



The incorporation of yoga techniques in the classroom

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Submitted in partial fulfilment of the requirements for the degree of Doctor of Philosophia in the Faculty of Education, University of Pretoria

2015 October 9th



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Summary

This study examines the integration of yoga into the elementary classroom routine to assist teachers with creating a positive classroom climate conducive to learning, and to aid learners with focused concentration. The aim of the research was to understand not only how yoga could be incorporated, but also why it had not previously been incorporated. Past research has repeatedly shown the benefits of yoga to students and learning, and it therefore seems logical for yoga to be integrated into the classroom. By understanding the barriers which exist to the incorporation of yoga into the classroom, one can better understand ways of overcoming these barriers and of effectively introducing yoga into the school environment. This study was conducted from an interpretivist paradigm. A case study design was used to conduct this research because case studies clearly seek to illustrate a phenomenon which, in this case, is the phenomenon of yoga techniques in the classroom. The research was conducted in two separate phases, with the first phase guiding the data collection for the second phase. Once the data was collected, it was analysed by using thematic analysis. From this analysis several themes emerged. The data collected and analysed from phase 1 produced the following themes: positive feelings, improved focus and concentration, and changes in student behaviour. The data collected and analysed from phase 2 produced the following themes: religious concerns, lack of understanding, time constraints, and education is needed.



Dedication

This thesis is dedicated to:

My parents

Bonnie and Bruce Wiegman

Who have always told me that I can and never that I can't. It is because of both of you that I had the courage to complete my thesis.

My sister

Stephanie Wiegman

Who I aspire to be like and who constantly checked in on me with words of encouragement and support.

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Chapter 1: Introduction



Chapter 1: Introduction

"Yoga seems to give the body what it needs." (Betts & Betts, 2006, p. 17)

1.1 Purpose of study

The purpose of this research is to gather insight into teachers' perceptions about incorporating yoga techniques into the classroom in order to contribute to an understanding of how yoga and yoga techniques¹ can be integrated into the classroom. This study seeks to uncover possible obstacles to the integration of yoga techniques into the classroom.

1.2 Rationale for study

This research will explore teachers' perceptions about the possibility of incorporating yoga techniques into the classroom, and the challenges associated with this. As will be discussed in further detail in Chapter 2, previous research has shown the varied benefits yoga techniques provide. However, little has been explored with regard to how to integrate yoga techniques into the classroom and how teachers perceive yoga techniques in the classroom. Past research has shown the importance of teacher training, as well teacher support, when implementing a new curriculum (Breslin et al., 2008; Papier, 2010; Dierking & Fox, 2012). This suggests that the way teachers perceive yoga techniques in the classroom could have an impact on its viability and usefulness in the classroom. If a teacher does not perceive the concept that they are teaching to be beneficial, they may not take the time out of their day to teach it properly (Breslin et al., 2008). When teachers perceive a new curriculum or classroom management concept being introduced to be valuable, the implementation tends to be more successful (Breslin et al., 2008; Dierking & Fox, 2012). The same idea can be applied to yoga techniques. For yoga techniques to be advantageous. This suggests that it is important to understand

¹ This study focuses on the incorporation of yoga techniques (breathing (pranayama) and stretching (asana)), and does not focus on meditation. This is why the term *yoga techniques* is used. Past research did not always specify whether yoga or yoga techniques were focused upon. This study uses the term *yoga techniques* in order to clarify the focus.



how teachers perceive yoga techniques in the classroom, which is what this study aims to explore.

Studies have suggested that further research on yoga techniques as a tool for learning are needed; much of past research has focused on learning disabilities in children and has been conducted in India (Bhardwaj & Argawal, 2013; Case-Smith, Sines, & Klatt, 2010a; Finger, 2000; Kirp, 2014; Telles, 2009). Research in cultural settings where yoga may not be common practice is needed in order to assess the viability of yoga techniques in the classroom (Birdee et al., 2009). One of the greatest challenges teachers face is getting and maintaining students' attention (Allington, 1975; Herrenkohl & Metl, 2012; Young, Robinson, & Alberts, 2009). Yoga may be able to assist with concentration and focusing attention – a critical issue in the classroom (Wilson, 1995). According to Uma, Negendra, Nagerathan, Vaidehhi and Seethalakshmi (1989), yoga can be a way of gaining control over the mind and, consequently, can improve concentration and attention-span.

1.3 Research questions

1.3.1 The critical question of the research project

 How does insight into teachers' perceptions about yoga aid the understanding of the incorporation of yoga into the classroom?

1.3.2 Subquestion relevant to the research

• What challenges do (South African) educators face in terms of incorporating yoga into the classroom, and how can these be addressed?

1.4 Working assumptions

As Creswell (2009) explains, it is important to clarify my standpoint in order to acknowledge biases I might have as a researcher. For this reason, I am clear and upfront about my personal beliefs. I kept track of this in my research journal and invited critical readers from an American university (their comments were emailed and are attached in Addendum W) to interrogate my



work (please see section 3.11 in Chapter 3). Creswell states that "good qualitative research contains comments by the researcher about how their interpretation of the findings is shaped by their background" (Creswell, 2009, p. 192). I bring certain beliefs with me into the study, in that I approached this study from the viewpoint that teachers are responsible for creating a classroom where students want to learn, and that teachers need to believe in the concepts and ideas they are teaching, and that yoga is beneficial (Breslin et al., 2008; Dierking & Fox, 2012; Papier, 2010).

