElwain, 2012) and one study provided a high overall WOE (Roeser et al., 2013).

1.2.6 Stage 6 - Synthesise studies' findings

Table 14 (below) combines the effect sizes of significant associations within each study with the concluded WOE for each study. For example, Roeser et al. (2013) was concluded to be a study with a high WOE which tested high effect sizes for the associations between mindfulness and burnout, anxiety and depression. Table 15

includes all associations concluded not to be significant or significant effects with no available effect sizes.

Table 14: Effect sizes and Weight of Evidence

EFFECT SIZE	Weight of Evidence: LOW	MEDIUM	HIGH
HIGH		Swartz & Mcelwain (2011) (**Cognitive reappraisal** increases supportive teacher responses to children's negative emotions)	Roeser et al (2013) (**Mindfulness** reduces burnout, anxiety and depression)
MEDIUM		Benn et al (2012) (**Mindfulness** reduces stress, anxiety, depression, personal growth and self-compassion) Swartz & Mcelwain (2011) (**Cognitive reappraisal** reduces non- supportive responses to children's positive emotions)	Roeser et al (2013) (**Mindfulness** reduces stress)
LOW	Tsouloupas et al (2010) (**Cognitive reappraisal** reduces emotional exhaustion) Tsouloupas et al (2010) (**Expressive suppression** increases emotional exhaustion)	Benn et al (2012) (**Mindfulness** reduces negative affect) Brackett et al (2010) (**Emotional regulation ability (cognitive reappraisal and expressive suppression)** increases job satisfaction and personal accomplishment) Chang (2013) (**Expressive suppression** increases burnout) Jennings et al (2011) (**Mindfulness** reduces general hurry and task related hurry)	

Table 15: Associations with no reported effect

Jennings et al (2011) ***Mindfulness*** *has no effect on depression or negative affect*
Benn et al (2012) ***Mindfulness*** *has no effect on positive affect*
Chang (2013) ***Cognitive reappraisal*** *has no effect on burnout*
Swartz & Mcelwain (2011) ***Expressive suppression*** *has no effect on teacher supportive responses to negative emotions or non-supportive teacher responses to positive emotions*
Gold et al (2010) ***Mindfulness*** *has no effect on anxiety; mindfulness reduces stress and depression but effect sizes unavailable*
Brackett et al (2010) *Emotional regulation ability* ***(cognitive reappraisal and expressive suppression)*** *has no effect on emotional exhaustion or depersonalisation*

1.2.7 Stage 7 - Report outcomes of systematic review

This systematic review concludes that emotional regulation strategies can be effective in improving teacher well-being with nineteen out of thirty of the associations tested within the eight studies indicating a significant effect in this direction. However, such a conclusion should be looked upon with a degree of caution as only one of the eight studies identified (Roeser et al., 2013) achieved a 'high' WOE score. In addition, around half the studies which concluded an emotional regulation strategy to be effective reported only a 'small' effect size by the parameters put forward by Hattie (2009) for Cohen's d and Kline (2005) for standardised path coefficient. It should also be noted that comparison between the studies identified was problematic as a wide range of outcome variables relating to emotional well-being were measured (e.g. anxiety,

burnout, stress). Therefore, any assumptions made are dependent on the measure utilised to assess emotional well-being. The effects of each of the emotional regulation strategies identified in the review are discussed below. This is followed by an overview of the methodological issues that were considered during the quality assessment.

Mindfulness

Within the eight studies, 18 associations between mindfulness and aspects of emotional well-being were tested. Mindfulness proved to be very effective in improving teacher well-being within this review's eight studies with 14 out of 18 associations showing significant positive effects, 11 of which were tested within studies with medium to high WOE and nine with medium to high effect sizes. There are several potential reasons why mindfulness proved to be so effective in this context. Firstly, mindfulness emphasises purposeful attentiveness to current experiences with a non-judgemental attitude (Hill & Updegraff, 2012). According to Lutz, Slagter, Dunne, and Davidson (2008) an increased awareness of an individual's emotions and responses can lead to higher levels of empathy. In a variety of situations within the teacher role, the ability to empathise could be an important tool towards maintaining a positive well-being (e.g. empathising with a child's frustration when struggling with a difficult task).

In addition, the more attentive stance towards current emotions promoted by mindfulness can help limit the lability of such emotions (Linehan, Bohus, & Lynch, 2007) hence helping teachers to better control the fluctuations of emotional state that may be caused by a challenging classroom and ultimately preserve a stable state of well-being. Finally, Barrett, Gross, Christensen, and Benvenuto (2001) note that the

ability to identify and differentiate between emotions as they are experienced can facilitate a greater sense of emotional control. Sutton (2004) suggests teachers believe that such control is one of the key contributors towards maintaining an idealised professional self-image and nurturing positive relationships with children at school.

Cognitive reappraisal

Cognitive reappraisal[4] was also a successful strategy in improving aspects of teacher well-being. Five of the eight associations tested indicated a significant positive effect, albeit with only two incorporating a medium to high effect size and no associations within a study with a high WOE. The variability in the success of cognitive reappraisal could relate to timing, context or approach. In relation to timing, Shian-Ling, Robins, Smoski, Dagenbach, and Leary (2013) state that cognitive reappraisal is only effective as an antecedent focused strategy, rather than a response focused strategy. In the mostly cross-sectional studies examining cognitive reappraisal within this review, it is not made clear how the participating teachers instigate the process of reappraisal (more specifically whether the strategy was implemented in anticipation of a potentially stressful event or in response to one).

Troy, Shallcross, and Mauss (2013) point to the contextual variability of cognitive reappraisal by reiterating that the strategy involves looking upon a stressful situation differently in order to control the emotional repercussions. Therefore, the variability in success of cognitive reappraisal may link to the extent to which the situation itself can be controlled. For instance, if teachers arrive at school each day with the certainty that they will be required to take charge over a regularly disruptive class, then reappraisal

[4] Mindfulness and cognitive reappraisal should not be viewed as mutually exclusive. For example, the refocusing of attention involved in mindfulness practice could also be seen as a feature of cognitive reappraisal Garland, Gaylord and Park, (2009).

may be a useful strategy as the only option is to focus on controlling the emotions associated with the situation. However, if teachers regularly encounter a situation which is potentially adaptable (such as changing the style of lesson for a subject many children find dull), it would be more prudent to focus energies on the situation itself rather than the associated emotions. In such a case, cognitive reappraisal may not be as beneficial. Finally, cognitive reappraisal is too often viewed as a monolithic construct (Cristea, Szentagotai Tatar, Nagy, & David, 2012). Therefore in this review, it was not possible to detect whether teachers were attempting to reappraise by searching for the positive aspects of a situation or attempting to view the pre-existing negative situational aspects in a less threatening light.

Expressive Suppression

Expressive suppression proved to be ineffectual in improving aspects of teacher well-being with only two of the six associations tested indicating a positive effect, both with low effect sizes in a study with a medium WOE. In addition, expressive suppression actually had a significant negative effect on teacher well-being in two studies (Chang, 2013; Tsouloupas et al., 2010). Expressive suppression is widely viewed as a useful short term emotional regulation strategy which may prevent further escalation or deterioration of emotions within a stressful experience but may also result in negative consequences in the longer term such as negative self-image, memory loss or depression (Gross & John, 2003). Moreover, expressive suppression may result in additional negative consequences within the interactive practice of teaching. According to Butler et al. (2003) the potential of expressive suppression to distract from the current situation along with the reduction in expressions of emotion can result in breakdown of social interactions and potential damage to working

relationships. Firstly, distraction from an interaction can result in a decrease in responsiveness, which can lead to a deterioration of rapport within a conversation (e.g. if a head teacher communicates instructions to a teacher only to be met with a blank look). Also, the inhibition of emotion within an interaction could inhibit the emotional bond between the participants. An example of how this occurs in the teaching context could be if a child approaches his/her teacher with a piece of work he/she is particularly proud of but does not receive warm praise in reciprocation. The presence of emotion is particularly important within the interactions of teachers and pupils, due to the need for young children to feel emotionally contained via supportive and secure attachments (Bowlby, 1988). Whilst there may be instances in which it is beneficial to utilise the suppression of emotion such as when an individual becomes increasingly angry or when interpersonal distance needs to be maintained (Butler et al., 2003) it is important to be wary of potentially damaging long term effects.

1.3 Methodological considerations

1.3.1 Sample size and make up

Sample sizes were sometimes small (e.g. eleven participants in Gold et al. (2010)) whilst the participant groups were relatively homogenous throughout all studies, in terms of ethnicity, gender and geographical spread. The overwhelming majority of participants across the studies were white Caucasian. In Tsouloupas et al. (2010) for example, 91% of the participants were described as “Caucasian American”. Brackett et al. (2010) collected data from only one school whilst Jennings *et al.* (2011) examined two small groups of teachers in localised urban/suburban settings in the U.S. In Chang (2013) there was limited ethnic or geographical spread amongst the 492 participants.

The above factors were judged to limit generalisability. In many of the studies it was impossible to draw any conclusions as to the applicability of the results across such cultural boundaries.

Additionally, participants in the majority of studies were self-selected, i.e. they answered some form of call to participate. This is a potential source of bias compared with the use of randomised selection techniques. Participants who proactively volunteer to adopt emotional regulation strategies might be more motivated to report the positive effects of the study as they perceive some social desirability in being associated with a study that produced positive outcomes. For example those participants who put themselves forward for an intervention study designed to reduce burnout in Roeser et al. (2013) might do so because they perceive themselves to be experiencing burnout themselves and therefore would be positively motivated to find some form of solution, thus introducing an element of bias into the participant cohort.

1.3.2 Design of studies

All studies relied on some form of self-reporting techniques. For those involving a specific intervention, this would be at intervals and pre- and post- programme. Often data was collected via an online questionnaire with only Swartz and McElwain (2012) relying on some form of group observation techniques in a naturalistic classroom setting. Self-reporting techniques are inherently subjective and can be open to criticism of self-enhancement bias or a reticence to self-report negative results because of perceived peer pressure (Donaldson & Grant-Vallone, 2002). Indeed deliberate self-misrepresentation is also a possibility but this was felt to be less likely given the participant groups concerned and their willingness to participate in the

studies. Whilst the completion of questionnaires provides the researcher with a range of answers to specific questions which can assist in the application of coding techniques (e.g. Likert scale modelling), such a rigid questioning regime can impede the collection of more idiosyncratic responses that enable more holistic and phenomenological interpretations to be explored in the data.

A further issue with several studies in this review was the cross-sectional nature of the methodology. Such studies consisted of analysis of data collected from participants already utilising emotional regulation strategies. These studies did not incorporate pre-post-test groups, randomised control groups and did not examine the data longitudinally. Therefore any inference that emotional regulation strategies relate to higher wellbeing carries less weight as it is impossible to establish causality. This major limitation was often recognised by the authors who, in a number of studies suggested that the results only provided preliminary evidence to support a particular intervention or theory and acknowledged that more in-depth, longitudinal work would be needed in the future. Only Benn et al. (2012) and Roeser et al. (2013) utilised RCT's which added to the WOE of these particular studies. An additional point to consider would be the relative differences in social support as a result of differences in experimental design. As Kinman et al. (2011) state, social support is particularly beneficial in limiting the impact of emotional labour within teaching. Therefore, strategies introduced in the form of group interventions may have been more effective than pre-existing strategies implemented by individuals.

1.3.3 Data collection and analysis

Most studies collected both qualitative (subjective) and quantitative (objective) responses. These responses were analysed to produce some measureable and comparable results. Only Swartz and McElwain (2012) consisted of direct observation in a naturalistic setting with the authors going to great lengths to use robust coding techniques. This was perceived to add to the robustness of the data although such methods are always open to challenge in terms of what is deemed sufficiently important to record in observation. Several of the studies used some form of established measurement tool or analytical scale. As the review did not set out to assess the efficacy of such tools, these were taken at face value and an assumption was therefore made that the use of such tools added to the robustness of the data analysis. In addition, Brackett et al. (2010) used an expert scoring technique which involved comparing the responses of participants to those of a panel of experts answering the same question. To the participant's question score would then be added an additional value which was related to the percentage of experts answering in the same way. In Roeser et al (2013), the efficacy of an eight week support programme for teachers was tested with objective data collected via the use of independent health screening. All studies took steps to establish data analysis reliability with seven studies utilising the Cronbach's Alpha measure. Apart from Gold et al. (2010), all studies also explained the fit between the research question and the method of data analysis.

1.3.4 Limitations of this review

This systematic review, like any, has limitations. Firstly, database searches yielded studies published in academic journals. Therefore the review may be influenced by the file drawer problem (Rosenthal, 1979): the likelihood that studies with significant results are more likely to be accepted for journal publication, whilst studies with negative results are less likely to be accepted. In addition, this review was conducted by a single author. Therefore, the review lacks the inter-rater reliability that would have been useful when determining inclusion / exclusion criteria and WOE. A final limitation is that the studies selected for in-depth analysis are variable in respect of participant demographics and study context along with the nature of emotional regulation strategy and teacher well-being. Whilst to a certain extent this was unavoidable due to the lack of appropriate studies found during earlier searches with more defined parameters, the necessity to widen the scope of the search has reduced the generalisability of the review. Whilst broad implications can be made from this review about the effects of different forms of emotional regulation on separate aspects of well-being, the variability of the sample, context and variables within the chosen studies mean generalisability to particular contexts, populations or specific aspects of emotional regulation and well-being is limited.

1.3.5 Recommendations for further research

Further research in this area should incorporate more focus on the long-term effects of emotional regulation strategies on teacher well-being. Only two of the selected studies (Benn et al., 2012; Roeser et al., 2013) carried out follow up measures at 2 and 3 months respectively. Therefore, it would be useful to investigate whether some of the

strategies deemed to be successful in improving well-being immediately after intervention continue to be as productive as time goes on. Also, it would be interesting to look at the effects of emotional regulation strategies within more specific contexts in teaching practice. For example, are such strategies particularly effective when applied to emotions involved within difficult interactions (with children or other members of staff), outlook on a heavy workload or frustration at school policy? Which strategies are most effective in different contexts and why?

1.3.6 Summary

Emotional regulation can be effective in improving teacher well-being, though this is dependent on the type of strategy used. Within the eight studies analysed, mindfulness proved to be the most effective strategy. Cognitive reappraisal was also an effective strategy, though expressive suppression was not effective and in some cases actually counterproductive to positive well-being. These results should be looked upon with an element of caution due to wide variability in WOE amongst the eight studies and low effect sizes for over half of the associations.

PART 2: BRIDGING DOCUMENT

The purpose of this bridging document is to

a) Highlight personal and professional motivations for undertaking research in my chosen topic.

b) Outline how the findings of the systematic review have provided a rationale for my choice of empirical research.

c) Present and discuss the philosophical, methodological and ethical issues associated with the empirical research

d) Consider the importance of quality assurance and reflexivity during the research process

2.1 Rationale for research topic

My initial interest in the emotional well-being of early years practitioners (EYPs) stems from the personal experiences of a close female relative working in the field. A few years ago, she was employed as a nursery assistant and primarily worked with a child with social, emotional and behaviour difficulties. After work, she would usually return home feeling emotionally exhausted and often distressed as a result of the intense emotional labour invested within her work. Emotional labour is defined as 'the process by which workers are expected to manage their feelings in accordance with organisationally defined rules and guidelines' (Wharton, 2009). As referred to on page 7, discussions with the Early Years and Childcare team in my local authority indicated that this was a prevalent issue within early years practice. Therefore, it was agreed that research investigating the efficacy of an emotional support system for EYPs would be worthwhile.

2.2 Implications of systematic review for empirical research

My original systematic review question was 'How effective are emotional regulation processes in improving the well-being of EYPs?' However, it soon became clear that there was a dearth of research examining emotional well-being of EYPs. As described on page 10, I decided, after consultation with my research commissioners, to address the original question with school teachers and use the findings of the review to guide an empirical research study centred on emotional well-being of EYPs. I chose to do this on the basis that emotional labour is prevalent across teaching practices as part of the organisational commitment to support, motivate and inspire children and young people (Isenbarger & Zembylas, 2006).

To reiterate the findings of the systematic review, emotional regulation strategies were deemed to be effective in improving teacher well-being, although this was dependent on the type of strategy used. Mindfulness and cognitive reappraisal were concluded to be most effective, with expressive suppression least effective. These findings were also looked upon with a degree of caution due to high variability in weight of evidence across studies and low effect sizes in the majority of studied associations between emotional regulation and well-being.

Drawing from these findings, I decided to investigate the efficacy of the 'Chimp Management' (CM) model (Peters, 2012) as an emotional support system for EYPs.

2.3 Chimp Management

I first became aware of the CM model through my interest in sport. I listened to high profile figures in various fields (such as Bradley Wiggins, Steven Gerrard and Ronnie O'Sullivan) speak in the media about how the model had helped them to control their

emotions, develop confidence and ultimately improve their performance level and general well-being in the face of the intense pressure within professional sport. Upon further investigation, I learnt that the model has been applied within numerous domains in addition to sport including business, medicine and education although no empirical research has been conducted to date.

To investigate the possibility of applying the CM model within this early years research project, I firstly contacted the director of the education sector within CM Ltd. I discussed the rationale behind my research and my proposal to train EYPs to apply the model within their practice. Upon gaining permission from the author for the model to be used in this research, we then agreed two modes of collaboration with CM Ltd; joint training sessions with a member of CM staff to introduce the model to research participants and supervision with CM staff on an ad hoc basis throughout the research process.

2.4 Adult learning

The CM training sessions were guided by the androgogical model of adult learning (Knowles, 1990). Knowles presents a set of criteria for effective adult learning. In Table 16, I outline how I have met these criteria in my research.

Table 16: Knowles criteria for effective adult learning

Knowles (1990) criteria	Outline of criteria	How my research matches Knowles' criteria
The need to know	Learners need to understand why learning something is important in the wider context	The rationale for the research was reiterated from the outset of the training sessions
The learner's self-concept	Learners need to be encouraged to be autonomous and self-directed in their learning	Participants were encouraged to adopt a degree of autonomy in their learning by completing tasks between training sessions
The learner's experience	Learners need to relate the topic for learning to their own life skills and experiences	Participants were invited to contribute their personal and professional experiences and apply them to the CM model during the training sessions.
Readiness to learn	Learners need to understand why the topic is important to them personally	Participating settings were self-selecting, therefore it was assumed that the learners believed that the training sessions would be useful to them.
Orientation to learning	Learners need to be able to link the topic for learning to real life situations.	Regular examples of how the model may be applied within real life situations were provided to the learners during the training.
Motivation	Learners need to be motivated by internal incentives e.g. self-esteem.	The contributions of participants were regularly referred back to in order to personalise the learning experience.

2.5 Conceptual Framework

In considering the methodology for this research, I adopted a pragmatic approach in order to choose a method that was most likely to produce a rounded and comprehensive interpretation of the field under study. I therefore chose to adopt an interpretative phenomenological analysis (IPA) approach based on a critical realist perspective. This enabled me to accept the existence of an objective reality, whilst at the same time accepting that "my" reality is not always "theirs" which requires us to create individual meanings from the interpretations we make of this so-called reality. As Larkin, Watts, and Clifton (2006, p. 107) state: *'What is real is not dependent on us, but the exact meaning and nature of reality is.'*

Critical realism creates a bridge between the positivist (objective) and interpretivist (subjective) positions enabling me to adopt a more subtle approach that allows me to view the social world as independent of our own knowledge of it whilst, at the same time, accepting the inherent reflexivity of such research. It allows me to accept that data can be collected and analysed to provide a picture of how things appear in another person's world but that my interpretation of such data will be influenced by my own worldview and experiences and thus interpreted in a way that is unique to me. This view accords with Willig (2008) who suggests that researchers may not have direct access to reality. Furthermore Bhaskar (1997, pp. 18-19) states that:

> *Human agents are neither passive products of social structures nor entirely their creators but are placed in an iterative and naturally reflexive feedback relationship to them. Society exists independently of our conceptions of it, in its causal properties, its ability to exert deterministic force on individuals; yet it is dependent on our actions, human activity, for its reproduction and can be transformed by this activity. It is thus both real and transcendent.*

Bhaskar refers to the distinct, yet inextricably linked interconnected ontological levels that exist between individuals allowing him to suggest that from a critical realist perspective social reality is 'stratified' (p.20), with each level dependent on each other for their existence, yet capable of exerting deterministic force on the other.

The IPA approach recognises the difficulty of fully accessing individual subjective experiences as these are described through language which itself is linked inextricably to a person's thinking and emotional state. However, through a careful and methodical analysis of the descriptive and idiosyncratic language used and the personal reflections of each participant, it is possible to produce a rich seam of data that uncovers common themes as they emerge from the multiple conversations. These themes can then be analysed and compared to produce a valid and nuanced interpretation of the subject under study.

'…the IPA researcher is engaged in a double hermeneutic because the researcher is trying to make sense of the participant trying to make sense of what is happening to them' (Smith, Flowers, & Larkin, 2009)

Only one participant from each early years staff group was interviewed in accord with the recommended number of four to ten IPA interviews for professional doctorate research (Smith et al., 2009). Time constraints were also a factor in this decision. Although only one member of staff from each setting was interviewed, the CM training sessions took place in a group format in order to provide opportunity for the interviewed participants to engage in shared reflection on their experiences of the model.

2.6 Ethical considerations

An empirical research proposal was submitted to the Education, Communication and Language Sciences research panel at Newcastle University in April 2014. The research was approved in May 2014. I continued to be mindful of ethical issues throughout the research and of the need to address these issues in accordance with the BPS Code of Human Research Ethics (BPS, 2011).

Each early years setting was visited prior to the research in order to address any queries and to complete informed consent forms (see Appendix 2), reiterate the purpose and design of the study as well as issues surrounding confidentiality of data. Participants were also reminded of their right to withdraw from the study at any time and were informed that a summary of the study's findings would be made available to each setting upon completion.

Firstly, at the invitation stage, I felt it important to reassure potential participants of the validity of this research and how this process could benefit them in their practice. In an attempt to validate the study, requests for participation were disseminated via the EYCC team manager, which, I felt, provided a degree of reassurance to those considering participation.

Next, the BPS (2011) advises that psychological researchers should endeavour to maximise the benefit of their work. In order to do so in this study, I chose to conduct the research within privately owned early years settings. I made this decision as there are less training and development opportunities available for practitioners within private settings than within maintained schools (SQW, 2011). Due to the legal

obligation for early years settings to maintain high staff to child ratios[5] and the relatively small teams that operate in the private sector, managers find it difficult, and are sometimes reluctant to release staff for training and development opportunities (SQW, 2011). Furthermore, around 80% of early years providers are private or voluntary and comprise of small and geographically dispersed settings (Caluouri, 2009). Subsequently, CPD is generally more difficult to deliver within this sector (Elfer & Dearnley, 2007). Whilst advocating the benefits of this research to potential participants, I was also aware of the need to manage expectations. Therefore at the beginning of the training sessions, I emphasised that this was a single three hour intervention that would be limited in its scope. It was also made explicit that the CM model was simply one form of support system and that other approaches might be more suitable for some individuals.

I was conscious of the need to establish full informed consent from research participants. Therefore, prior to participating in the research, each member of early years staff was asked to sign an informed consent form detailing the nature and purpose of the study on page 115 (Appendix 2). The form also gave assurances:

- of the participant's right to withdraw from the study at any time
- that any data they contribute would remain anonymous until analysis is complete, after which the data would be destroyed
- that the results of the study would be made available to participants as the earliest available opportunity

[5] See Department for Education (2014)

Finally, the form included contact details of both the principal investigator (myself) and my research supervisor to enable participants to ask questions or request information at any point during the research process.

As the focus of the interviews centred on the emotional aspect of the early years role, I was conscious of the need to maintain awareness of the potential sensitivity of the topic for the participants. Therefore in accordance with Smythe and Murray (2000), I looked upon informed consent as an on-going process within this research and assumed responsibility for revisiting the issue during sensitive periods and mutually renegotiating consent when necessary.

In addition, Haverkamp (2005, p. 153) warns of the potential loss of objectivity and distance from the subject in what can be emotionally charged encounters. He states:

'One of the most challenging requirements for the psychologist researcher is to maintain one's role as researcher during interviews that are characterized by high levels of rapport, intimate disclosure, and potentially strong emotion.'

In order to address this issue I ensured that my role as researcher was made clear to the participants. In addition I followed the interview schedule and avoided my natural instinct to offer psychological support.

2.7 Quality of research

The findings obtained from qualitative research can be viewed, especially by researchers from a quantitative methodological tradition, as lacking in rigour and replicability. Thus, it is essential that those adopting a qualitative approach can demonstrate an awareness of those factors within the research process that can ensure a rigorous approach is adopted, which will lead to data that is robust and valid.

In pursuit of this goal I have followed Yardley (2000, p. 219) who identified a number of characteristics of high quality qualitative research, namely sensitivity to context, commitment and rigour, transparency and coherence; and impact and importance.

The adoption of a phenomenological approach has enabled me to remain sensitive to the context of this study by exploring, in some depth, the personal experiences of individuals working in similar settings and seeking to understand how their views can be interpreted in the context of the research question. I have sought to delve deeply into their world and, by rigorous analysis of the discourse produced from these interactions, sought to interpret these views, always aware that I do so through my own personal lens.

I believe that I have adopted a rigorous approach to this research project with a thorough engagement with the topic, initially at a theoretical level and subsequently in the process of data collection and interpretation. Whilst the sample size has been relatively modest I have set out to explore the role of the Early Years Practitioner through an empathetic and deep immersion in their world, focussing on and developing unexpected viewpoints, which challenge both my own preconceptions and those of the wider academic and professional community. I have also reflected deeply on how my own worldview and presence during the data collection process might influence the final outcome, recognising the implausibility of the concept of true objectivity and accepting that the outcomes from this research will be based on my own interpretation of the data. I do not see this as a weakness however, as I believe through the adoption of a thematic approach and the use of triangulation methods I

have produced a holistic interpretation of the research subject that is both valid and robust.

In terms of transparency and clarity, Yardley (2000, p. 222) refers to the "clarity and cogency" which results from the "rhetorical power or persuasiveness" of the arguments presented. Whilst this is for others to judge, I believe that I have not merely described a given situation, but have constructed an interpretation of reality as seen through the participants' eyes, thus producing a convincing account. I have attempted to recreate their reality through their words, which provide powerful illustrative examples of the challenges experienced by EYPs in their daily roles. The adoption of an openly reflexive approach and an explicit acknowledgement of the illusive nature of objective truth have constantly challenged me to see the data through the lens of my own personal experiences. This provides a degree of transparency and assurance to the reader that I have not simply accepted the accounts at face value but have reflected on how my own personal assumptions and values might influence the nature of the final account as it appears on the page. This level of reflexivity, my choice of what data to include or leave out and the rhetorical style that I have adopted, has produced a unique and personal interpretation of a group of individuals in a particular setting.

Yardley's final characteristic relates to the impact and importance of the study. Once again I will leave it to the reader to judge its importance. However, the study itself set out to assess the impact of a particular psychological intervention as a support mechanism, which sought to empower individuals to think, and therefore act, differently in situations which had previously been sources of stress and anxiety.

Whilst this research is grounded in theory, it has produced results that have the potential to be of great practical benefit to practitioners in this field. The generic nature of the intervention enables these findings to be extended beyond the world of the EYP to other work settings which individuals experience as stressful. This has enabled me to produce data which are valid, robust and will have some value and utility as an exploration of the effectiveness of a particular psychological technique and as the basis for future research.

2.8 Reflexivity

According to Finlay (2002, p. 532), reflexivity in research involves the 'continual evaluation of subjective responses, inter-subjective dynamics, and the research process itself'. In adopting a reflexive approach, qualitative researchers must acknowledge that their presuppositions, assumptions, knowledge and beliefs will affect the way in which the data is interpreted (Finlay, 2002). This is particularly pertinent within IPA as the researcher engages in a double hermeneutic in which he/she attempts to make sense of the participant's own sense making (Smith et al., 2009). Therefore, my position as a trainee educational psychologist with practical experience of working in the early years sector must be acknowledged. Attempts were made wherever possible to bracket off my experiences when interpreting the data but as Larkin, Eatough, and Osborn (2011) remind us, bracketing can only serve to suspend our preconceptions, not remove them completely.

Whilst I acknowledge that my experiences to date could lead to others questioning the validity of the data, it is also the case that this experience could be seen as a significant advantage as it may enable me to recognise certain issues central to this project and to

delve deeply into them to produce more nuanced and rich interpretations of the data. It is also necessary to acknowledge the potential that my presence as a researcher could introduce a perceived power imbalance between interviewer and interviewee that once again could influence the final outcome. Finally, I recognise the double hermeneutic concept in the re-interpretation of the subject's lived experience and the challenges that this places on the researcher. However, I believe that acknowledging these issues is part of an on-going and iterative process that will enable me to produce data which is valid and robust.

PART 3. EMPIRICAL DOCUMENT: Managing the 'chimp' in early years settings

Abstract

Feedback from local authority early years services shows that the emotional well-being of Early Years Practitioners (EYPs) is at risk due to the intense emotional labour committed within early years practices. This research aimed to investigate the potential of a metaphorical model entitled 'Chimp Management' (Peters, 2012) to positively affect emotional well-being in early years practice. 'Chimp Management' provides a framework for emotional reflection and links closely with the effective strategies identified in the SR. The model contains three distinct elements: the 'chimp' which thinks emotionally and is guided by impressions and feelings, the 'human' which is logical and guided by facts and truth and the 'computer' which acts as a reference point for information, values and beliefs.

Fifteen self-selecting EYPs from five private nurseries took part in semi-structured interviews to discuss the emotional impact of the role. Participants then took part in a short training course about the Chimp Management model. One month post training, practitioners took part in a further set of semi-structured interviews to discuss how, when and why the model was useful or not useful in managing the emotional impact of their practice.

Interpretative phenomenological analysis was used to analyse the practitioner interviews. Master themes from the pre-training interviews comprised of emotional labour across personal, professional and organisational domains. Master themes for the post- training interviews surrounding the use of the Chimp Management model

consisted of ‘self-development and enjoyment’ and ‘self-regulatory strategies’.

Implications for the potential of applying such models within EP practice are discussed.

3.1 Introduction

Many studies have highlighted the importance of caring within Early Years Practice e.g. Taggart (2011); Harwood, Klopper, Osanyin, and Vanderlee (2013). This type of work involves a degree of 'emotional labour' (Hochschild, 1983) that can place severe psychological strain on the individual carrying out such work (Boyer, Reimer, & Irvine, 2013; Elfer, 2012). According to Osgood (2010), the emotional labour committed by Early Years Practitioners (EYPs) should be at the centre of a reconceptualization of professionalism within early years work. More specifically, (Osgood, 2010, p. 130) states that 'rather than viewing emotional labour…as a means of exploitation, emotions should be reclaimed as vital and credible in ECEC (Early Childhood Education and Care) practice'.

The concept of emotional labour has, to date, been associated within early years practice with the act of caring itself, in terms of the regulation of emotions of both oneself and another (Boyer et al., 2013). However, this research seeks to widen the scope of emotional labour to encompass the psychological pressures experienced by EYPs as a result of their perceived inability to perform the caring role due to systemic restrictions placed upon them in this more professionalised environment.

The consequences of such emotional labour can be widened beyond the impact on EYPs themselves to include the receivers of care. Boyer et al. (2013, p. 527) suggest that:

> *'This burden of emotional regulation amongst nursery workers may be higher because the receivers of that care are experienced not only as vulnerable, but even as emotionally permeable or boundary-less.*

3.1.1 Emotional labour: background

The concept 'emotional labour' was first described by Hochschild (1983, p. 7) as the requirement to 'induce or suppress feeling in order to sustain…outward countenance.' A more recent definition is provided by Wharton (2009, p. 147) who describes emotional labour as 'the process by which workers are expected to manage their feelings in accordance with organisationally defined rules and guidelines'.

3.1.2 Effects of emotional labour

Brotheridge and Grandey (2002) suggest emotional labour comprises two distinct strategies; deep acting and surface acting. Deep acting refers to the control of inward feeling which naturally modifies outward emotion whereas surface acting relates to the control of outward emotion (Hulsheger & Lang, 2010). As Wharton (2009) notes, the dissonance between inward feeling and outward emotion that occurs within surface acting can lead to psychological strain and elements of burnout. For example, Hulsheger and Lang (2010) found that regular surface acting in trainee teachers led to increases in psychological strain whereas Van Dijk and Brown (2006) concluded that persistent surface acting can result in the emotional exhaustion element of burnout.

3.1.3 Emotional labour in caring within early years practice

The emotional labour involved in caring for young children is extensive (Elfer, 2012). As Elfer and Dearnley (2007, p. 269) state, EYPs are 'subject to the intense projection of feelings' from the young children they are responsible for. This may present, for example, in the form of a distressed child upset at being separated from his / her

parents for the first time. Another example might be the anger displayed by a child finding it difficult to adjust to nursery structures and expectations. EYPs must invest emotional labour in order to fulfil the requirement to maintain patience and understanding in the face of such emotion.

Furthermore, the requirement for emotional labour within the caring aspect of early years practice extends beyond the interactions with the children themselves to those involving the key adults surrounding the child (Osgood, 2010) or those within the 'mesosystem' (Bronfrenbrenner, 1979). For example, Boyer et al. (2013) reported that EYPs spoke of the need to suppress the frustration elicited by instances of parental apathy regarding their child's achievement or behaviour. Moreover, Elfer (2012) notes the presence of emotional labour in inducing or suppressing emotions within interactions with colleagues in order to engage in productive collaboration within a stressful environment.

3.1.4 An extension of emotional labour in early years practice

Osgood (2010) suggests ECEC's narrow focus on objective and measurable outcomes, set against an ever-more stringent national regulatory framework, side-lines the nurturing and caring aspects of the Early Years role. However, those entering the early years profession are often motivated by a desire to care. Often therefore the EYP may expend emotional labour on the suppression of negative emotions such as frustration and guilt at the inability to fulfil their primary motivations for entering the profession in the first instance.

3.1.5 Support systems needed

Given the prevalence of emotional labour within early years practice, there is a clear need for EYPs to have access to support systems which can mitigate the negative impact on well-being. As Osgood (2010) states, the negative consequences of emotional labour may be mitigated by opportunities for EYPs to reflect upon the presence and nature of the emotional strain involved in their work. Research into possible support systems which facilitate such reflection is scarce; however the few systems that have been implemented and evaluated have yielded positive feedback for this form of professional development, although the impact often diminishes once the intervention ends.

Elfer and Dearnley (2007) implemented a form of Continuing Professional Development (CPD) via the provision of structured, didactic and interactive training and support sessions for EYPs. Whilst evaluated positively by the participants in terms of significant experiential learning and appreciation of the opportunity to share some of the emotional challenges of the role, the authors recognised that this model was particularly resource-intensive, requiring regular time to be set aside for training sessions with appropriate levels of professional facilitation. Following the conclusion of the study, and for a variety of stated reasons, the CPD was abandoned. An earlier critique of this type of intervention is supplied by Manning-Morton (2006, p. 47) who suggests that working with young children 'touches deeply held personal values and often deeply buried personal experiences, issues that are not able to be adequately addressed through standard, content-focused training.' Manning-Morton (2006) describes another support mechanism (designed and initiated by the author) named

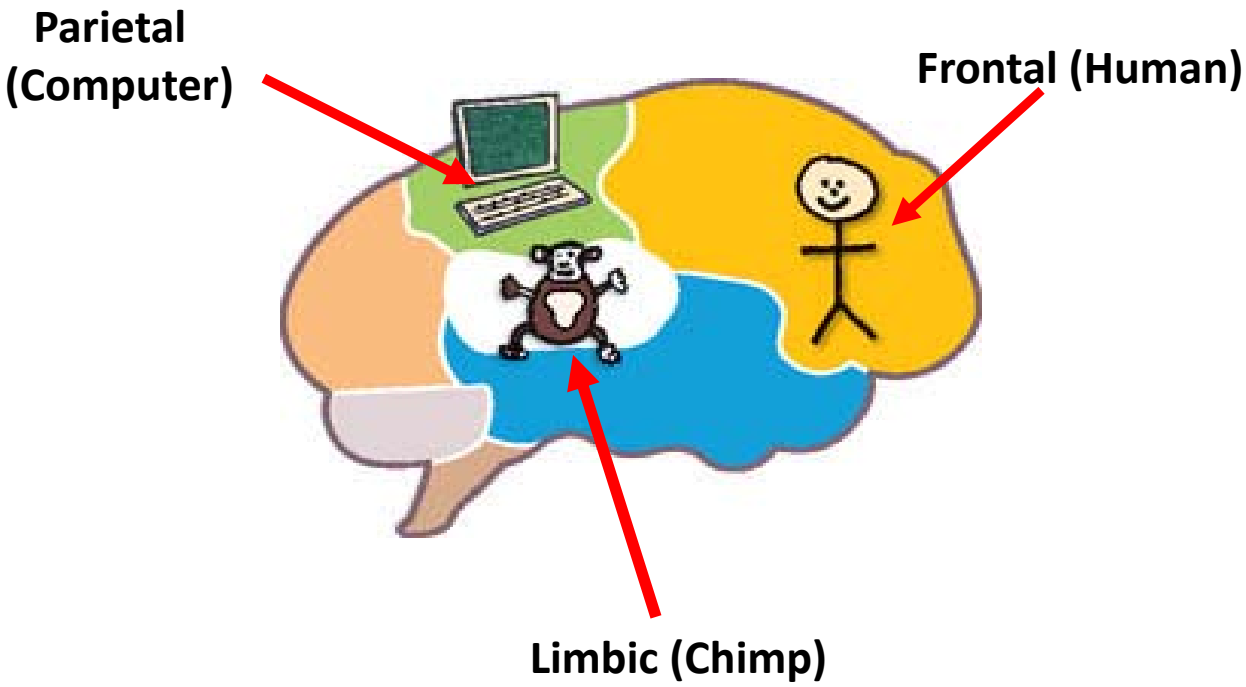
the ‘Key Times’ project. The project (described as ‘relationship-based learning’) was less didactic than that of Elfer and Dearnley (2007) with the creation of a social space that allowed for personal reflection, theoretical thinking and observations of practice which allowed EYPs to develop a professional identity that was critically reflexive. Manning-Morton (2006) reported that EYPs found the process of emotional reflection supportive and beneficial both in developing their working relationships with children and in developing their own sense of professional self-worth.

3.1.6 The Chimp Management model

This research study assesses the impact of training sessions based on the ‘Chimp Management’ (CM) model (Peters, 2012) on the responses of EYPs to the emotional labour encountered within their practice. In the CM model, the ‘psychological mind’ comprises of three distinct metaphors which represent different lobes of the brain; the chimp, human and computer. The ‘chimp’ (the limbic brain) is portrayed as an ‘emotional machine’, the ‘human’ (the frontal brain) is the self and the computer (the parietal brain) represents a storage area for information, beliefs and values. A visual representation of the model can be seen in Figure 1.

The model invites users to recognise when the metaphorical ‘chimp’ may be hijacking thoughts, feelings and behaviours and to understand what ‘drives’ the chimp to these hijacks (Peters, 2012). The model then promotes ways in which the chimp can be managed in order to prevent such hijacks, such as ‘exercising’ the chimp (expressing emotion), ‘boxing’ the chimp (using facts or logic) or feeding the chimp ‘bananas’ (distractions and rewards) (Peters, 2012).

Figure 1: Chimp Management model



The CM model was chosen for this study due to its close links with the successful emotional regulation strategies identified within the systematic review. Mindfulness was concluded to be the most effective strategy and can be defined as the act of 'paying attention in a particular way: on purpose, in the moment and nonjudgmentally' (Teasdale, Williams, & Segal, 2014, p. 27). The CM model relates to mindfulness practices as it promotes the need to maintain a non-judgemental awareness and acceptance of the 'chimp' and the 'human' as two separate entities; the 'chimp' as an emotional machine and the 'human' as a logical self.

Cognitive reappraisal was also concluded to be a successful strategy within the systematic review. Cognitive reappraisal is an antecedent form of emotional regulation which involves 'changing the way an individual thinks about a potentially emotion-eliciting situation in order to modify its emotional impact' (John & Gross, 2004, p.

1302). I view the CM model as a multi-layered cognitive reappraisal. Firstly, the model invites an individual to consider when the metaphorical 'chimp' may be hijacking them with undesirable thoughts, feelings or behaviours (Peters, 2012). When 'chimp' hijacks are recognised and the human regains control of the situation, a further reappraisal may then occur as the 'human' looks upon the situation with more rationality and perspective. This links with work from Goldin, McRae, Ramel, and Gross (2008) who concluded from FRMI studies that reappraisal generates increased activity in the frontal cortex regions (the 'human' as shown in Figure 1) as well as decreased activity in the amygdala within the limbic system (the 'chimp' as shown in Figure 1).

3.2 Methodology

3.2.1 Participants

Contact was made with a Local Authority Early Years and Childcare (EYCC) team. Through collaboration with the EYCC team leader, information regarding the proposed study along with criteria for participation was emailed to the manager of every private and voluntary early years setting in the borough (see page 48 in bridging document for rationale regarding choice of settings).

Five settings agreed to participate. Managers were asked to request three to four staff volunteers for participation in three one hour group training sessions over a period of three weeks. Each of the five staff managers were also asked to select one member of staff from within their group to take part in a one-hour semi-structured interview two weeks prior to and after the training sessions. Only one member of staff from each group was selected for interview, following guidance from Smith, Flowers & Larkin (2009) that IPA studies within professional doctorates consist of four to ten interviews.

The member of staff chosen for interview was dependent on the manager's judgement of who would be most comfortable participating in a one to one research interview.

3.2.2 Procedure

The pre-selected participants firstly took part in individual semi-structured interviews surrounding the role of an early years practitioner and the emotional impact of early years practice (see Appendix 3). Two weeks after the interviews, all four participants from each setting received three weekly training sessions on the CM model. These sessions are outlined in Table 17 overleaf.

Table 17: Chimp Management training sessions

Session 1	Objectives of the training sessions were introduced to the participants. These were (as described to the participants); ➢ to gain a greater insight into the human mind ➢ to be able to work with your mind to develop emotional skill ➢ to be able to use this skill to get the best out of yourself and others The core elements of the CM model were introduced, namely the Chimp, Human and Computer (as seen in Figure 1). The participants were also invited to reflect upon their practice and highlight situations in which the Chimp could be hijacking their thoughts, feelings and behaviours.
Session 2	An overview of the potential instincts and drives of the Chimp was provided in order to help the participants develop understanding of how and why the Chimp can hijack our thoughts, feelings and behaviours. For example, participants were taught how the Chimp instinctively reacts to stressful situations on a 'fight, flight or freeze' basis and how the Chimp's actions are motivated by individual drives such as 'security', 'territory' or 'power'. Participants were invited to reflect upon the individual drives of their own chimp and how these have motivated their actions in the past.
Session 3	Participants were presented with guidance on how to manage the chimp, for example by; ➢ learning to recognise when the Chimp is hijacking the human ➢ 'exercising' the chimp by offloading emotion ➢ 'boxing' the chimp by providing logical fact or truth ➢ providing the chimp with 'bananas' as a form of distraction or reward To conclude, the training material of all three sessions was summarised.

Power-point presentations were used within the training sessions[6] whilst diagrams of the CM model (Figure 1 on page 62) were given to practitioners to guide reflective thinking between sessions. Two weeks after training, practitioners took part in further semi-structured interviews to discuss their experiences of the CM model, particularly in relation to managing the emotional impact of their practice (see Appendix 4). After transcription, the audio recordings of the interviews were destroyed.

3.3 Data Analysis

The names of the participants were changed to ensure anonymity. Transcripts were analysed in line with IPA techniques (Smith et al., 2009) to enable exploration of the lived experience of the individual. Initial reading sought to establish emergent themes and patterns. Notations were split into three categories; descriptive, linguistic and conceptual (interpretative); transcripts and notations were then revisited to begin the process of clustering Emergent Themes into broader Superordinate Themes. A wider analysis then took place to establish commonalities and variations between themes and concepts across all interviews. This process enabled a further higher level clustering of Superordinate Themes into Master Themes.

3.3.1 Pre-intervention findings

In the interviews held prior to the Chimp Model intervention, I interpreted the following master and superordinate themes (see Table 18 overleaf).

[6] PowerPoint slides are not included in the appendix due to copyright restrictions.

Table 18: Pre-intervention master themes and superordinate themes

Master theme	Superordinate theme
Personal domain	Lack of self-worth
	Negative emotions
	Self-fulfilment
Professional domain	Relationship with colleagues/professionals
	Relationship with parents
	Commitment to professionalism
	Emotional bonds with children
Organisational domain	No time to care
	Emotional labour of paperwork

3.3.2 Personal domain

Most participants cared deeply about their work. I interpreted a substantial element of fulfilment experienced in their role performance, especially when parents recognised the contribution they made to their child's wellbeing. However, there was considerable evidence that pointed towards the negative aspects of the work and the psychological demands that working with babies and young children brings. Often, this resulted in participants continuing to think about the children outside work, resulting in stresses at home and, in those with a more resilient outlook, attempts being made to ameliorate the effects by adopting strategies to distract them from thinking about work. For example, Anna stated:

> *Outside of work you are constantly thinking of what you could do for the children and how you could go about it; it never stops…*

She continued by suggesting that the role of the EYP was like being on a *'conveyor belt'*. I viewed this as Anna looking upon her role as a 'non-stop responsibility' which affected her wellbeing at home and her relationships. Emma also used evocative

language when she talked about being *'dragged down'* by work and, at times, being in a *'black place'*. However, she considered herself to be *'quite reflective'* and able to put events at work in perspective. She continued:

> *…maybe I should have done this and maybe I'll try that next time but I don't really let it get me down… I would just go for a walk and try and sort myself out and come back.*

The day-to-day demands of working in a busy early years environment were apparent in what Freda said:

> *…work can sort of tend to escalate and staff can feel a bit stressed 'cos there is so many factors going on in the same room.*

Despite such stress, Anna appeared to acknowledge that this is often overlooked by EYPs:

> *…you're just trying to push your emotions to one side…and just deal with it.*

Freda referred to the impact that these outward signs of stress can have on the children when she suggested that *'…the children feed off that, you see.*'

Where situations are perceived to be so stressful, the role of the manager is seen as challenging, with a focus more often on what is going wrong rather than finding the time to praise good work. This can affect negatively feelings of self-worth within the workforce. Anna recognised this issue:

> *…you always revert back to picking up…just the little things but…it makes you feel horrible actually that you can't get across to the staff that…they're doing a brilliant job.*

Despite the negative emotions expressed above, a number of participants appeared to find the job fulfilling. Anna commented that '*it has to be more rewarding otherwise I wouldn't come in and deal with the stress of it all*.' Freda also referred to her fulfilment in supporting the children. She described aspects of her work as '*fun'* and stated:

> *…when you do actually sit down and play with them, it's their enjoyment from it…they are always saying come and play with me.*

Denise concurred, speaking of how much she loved her job, particularly when she received positive feedback from parents. She went on to say:

> *…that makes me feel good 'cos you're trusting me with the most important thing in the world…that makes me feel good inside.*

3.3.3 Professional domain

Here, I explored the relationships the EYPs had with parents and fellow professionals, together with the emotional bonds that developed with the children in their care. A number of participants suggested that the relationships with parents were often challenging due to the unrealistic demands placed on staff. Often, these interactions took the form of protracted and contested negotiations between the two parties. As Emma said, *'[you] try and work it out between you; it's not all plain sailing.'* Adopting a maternal posture, Emma continued by suggesting that she would not want to bring her own child up in the same way that some of the parents want to and that often it is a case of '*[coming] to some arrangement'.* Some parents also seemed unwilling to accept help particularly if it was intimated that their child required additional support from other agencies. Anna, for example, expressed concern that some parents refuse to access the provision being offered to them and referred to one particular parent

who, in her opinion, '*isn't willing to reach their hand out and accept the help.*' Frustration was also interpreted due to the perception that the development work undertaken with the children in the early years setting was often compromised by a lack of parental activity at home. Cathy said:

> *…with certain children's families you feel like you have come to a dead end…cos you're doing all this work…and then it just sort of stops the minute they leave.*

Emma appeared to allude to a sense of frustration that parents in some cases could be doing more for their child:

> *It's been very, very young mums who really don't know how to bring a child up so we try and just give them the information…but you've got to try hard not to judge.*

Despite this occasional frustration however, Emma made reference to the '*connection'* that can develop over time between the EYP and certain parents. This often becomes a strong and caring relationship as can be seen when she said:

> *…it's not just the baby you look after, it's the mum cos you can see that they are so upset about leaving this baby.*

A number of participants also highlighted the challenges of dealing with external professionals. Anna referred to a particular encounter with a visiting professional who appeared to undermine the efforts of the staff:

> *…but for somebody to come in and judge, judge you on what you've done..*

Cathy also spoke about dealing with such difficult issues when she said that as a deputy [manager] she saw '*the conflict side*' of working relationships and often had to '*step in between them and sort it out*.'

3.3.4 Organisational domain

Here I consider those aspects of stress arising from organisational or systemic pressures. Often this relates to the perceived lack of available time to devote to the children due to the demands of administration and bureaucracy. Indeed, when asked to describe the most stressful aspect of her work Denise summed it up in one word - '*Paperwork*.' Anna also referred to these pressures in terms of the time spent collating data to be submitted to the Local Authority. She continued:

> *…it mounts up, it's a lot of things that is taking you out of that room away from the children and we are back to paperwork, which is stress.*

Anna also referred to the increasing bureaucratic and organisational requirements that staff are subjected to:

> *…the role has got harder so you are constantly asking them [the staff] to do this, to do that, to learn this, to learn that… it is taking away the play with the children and it's all paperwork so that makes you feel frustrated.*

Often there is no specific time allocated to complete such tasks, which seemed to bring about feelings of stress and frustration, together with feelings of guilt at being unable to give sufficient attention to the children. Denise talked about trying to balance the time she devotes to the children with her other duties. She said:

> *…the only time is like paperwork, if you're trying to do planning and you're trying to fit activities in all within that day…*

Cathy concurred with this view, suggesting that she feels:

> *…quite frustrated actually cos I think you get a lot more from children playing with them and working with them rather than going away from them to do a load of paperwork.*

Freda also referred to her frustrations from the seemingly endless burgeoning of 'red tape':

> *Sometimes it annoys me…I feel we don't really need all the legislation…we are looking after children and that is our main priority.*

More positively, Denise concluded by saying that the introduction of '*time out*' – dedicated time away from the children for administrative duties – has alleviated a lot of the stress.

Apart from the stresses caused by bureaucracy, the lack of time to care on a one-to-one basis also appeared in the discussions suggesting a staff to child ratio that was lower than some of the participants thought acceptable. Cathy indicated that, in her opinion, there were not enough staff. Freda also said:

> *You've got a lot of things going on…they are learning about rules and boundaries and how to push them… there is so much going on you've got so many screaming.*

3.4 Post-intervention findings

In the interviews held following the CM intervention the following master and superordinate themes were discovered. The two domains identified as master themes are outlined overleaf in Table 19.

Table 19: Post intervention master and superordinate themes

Master theme	Superordinate theme
Self-development and enjoyment	Self-acceptance
	Fun
	Improved teamwork and morale
	Self-discovery
Self-regulatory strategies	Sense of perspective
	Reflectiveness
	Being mindful
	Self-control

3.4.1 Self-development and enjoyment

Here, I explore how the intervention affected the participants' sense of 'self'. Four participants reported that they were more accepting of who they were in their world, which had affected positively their relationships with others. Others commented on how they had enjoyed taking part in the course which had led to the development of some personal strategies and techniques that allowed them to cope with the stresses in their lives. Others expressed a degree of pride in completing the sessions after initially feeling that this was not for them.

The CM sessions set the participants on a journey of self-discovery which I construed to be illuminating and refreshing. Freda suggested that the interventions enabled her to accept her character and to build on this acceptance. She went on to say, '… *but it's also made me accept flaws cos everybody has them*.' Freda however cautioned by intimating that the intervention is not a panacea for all ills in that the 'Chimp' does sometimes take control of her emotions. She suggested that:

> *…there is certain times that the chimp will come out and there is nothing I can do about it but that's okay.*

In becoming more self-aware, Denise seemed to refer to the development of a more empathetic communication style, with a positive impact on her professional relationships. She said:

> *I am finding I am giving them more time now and explaining things better to them rather than just expecting them to sort of know how to do it.*

The adage, 'a problem shared is a problem halved' came to mind when Denise talked about '*sharing her stress*' with her colleagues and involving them more in problem solving. She stated:

> *I am more open [now] to working out a solution maybe as to how to overcome it whereas before I would just think soldier on, soldier on.*

This suggests a change in Denise's outlook as she had, prior to the intervention, talked about the psychological burden of her role and how she would often take these anxieties into her home life. Denise seemed also to be finding more time to discuss issues with her colleagues whereas previously she had felt stressed simply because of her perceived lack of time to fulfil her role to the best of her abilities.

3.4.2 Self-regulatory strategies

Here, we examine how this newfound self-discovery has enabled some participants to regulate their own emotions, to become more reflective in their practice and apply a degree of self-control that had been, in the past, almost absent in their day-to-day interactions with others.

Cathy appeared to suggest that the intervention had enabled her to develop a greater sense of perspective and acceptance around her role, allowing her to take a more considered approach to stressful situations:

> *…and it's not as bad as it seems and there is nothing you can do about it; that's just life; calm down and take a step back and get on with it and that actually works…*

Where Cathy would have previously reacted to a particular encounter in a way that was likely to inflame the situation she now felt able to stand back and see it for what it is. She continued:

> *…things what would get my back up prior [to the intervention]; I am stopping and thinking to myself no it's not actually a big deal.*

These comments are instructive as Cathy had previously referred to how her working relationships and the '*conflict side'* of her work had resulted in her experiencing stress in the past. Anna also felt that she had developed a greater degree of self-control. She said:

> *I think sometimes you can stop yourself from doing something or saying something before you do it cos you know it's the Chimp taking over and reacting…*

Freda, who also reported issues with conflict in the past, also felt that the intervention enabled her to stand back rather than to enter 'fight' mode:

> *and I felt better in myself that I had actually took the advice on board and removed myself from the situation and just to give us both breathing space to bring the chimp back down to human against human…*

Prior to the intervention, Anna had commented that on occasions the job had becoming all-consuming and that she found it difficult to let go of the stress at the end of the day. She also talked about the challenges of dealing with external professionals and how such encounters sometimes had a negative effect on her confidence. However, working through the intervention appears to have provided her with some perspective as she stated, '*… it makes you think more about why you're doing things…*' Cathy appeared to have developed more resilience and to control her emotions more readily:

> *I won't just sort of break down and have a big drama about it; I just step back and think about it for a minute.*

Similarly, Denise talked about how she now adopts a more reflective stance in certain situations, which would in the past have resulted in conflict. She said, '*I think, well no, if I do this it's going to escalate from there*…' Denise also suggested that the intervention has allowed her to see how her response to situations in the past might have inflamed the situation whereas she was now more mindful of others when she said:

> *It's being more understanding of others' feelings and how they work and how different people work and just not being self-centred about my own thoughts.*

This more empathetic theme is continued by Cathy who stated:

> *I think to myself…if that was me and that was my chimp…would I want to be left or have someone come over to me or talking to me in my face, so I thought I would like to be left.*

3.5 Discussion

Master themes for the pre-intervention interviews were the following: 'personal domain', 'professional domain and 'organisational domain'. In terms of the personal domain, the psychological pressures of supporting babies and young children were explored which resulted in degrees of emotional labour for the participants. Many reflected on their own performance and were concerned that they were not meeting their (often self-imposed) high standards. Feelings of being consumed by the role were prevalent with new children arriving and strong bonds being developed over the weeks and months of care, only for these to be broken as the child moved on to another setting and the cycle began again. This is consistent with the findings of Boyer et al. (2013) who noted how EYPs experience sadness across work and home due to the departure of children from the early years setting. There was also a common feeling of injustice at being undervalued by those senior to themselves. On a more positive note, all participants took great pride in their work and felt a degree of fulfilment in being able to make a real and positive difference to the children in their care and to their parents.

In terms of the professional domain, three participants felt that the most contested aspect of their work was the interactions with parents who often, some participants felt, set unrealistic demands and were thought to be less than pro-active in the support activities with their own child at home. This left these participants concerned, frustrated and sometimes angry, feeling that all their hard work had gone to waste. The stresses of inter-professional relationships also came to the fore, in terms of tensions between managers and staff and in the lack of understanding and recognition that was shown by external staff from other agencies. Finally, the role of the EYP

necessitates the development of strong personal bonds with children, which became fraught when it was felt the children were not progressing as hoped.

The organisational domain was dominated by the sense that regulatory requirements within early years work were impacting upon the amount of time available to care for the children which resulted in considerable frustration and upset for the EYPs. The frequent reference to paperwork as one of the main stressors of the role suggested that the administrative burden and the amount of "red tape" was felt unnecessary, yielding little benefit to the quality of care delivered. This corroborates the work of Osgood (2010) who highlights a conflict between the ethics of care and performative discourse within governmental legislation. Furthermore, these findings indicate how emotional labour is not just apparent when care is being delivered within early years practice but often when EYPs are unable to deliver the care they feel is needed.

In the post-intervention interviews the master themes were identified as 'self-development and enjoyment' and 'self-regulatory strategies'. Following the intervention the participants seemed enthusiastic about applying the CM model in real life situations. Most seemed to have developed a clear distinction in their minds between the 'Human' and the 'Chimp' and were aware and accepting of situations in which they described the Chimp taking over. This could be interpreted as a more balanced locus of control expectancy in which individuals recognise their own ability to influence their own outcomes as well as acknowledging that certain events might be impacted by other factors as highlighted by April, Dharani, and Peters (2012). Furthermore, as Gentner, Bowdle, Wolff, and Boronat (2001) note, metaphors help facilitate understanding of complex information by representing an unfamiliar, target

concept with a familiar, source concept. The CM model demonstrates the power of metaphor by conveying neurological concepts with more accessible representations. This may enable a greater sense of confidence and understanding when attempting emotional regulatory processes.

This more empathetic and thoughtful approach appeared to have a positive impact on their personal relationships and on team collaboration in terms of sharing workload and devoting more time to communication with colleagues. The participants seemed to display more resilience and confidence about their role and their relationships with others. These findings support the work of Southwick, Litz, Charney, and Friedman (2011) who highlighted a number of psychological processes which are associated with the cultivation and maintenance of resilience, some of which can be seen within the CM model.

When the participants became aware of the 'Chimp' and its impact on their thinking, this enabled them to focus their emotions within a particular part of their psyche, creating an opportunity to control these emotions more readily. This created, in some, a greater sense of perspective, which enabled them to take a more considered and reflexive approach to stressful situation which might previously have resulted in conflict. This highlights the potential of the CM model in enabling effective cognitive reappraisal. According to Ochsner and Gross (2008), reappraisal can comprise of both the reinterpretation of situational or contextual stimuli or increased separation by looking upon stimuli from a third-person perspective, both of which CM achieves in this study.

Participants also spoke of their enjoyment in employing CM. The presence of humour within the reappraisal stimulated by the model appears to enhance the positive effects of resilience in inhibiting emotional labour. This confirms earlier research that humour is effective in reducing symptoms of stress by easing tension and discomfort (Strick, Holland, Van Baaren, & Van Knippenberg, 2009).

3.5.1 Limitations

Of course, a degree of caution is required when interpreting these highly positive results. The small size of the participant cohort restricts the generalisability of the findings, whilst time constraints for the participating EYPs necessitated that the CM training course be restricted to three one hour sessions. More sessions would have enabled a more in-depth understanding of the theoretical underpinnings and potential applications of the model.

An additional limitation of this study could be that the participants selected for interview were chosen by the manager of each early years setting involved. This could potentially have compromised the data to some extent, in that some participants may have been selected by managers in anticipation of what they might report during interview. A study with greater scope may have been able to interview every member of staff involved in the CM training sessions and therefore garner a more thorough representation of the views of each setting.

3.5.2 Conclusion

This work addresses the lack of research on emotional well-being interventions for EYPs. This research is unique in that it investigates the efficacy of a metaphorical model that facilitates the process of emotional reflection. Overall, the findings show

that the training sessions based on the CM model helped the participants to feel better equipped to manage the emotional labour within their practice. The CM model enabled the participants to develop emotional regulatory strategies which had a positive impact on their approach to work and on their relationships with their colleagues. It is hoped that this might bring about a longer term impact on well-being than previous interventions. It would be useful to revisit the participants at intervals of three and six months, to determine whether they were still able to apply CM principles with positive effects on their daily lives.

As far as I am aware, no other studies have employed interpretative phenomenological analysis in the domain of early years practice. The thought-provoking findings of this study have highlighted the scope for greater use of phenomenological research within early years practice. In addition, this study has demonstrated how greater attention to the emotional well-being of EYPs within EP casework is crucial in order to address the evident emotional labour that prevails in early years practice. Addressing these issues through the use of this type of intervention has the capacity to produce a more positively motivated and contented workforce, which subsequently has the potential to have a positive impact on the wellbeing of the children in their care.

In demonstrating the range and extent of the emotional labour within early years practice, this study corroborates the work of Osgood (2010), Boyer (2013) and Elfer (2007; 2012) in highlighting the pertinence of this issue. Furthermore, by highlighting the benefits of providing a structured framework to facilitate more effective reflection and management of such labour, this study also provides a warrant for systemic interventions from EPs in this area. This could comprise of a wider-scale

implementation of structured frameworks like the CM model amongst early years settings or the provision of CPD sessions to convey the importance of this issue to local authority early years teams. This study may also offer a suggestion of the importance of EPs' own reflection on the management of the emotional labour involved within their own practice in safe and supportive environments such as supervision and team meetings. Future research in this area could include a more in-depth exploration of the domains in which emotional labour emerged during the interviews within this research (personal, professional and organisational) as well as a longitudinal analysis to examine whether structured frameworks such as the CM model can facilitate the management of emotional labour over a sustained period.

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Appendix 1

EPPi WOE (A). Trustworthiness of study based on methodological coherence.

N1 - Are there ethical concerns about the way the study was done?

Study	Evidence	Conclusion
Benn et al (2012)	Participants received payment for completion of assessments at 3 different points of the study. There were no other concerns.	N.1.2 No
Brackett et al (2010)	Willing cohort of participants who volunteered to be part of the study. No payments or inducements. Properly conducted study. No ethical concerns.	N.1.2 No
Chang (2013)	Participants self-selected by replying to an email request to participate in the study. No payments or inducements. Properly conducted study. No ethical concerns.	N.1.2 No
Gold et al (2009)	Cohort of participants was self-selecting. All were teachers with stress-related conditions. Some ethical concerns therefore about the potential for pressure to be applied if the course is "sold" as a solution to their issues.	N.1.1. Yes
Jennings et al (2011)	Willing cohort of participants. No payments or inducements. Properly conducted study. No ethical concerns.	N.1.2 No
Roeser et al (2013)	Willing cohort of participants with a low attrition rate. Some payments made for completion of assessments. Properly conducted study. No ethical concerns.	N.1.2 No

Study	Evidence	Conclusion
Swartz & McElwain (2012)	Cohort of participants was from pre-employment teachers undergoing training. Properly conducted study. No ethical concerns.	N 1.2 No
Tsouloupas et al (2009)	Willing cohort of participants. No payments or inducements. Properly conducted study. No ethical concerns.	N.1.2 No

N2 - Were students and/or parents appropriately involved in the design or conduct of the study?

Study	Evidence	Conclusion
Benn et al (2012)	Participants were fully involved in the conduct of the study as they were included in the program throughout study period including completion of 3 separate assessments	N.2.1 Yes
Brackett et al (2010)	Participants not involved in either design or conduct of study. Data collected via an online survey. Therefore no input from participants in design or conduct of study.	No 2.3 No
Chang (2013)	Participants not involved in either design or conduct of study. Data collected via an online survey. Therefore no input from participants in design or conduct of study.	No 2.3 No
Gold et al (2009)	Participants not involved in design of study. Study involved analysis of results from an 8 week course completed by the participants. Therefore it could be argued that the participants were involved in the conduct of the study. Middle score therefore given.	No 2.2 Yes, a little
Jennings et al (2011)	Participants were fully involved in the conduct of the study. Regular didactic sessions, self-awareness tests and telephone support.	N.2.1 Yes

Roeser et al (2013)	Participants enrolled in 8 week program consisting of 11 sessions and 36 hours of contact time. Research data collected via a series of self-reported surveys and some semi-structured interviews.	N.2.1 Yes
Swartz & McElwain (2012)	Participants not involved in either design or conduct of study. Data collected via initial questionnaires and then classroom observation over a number of weeks. Therefore no input from participants in design or conduct of study.	No 2.3 No
Tsouloupas et al (2009)	Participants not involved in either design or conduct of study. Data collected via an online survey. Therefore no input from participants in design or conduct of study.	No 2.3 No

N3 - Is there sufficient justification for why the study was done the way it was?

Study	**Evidence**	**Conclusion**
Benn et al (2012)	The study was designed to evaluate the effectiveness of a particular intervention by quantitative analysis of pre, post and intermediate results.	N.3.1 Yes
Brackett et al (2010)	The study set out to examine the relationship between emotional resilience as defined by a recognised analytical scale and burnout and job satisfaction amongst teachers. The methodology therefore seems justified.	N.3.1 Yes
Chang (2013)	The study examined teacher emotional responses in the context of facing student misbehaviour. The online survey was comprehensive containing descriptive (qualitative) responses and Likert-scale type answers to collate quantitative data. The methodology therefore seems justified.	N.3.1 Yes

Gold et al (2009)	The study set out to test the efficacy of an 8 week course attended by all participants. No other methodology would therefore be appropriate.	N 3.1 Yes
Jennings et al (2011)	The study was designed to evaluate the effectiveness of a particular intervention by quantitative analysis of pre and post-results.	N.3.1 Yes
Roeser et al (2013)	The study set out to test the efficacy of an 8 week intervention and support program. The methodology of this research seems justified.	N.3.1 Yes
Swartz & McElwain (2012)	Study based on responses to initial questionnaire followed by observation of teacher / child interactions and emotional/behavioural responses. The methodology therefore seems justified.	N 3.1 Yes
Tsouloupas et al (2009)	The study set out to examine teachers' perceptions regarding student misbehaviour. The use on an online survey is a justified, if somewhat limited, method of conducting this research.	N 3.1 Yes

N4 - Was the choice of research design appropriate for addressing the research question(s) posed?

Study	**Evidence**	**Conclusion**
Benn et al (2012)	The use of a randomised control design to investigate the influence of a particular intervention seemed wholly appropriate.	N.4.1 Yes
Brackett et al (2010)	The study set out to examine "emotional-regulation ability" (ERA) in teachers. A recognised performance testing regime was employed, of which the measurement of ERA is a sub-set. The choice of research design seemed appropriate.	N.4.1 Yes

Study	Evidence	Conclusion
Chang (2013)	The choice of a randomised online survey and analysis of data using recognised and well thought-through measurement strategies suggests that the research design was appropriate.	N.4.1 Yes
Gold et al (2009)	Study set out to test the efficacy of an 8 week course attended by all participants. No other research design would therefore be appropriate.	N.4.1 Yes
Jennings et al (2011)	The use of two separate cohorts from different socio-economic areas involving a range of support interventions. Some stratification of participants employed.	N.4.1 Yes
Roeser et al (2013)	The process of monitoring the teachers involved throughout the program duration using a variety of means including self-reported data, some semi-structured interviewing and objective physiological assessments seem appropriate for this type of research question. The use of randomised control samples also add to the validity of method.	N.4.1 Yes
Swartz & McElwain (2012)	Observation of teacher / child interactions over an extended period in laboratory classroom situation within teacher training facility at university is an appropriate research design to answer the questions posed.	N.4.1 Yes
Tsouloupas et al (2009)	The research set out to examine teachers' perceptions of student misbehaviour and the use of an online survey consisting of a limited number of questions (albeit based on previous conceptual models) provides a very narrow cross-sectional data set. A multi-method approach including interviews / focus groups would seem a more appropriate research design.	N.4.2 No

N5 - Have sufficient attempts been made to establish repeatability or reliability of the data collection methods or tools?

Study	Evidence	Conclusion
Benn et al (2012)	No attempt was made to establish the repeatability or reliability of the data collection method or tools. Authors recognised that the study only provided preliminary evidence of the effectiveness of the intervention and highlighted that future research was necessary to attempt to replicate findings and increase the evidence base.	N.5.3 None
Brackett et al (2010)	No attempt was made to establish the repeatability or reliability of the data collection method or tools. Authors recognise the limitations of the study and the impact on repeatability. There was a relatively small sample of limited diversity, both ethnically and geographically. No longitudinal analysis occurred, again affecting reliability.	N.5.3 None
Chang (2013)	No attempt was made to establish the repeatability or reliability of the data collection method or tools. Author recognises the limitations of the study and the impact on repeatability. The research relied on self-reported data and self-recalled incidents, thus teachers who perceived never to have had a challenging incident may not have proceeded with the survey. Whilst the sample size was relatively large (492) there was limited ethnic or geographical diversity.	N.5.3 None
Gold et al (2009)	No attempt was made to establish the repeatability or reliability of the data collection method or tools. Authors recognise the limitations of this research in terms of the very small sample size with limited diversity, leading to problems with repeatability. The self-selected nature of the participants and the self-reporting of data after the course both cause some concerns over the validity of the data reported.	N.5.3 None

Study	Evidence	Conclusion
Jennings et al (2011)	No attempt was made to establish the repeatability or reliability of the data collection method or tools. Authors recognised that the study only provided preliminary evidence of the effectiveness of the intervention and highlighted that future research was necessary to attempt to replicate findings and increase the evidence base.	N.5.3 None
Roeser et al (2013)	This study had a relatively small sample size of 113 participants based in schools in Canada and the USA. However, a robust and diverse methodology including control groups, self-assessments, interviews and objective data around physiological wellbeing was used, increasing the range of data collection sources and subsequently increasing the reliability.	N.5.2. Yes, some attempt
Swartz & McElwain (2012)	Authors recognise that this was a small study based on the observations of 24 female pre-service teachers in a US mid-western university setting. However observations did take place in pairs to ensure inter rater reliability. A much wider study, geographically, ethnically and longitudinally would be required to have confidence that the results obtained were generalisable.	N.5.2 Yes, some attempt
Tsouloupas et al (2009)	Authors recognise the limitations of this research in terms of the size of the cohort of participants, the lack of geographic and ethnic spread and the cross-sectional nature of the study. No attempts have been made, or would be justified, to establish repeatability or reliability of this method.	N.5.3 None

N6 - Have sufficient attempts been made to establish the validity or trustworthiness of the data collection tools or methodology?

Study	Evidence	Conclusion
Benn et al (2012)	Authors acknowledged a number of limitations in the study thus suggesting an attempt to establish the extent of the validity of the method.	N.6.2 Yes, some attempt
Brackett et al (2010)	Despite the small sample size with limited diversity, some attempt was made to use an established measurement tool to analyse the results which would provide a degree of trustworthiness to the data collected.	N.6.2 Yes, some attempt
Chang (2013)	Author recognizes the limitations of the study but went to great lengths in the data collection methodology to ensure validity of the data captured using a number of recognised measurement tools and the testing of a self-designed hypothesized conceptual model.	N.6.2 Yes, some attempt
Gold et al (2009)	Established pre- and post- depression, anxiety and stress scales were used to assess effect of the course on participants' stress levels which seem appropriate for this type of study. Therefore despite the very small sample size with limited diversity, some attempt was made to use an established measurement tool to analyse the results which would provide a degree of trustworthiness to the data collected.	N.6.2 Yes, some attempt
Jennings et al (2011)	Authors recognised the limitation of small sample size but adopted an experimental and control group approach in Study 2 suggesting that the authors were attempting to establish validity of method.	N.6.2 Yes, some attempt
Roeser et al (2013)	The study aimed to test the efficacy of an established intention for teachers using a diverse range of methods for data collection and the use of randomised control groups. There was also objective data collected via health screening. Despite the relatively modest size of the study	N.6.1 Yes, good

Study	Evidence	Conclusion
	there were sufficient attempts made by the authors to establish validity of the methodology.	
Swartz & McElwain (2012)	Data was obtained from an initial questionnaire and observations on at least 4 occasions of teacher / child interactions. The data from the latter part of the study was coded using a recognised conceptual framework. The use of a blind and reliability coder adds robustness to the data analysis process.	N.6.2 Yes, some attempt
Tsouloupas et al (2009)	No attempt has been made to establish the validity or trustworthiness of the chosen methodology. The use of an online survey is a relatively simple way of collecting data but does not provide any trustworthiness particularly when considering the questions being considered relate to subjective issues around teachers' perceptions.	N.6.3 None

N7 - Have sufficient attempts been made to establish the repeatability or reliability of the data analysis?

Study	Evidence	Conclusion
Benn et al (2012)	Tests for Cronbach's Alpha were conducted with high reliability found on all scales (higher than the .70 criterion put forward by Nunnally & Bernstein, (1994)).	N.7.1 Yes
Brackett et al (2010)	Tests for Cronbach's Alpha were conducted with high reliability found on all scales (at least .75) excluding the Marlowe Crowe social desirability scale (.67). It was acknowledged that correlations of this scale with other variables should be interpreted with caution.	N.7.1 Yes
Chang (2013)	Tests for Cronbach's Alpha were conducted with high reliability found on all scales (at least	N.7.1 Yes

Study	Evidence	Conclusion
	.70).	
Gold et al (2009)	Tests for Cronbach's Alpha were conducted with high reliability found on all scales (at least .75).	N.7.1 Yes
Jennings et al (2011)	Tests for Cronbach's Alpha were conducted with high reliability found on all scales (at least .70).	N.7.1 Yes
Roeser et al (2013)	Tests for Cronbach's Alpha were conducted with high reliability found on all scales (at least .70).	N.7.1 Yes
Swartz & McElwain (2012)	Test for Cohen's kappa was conducted to assess inter observer reliability and was high for both the child emotion codes (.96) and the teacher response codes (.91).	N.7.1 Yes
Tsouloupas et al (2009)	Tests for Cronbach's Alpha were conducted with medium to high reliability found on all scales (at least .70) excluding the coefficient for the emotion regulation strategies. The authors explained that as the measures for the emotion regulation strategies only contained two items, a high internal consistency was not expected.	N.7.1. Yes

N8 - Have sufficient attempts been made to establish the validity or trustworthiness of the data analysis?

Study	Evidence	Conclusion
Benn et al (2012)	The authors tested the effects of a mindfulness training package with a series of analyses of covariance. Each covariate showed significant effects however the authors went on to test for effect sizes as they provide a better estimate of impact with small samples.	N.8.1 Yes, good.
Brackett et al (2010)	The authors convey how the data is appropriate for a joint analysis of both the direct and mediated effects of emotional regulation ability (although only the direct effects of ERA are relevant for the purpose of this review).	N.8.1 Yes, good
Chang (2013)	The authors justify their use of LISREL and PRELIS for structural equation modelling, as well as the indices used to assess the goodness of fit between the empirical data and the model implied data structures.	N.8.1 Yes, good
Gold et al (2009)	No explanation is given for the selection of the Wilcoxon signed rank test for data analysis	N.8.3 No, none
Jennings et al (2011)	The authors explain their use of the Wilcoxon signed rank test as a non-parametric alternative to the repeated measures t-test which is more appropriate for small samples. The authors do not however explain the conversion to an ANCOVA model for data analysis within the second study.	N.8.2 Yes, some attempt
Roeser et al (2013)	The authors explain their use of an ANCOVA model to analyse the group differences by study condition (mindfulness training vs waitlist control). The authors also explain that they calculated effect sizes as they provide a better estimate of intervention impact than statistical	N.8.1 Yes, good

Study	Evidence	Conclusion
	significance for studies with small samples.	
Swartz & McElwain (2012)	The authors utilised a hierarchical regression model which is appropriate for testing both the unique and joint effects of more than one independent variable. The authors limited each regression model to two predictors due to the small sample size and took steps to minimise the multi-collinearity between the main effect and interaction terms.	N.8.1 Yes, good
Tsouloupas et al (2009)	The authors used a structural equation model to test the relationships among the study variables. The authors adapted the full SEM to a hybrid SEM because there were not enough indicators for cognitive reappraisal and expressive suppression (both two-item measures).	N.8.2 Yes, some attempt

N9 - To what extent are the research design and methods employed able to rule out any other sources of error or bias?

Study	Evidence	Conclusion
Benn et al (2012)	The relatively small sample size and high level of attrition in the study are both potential sources of error in any conclusions. However the use of a randomised control design gives some weight to the findings. The authors were clear in outlining the limitations of the study. Limitations included a relatively small sample size with participants restricted to residents from one US mid - western city, the attrition rate as the trial progressed and the consistency of group differences. Also, the findings were based on self-reported data in which social desirability may have had an impact.	N.9.2 – A little
Brackett et al	Study based on 123 teachers from three schools in south east of England with data collected via	N.9.2 – A little

Study	Evidence	Conclusion
(2010)	an online survey over the course of one school day. The potential for error or bias comes from the relatively small and homogeneous sample and the self-reporting methodology. However the recognised measurement tool used a system of expert scoring which reflect the extent to which a person's responses match those of a sample of a group of experts in the field. Where the answer matches an additional weighting is applied to the score. This method is designed to add some robustness to the data, although it could be argued that it might skew the data towards the consensus expert opinion on the topic.	
Chang (2013)	The sample size of 492 was relatively large albeit limited in terms of ethnic and geographical spread. Also the use of self-reported data with those who perceived not to have been placed in a challenging position in the classroom potentially self-excluding from the survey. Larger scale longitudinal studies would be required to ensure greater robustness of data. However the use of recognised measurement tools suggests some attempt to avoid error in data analysis.	N.9.2 – A little
Gold et al (2009)	The very small sample size of 11 primary school teachers all from schools within a small catchment area significantly impacts on the reliability of this data. The fact that all participants presented with stress-related conditions together with the use of self-reporting methods to collect the data also add elements of unreliability. No control group was employed which again limits the robustness of the results.	N.9.3. – Not at all
Jennings et al (2011)	Relatively small sample size creates significant issues around the robustness of data with a significant risk of error. Study confined to two groups In USA urban / suburban settings which is a potential source of bias.	N.9.3. – Not at all
Roeser et al	Study based on the experiences of 113 teachers from Canadian and US schools in an 8 week intervention program. Authors note that samples are required from more ethnically and	N.9.2 – A little

Study	Evidence	Conclusion
(2013)	geographically diverse cohorts to ensure greater robustness of data and to limit the potential for error. The authors recognise that wider studies including some third party reported data and the use of more active control groups would strengthen the reliability of the data. They also note that the study included a motivated sample of teachers – those willing to sign up to an intensive 8 week intervention program. However the use of a randomised control design, with extensive efforts employed to ensure the comparability of control groups, gives some weight to the findings.	
Swartz & McElwain (2012)	The small sample size of 24 female participants, all attending pre-service teacher training in a US mid-west university significantly impacts on the reliability of this data. The small scale of this study also impacted on the number of children observed. However the robust coding techniques and the naturalistic setting for the observations do reduce the potential for error. The authors note the high standard of the university which could impact on the quality of the pre-service teachers involved in the study, thus affecting generalisability. The use of live observation rather than capturing interactions using audio-visual recording was also seen as a limitation. Finally larger scale longitudinal studies would be required to ensure greater robustness of data.	N.9.2 – A little
Tsouloupas et al (2009)	The use of self-reporting techniques and the cross sectional nature of the study are both potential sources of error or bias. Voluntary sign-up to completion of the questionnaire might preclude those who are less well disposed to take part, possibly because of a lack of motivation which might exclude the very ones that the study aimed to capture.	N.9.3. – Not at all

N10 - How generalisable are the study results?

Study	Evidence	Conclusion
Benn et al (2012)	Authors noted this was a preliminary study with limited sample size. More studies with larger, more diverse sample required to provide evidence of generalisability. Authors noted that more research was necessary to further assess the efficacy of the intervention.	No Score
Brackett et al (2010)	Authors note the limitations of the study in terms of the cohort of participants and the lack of longitudinal analysis. More studies with greater diversity of sample sizes would be needed to provide greater generalisability.	No Score
Chang (2013)	Author notes the limitations of the study in terms of the cohort of participants and the lack of longitudinal analysis. Also a relatively modest study of teachers' internal and cognitive perceptions of particular incidents creates challenges in terms of claims of generalisability. More studies with greater diversity of sample sizes and longitudinal design would be needed to provide greater generalisability.	No Score
Gold et al (2009)	Authors noted this was a preliminary study with limited sample size based on a single intervention (8 week course). More studies with larger, more diverse sample required to provide evidence of generalisability together with some cross sectional analysis involving other forms of intervention. Authors noted that more research was necessary to further assess the efficacy of the intervention.	No Score
Jennings et al (2011)	Authors noted this was a preliminary study with limited sample size. More studies with larger, more diverse sample required to provide evidence of generalisability. Authors noted that more research was necessary to further assess the efficacy of the intervention.	No Score

Study	Evidence	Conclusion
Roeser et al (2013)	Results based on sample of 113 teachers based in Canadian and US schools in urban and sub-urban locations. There was a low attrition rate. Authors recognise limitations of this study and suggest that greater generalisability could be achieved with a larger, more ethnically and geographically diverse sample. The use of self-reported data collection techniques means that social desirability factors cannot be ruled out. The use of more objective third party data capture methods may add to the robustness of the data in this regard. However more objective measures were collected around physiological function. Despite its relatively small size the authors took care to ensure comparability of control groups. Results seem to support previous studies.	No Score
Swartz & McElwain (2012)	Results based on observation of small sample of 24 pre-service teachers attending teacher training in US mid-west university. Generalisability could only be assured with a larger, more ethnically and geographically diverse sample. Despite its small size the authors did use robust coding methods which would add to data reliability.	No Score
Tsouloupas et al (2009)	The research consisted of an online survey of 600 teachers working in the use, 91% of whom were Caucasian American. Authors note that the cross-sectional nature of the study and the limitations in the coding process will impact on generalisability. The results of this research cannot be held to be generalisable.	No Score

N11 - In light of the above, do the reviewers differ from the authors over the findings or conclusions of the study?

Study	Evidence	Conclusion
Benn et al (2012)	Overall, despite being a study of limited size, the robust methodology used allow the reviewer to conclude that the findings are robust despite further evidence being required in order to assess generalisability and the resultant conclusions.	N.11.1 No difference in conclusions
Brackett et al (2010)	Despite small sample size, the conclusions seem reasonably robust from the data collected.	N.11.1 No difference in conclusions
Chang (2013)	This was a well conducted and comprehensive study despite the limitations acknowledged by the author. The hypothesized model seems valid and the data analysis was conducted using recognised measurement tools. The findings seem robust.	N.11.1 No difference in conclusions
Gold et al (2009)	Despite small sample size, the conclusions seem reasonably robust from the data collected.	N.11.1 No difference in conclusions
Jennings et al (2011)	The author describes a more liberal significance level of 0.1% (p42), but no warrant for this decision is offered. This lack of clarity leads to questioning of findings and subsequent conclusions. Differing results were obtained in each of the two study groups indicating other	N.11.1 No difference in conclusions

Study	Evidence	Conclusion
	factors were impacting on the results obtained.	
Roeser et al (2013)	A robust methodology was employed including both subjective and objective data sources. Despite the small size of the cohort and the willingness of this group to be involved in the study, the findings seem robust.	N.11.1 No difference in conclusions
Swartz & McElwain (2012)	A robust coding methodology was used based on an established conceptual model. Despite the small size of the cohort and the study findings seem robust.	N.11.1 No difference in conclusions
Tsouloupas et al (2009)	Despite the limitations around sample size and aspects of the methodology, the findings from the relatively small data set seem valid.	N.11.1 No difference in conclusions

N12 - Have sufficient attempts been made to justify the conclusions drawn from the findings, so that they are trustworthy?

Study	Evidence	Conclusion
Benn et al (2012)	There was recognition of the study limitations by the authors. There was reference to other extant works in the field and how this research supports earlier hypotheses. This was a preliminary study with a small sample size. However the conclusions drawn from the findings of this study warrant a medium level of trustworthiness.	N.12.3 Medium
Brackett et al	Authors state that this is the first study of its kind to seek answers to these questions. The use	N.12.3 Medium

Study	Evidence	Conclusion
(2010)	of a recognised measurement tool adds somewhat to the trustworthiness of the data albeit that this data was based on cross-sectional self-reported results which can be unreliable. The findings of this study warrant a medium level of trustworthiness.	
Chang (2013)	There was recognition of the study limitations by the author. This was a relatively large cross-sectional and self-reported survey which explored perceptions and cognitive process in the context of a specific challenging event. There was significant reference to extant work in the field and the data was analysed comprehensively. The findings of this study warrant a medium level of trustworthiness.	N.12.3 Medium
Gold et al (2009)	There was recognition of the study limitations by the authors. Data was collected from a small number of self-selected participants all of whom presented with some form of depressive condition. Further the results were based on self-reported data which is often unreliable when reporting the success of an intervention in which the participant has invested time and effort. These limitations therefore give the study a low level of trustworthiness.	N.12.4 Low
Jennings et al (2011)	There was recognition of the study limitations by the authors. There was reference to other extant works in the field and how this research supports earlier hypotheses. This was a preliminary study with a small sample size. However the conclusions drawn from the findings of this study warrant a medium level of trustworthiness.	N.12.3 Medium
Roeser et al (2013)	There was recognition of the study limitations by the authors. A robust methodology was employed based on data obtained pre- post-test and throughout an 8 week intervention program. There was reference to other extant works in the field and how this research supports	N.12.2 High

Study	Evidence	Conclusion
	earlier hypotheses. The sample size was relatively small and homogeneous. However the conclusion drawn from the study findings warrant a high level of trustworthiness.	
Swartz & McElwain (2012)	There was recognition of the study limitations by the authors. A robust data coding methodology was used. There was reference to other extant works in the field and how this research supports earlier hypotheses. The sample size was relatively small and homogeneous. However the conclusion drawn from the study findings warrant a medium level of trustworthiness.	N.12.3 Medium
Tsouloupas et al (2009)	There was recognition of the study limitations by the authors. The cross-sectional nature of an online survey added to the self-reporting nature of this method gives some concern over the trustworthiness of the findings. The research questions aim to explore aspects of perceptions which seem too subjective and nuanced to be captured using this method alone. Finally, the relatively small size and its homogeneous nature give the study a low level of trustworthiness.	N.12.4 Low

Appendix 2

Informed Consent Form

Study title: Managing emotions in early years settings

Principal Researcher: Adam Baron (Trainee Educational Psychologist)

Supervisor: Dr Richard Parker (Academic Tutor, Newcastle University)

Researcher background

My name is Adam Baron and I am a trainee on the Doctorate in Applied Educational Psychology course at Newcastle University and a trainee EP with Wigan Educational Psychology Service.

Purpose of study

Working in early years settings can be very emotionally draining for practitioners. Examples of emotionally stressful situations within early years practice could include the maintenance of patience needed to deliver repeated instruction to a struggling child or the ongoing provision of emotional support for an upset or angry child. The frequency of this type of situation points to the need to investigate potential strategies to mitigate the impact of emotions within early years practice. This research study will investigate the perceptions of early years practitioners on an intervention designed to reduce the impact of emotionally stressful situations.

Outline of study

This study aims to explore the use of a model entitled 'Chimp Paradox' (designed by Dr Steve Peters) within early years practice. This model refers to an internal 'chimp' which thinks emotionally and is guided by impressions and feelings. The model

attempts to help people recognise when the 'chimp' might be hijacking thoughts and behaviours and compares such thoughts to 'human' thoughts which are logical and guided by facts and truth.

Nature of participation

3-4 practitioners from your setting will participate in this research. Each practitioner will participate in the three 'Chimp Paradox' training sessions whilst one practitioner will be asked, in addition, to volunteer to participate in interviews before and after the training sessions (please see below).

Session 1: Pre intervention interview exploring the role of the Early Year Practitioner **(1 practitioner for 60 minutes)**

Session 2: 'Chimp Paradox' training session 1 **(3-4 practitioners for 60 minutes)**

Session 3: 'Chimp Paradox' training session 2 **(3-4 practitioners for 60 minutes)**

Session 4: 'Chimp Paradox' training session 3 **(3-4 practitioners for 60 minutes)**

Session 5: Post intervention interview exploring the participants' experience of the 'Chimp Paradox' model **(1 practitioner for 60 minutes)**

Data collection

Interviews will be audio recorded and typed up for later analysis. Participants will also be asked to complete a questionnaire relating to the intervention at the beginning and end of the research process; this will also be used for analysis.

Anonymity

Any information you provide over the course of this study will remain anonymised. It will be stored on a secure, password protected computer and recordings will be destroyed once transcribed.

Right to withdraw

If you wish to withdraw from the study at any time over the course of the research process, you are free to do so with no obligation to give a reason.

Feedback on study outcomes

A copy of the results of the study will be sent to each participant in mid - 2015.

Consent signature

By signing this form you voluntarily agree to participate in this research study.

Signature of participant

…….

Date:……

Thank you for your participation.

Contact details

If you have any questions or queries about this research project, please direct them to the following email address and I will endeavour to reply within 48 hours.

a.baron@ncl.ac.uk

You can also contact my research supervisor via the following email address.

r.parker@ncl.ac.uk

Appendix 3

Pre-training interview guide

Question sequence

- Tell me about the role of an Early Years practitioner.
- What do you like best about your role?
- What are the main challenges of the role?
- How do you feel most effective in your role? What do you and other people notice when you feel you are most effective?
- Are there any times when you feel less effective in your role?
- Could you give me some examples of aspects of your role that make you feel good?
- Can you give me some examples of your job that cause you stress?
- How did this affect you in your job and outside of work?
- Do you feel differently now about that to how you felt at the time?
- Did this change how you think about yourself as an early years practitioner?
- What do you do to manage stress when/if it occurs?
- Do you find this effective?

Prompts/probes

'Can you tell me more about that?'

'How did you feel?

'Tell me what you were thinking?'

'What do you mean by that?'

Appendix 4

Post training interview guide

Question Sequence

- Tell me about your experience of the Chimp paradox sessions.
- Can you tell me about the aspects of the model that you found most useful within the sessions, if any? How did you find them useful?
- Tell me about your experiences of applying the Chimp model?
- Can you describe a specific example of when you applied the model?
- Why do you think the model was effective/not effective in this instance?
- How did using the model make you feel?
- Any other examples?
- Has the Chimp paradox model changed your perception about ability to deal with stressful situations?
- Have the Chimp paradox sessions changed the way you think about your role in early years?
- Tell me your views on the potential of the model to positively impact upon well-being in early years practitioners?

Prompts/probes

'Can you tell me more about that?'

'How did you feel?

'Tell me what you were thinking?'

'What do you mean by that?'

Appendix 5

Example master, superordinate and emergent theme trail

Master	Superordinate themes	Emergent themes
PERSONAL DOMAIN	Lack of self-worth (all related to adult relationships)	Worries around underperformance Doubting own ability Feeling of being undervalued Self-depreciation Sense of injustice Lacking self-confidence
	Negative emotions	Emotional investment (labour) Emotional self-neglect Feeling consumed Constant 'churn' of work Altruistic mind-set Concern over impact of own stress on children Emotional labour Self-doubt Coping strategies
	Self-fulfilment *(all related to work with children)*	Pride of working in the role Self-worth Self-development