1.5. Concept clarification

1.5.1 Classroom

A classroom is a place of learning. Classrooms are places where students spend the majority of their school week gaining knowledge, most often from a teacher (Merriam, 2008). Montessori does not use the term *classroom*; instead, she refers to the *environment* where children learn (Montessori, 1962, 1965, 1984). Piaget spoke about the classroom as a place where teachers act as a guide for student learning (Mooney, 2000; Piaget & Cook, 1976). For this study, the term *classroom* will be defined as a place where learning takes place.

1.5.2 Yoga techniques

Yoga techniques refer to specific yoga practices or the key aspects of yoga, such as: asana² and pranayama³. These techniques form a major part of the practice of yoga. The word *technique* is used to emphasise the point that yoga itself is not being practised. Certain aspects of yoga which have been shown to be beneficial are being used.

1.5.3 Yoga

Yoga has different meanings for different people and it is therefore not easy to give a single definition. Sumar (1998) describes yoga as a scientific system involving physical and mental practices and originating from India more than 3,000 years ago. Yoga can also be described as a

² An asana is a posture in yoga (Saraswati, 2008).

³ Pranayama refers to breathing practices used in yoga (Saraswati, 2008; Saraswati, 2009).



"union of body and mind created through physical exercises, breathing techniques and relaxation, meditation and mindfulness" (Cheesbrough et al., 2006:278). Iyengar (1976), who is considered to be an expert in yoga, wrote 53 pages in an attempt to answer the question, 'What is yoga?' Historically, yoga comes from India; the word yoga is derived from Sanskrit, meaning to yoke, bind or a union. Yoga focuses on balancing the body. For the purpose of this study, yoga is defined as breathing techniques and postures used to focus the mind and engage the body. This study does not focus on the meditative aspects of yoga.

1.6 Definitions

1.6.1 Pranayama is one aspect of yoga. Loosely translated it means breath control. Prana is often defined as life force, but commonly refers to the breath. Pranayama teaches different ways of breathing in order to cleanse and calm the mind and body. Pranayama also teaches one how to breathe properly in order to facilitate the oxygenation of our bodies (Saraswati, 2008; Saraswati, 2009). "Breathing is part of what separates yoga from other forms of exercise" (Toscano & Clemente, 2008, p. 18).

1.6.2 Asana refers to the postures or poses of yoga, for the purpose of this research. Each asana serves a purpose; they are not simply stretches that make us flexible. It is important to understand that asanas are more than simply 'contorting' one's body. "Asana means a state of being in which one can remain physically and mentally steady, calm, quiet and comfortable" (Saraswati, 2008, p. 8).

1.7 Outline of chapters

Chapter 1: Introduction

The first chapter provides an overview and introduction to my study by presenting a background and introductory orientation. The purpose and rationale, along with the problem statement and research questions, are discussed and clarified. The reasons for selecting this particular phenomenon as my research area is also explained.



Chapter 2: Literature review

The second chapter outlines previous research in relation to my study and thus provides a framework for the study. This chapter aims to place my research in context and to provide background information by exploring relevant literature on the topic being researched.

Chapter 3: Research design and methodology

In the third chapter, the research design is outlined and explained in detail. Methods by which the data was collected are discussed and justified, and also how the data was analysed. My conceptual framework is discussed, along with the role of the researcher in this study, and the ethical guidelines which I subscribed to are addressed. I conclude this chapter with a discussion of quality criteria addressing trustworthiness and validity.

Chapter 4: Findings

The fourth chapter contains the analysis of the data collected. In this chapter I present and discuss the themes which emerged in the data in relation to the literature which has come before.

Chapter 5: Conclusion and recommendations

In the final chapter, conclusions are presented, along with recommendations for further research and future study.

1.8 Conclusion

Chapter 1 gave a brief overview of the study while explaining important key concepts. The rationale behind the study as well as my viewpoint as a researcher was explained. Previous research suggests that yoga could be beneficial to students in the classroom (Bhardwaj & Argawal, 2013; Atkinson & Levine-Permuth, 2009; Benavides & Caballero, 2009; Betts & Betts, 2006; Bhardwaj & Argawal, 2013; Case-Smith, Sines & Klatt, 2010a; Cheesbrough, Woodhouse, & Griffiths, 2006; Finger, 2000; Peck, Kehle, Bray, & Theodore, 2005; Jain et al., 1991; Khalsa et al., 2012; Kirp, 2014; Miche Lawson, Cox & Labrie Blackwell, 2012; Peck et al., 2005; Platania-



Solazzo et al., 1992; Powell et al., 2008; Rizzolo et al., 2009; Rojas & Chan, 2005; Santangelo White, 2009; Steiner et al., 2012; Sumar, 1998; Telles & Srinivas, 1998; Telles et al., 2007; Telles, 2009; Toscano and Clemente, 2008; Tummers, 2004). However, in order for yoga to be incorporated into the classroom, an understanding of teachers' perceptions and feelings towards yoga needs to be gained. The next chapter elaborates on how yoga has been used in schools and with children. The aim of this research is to explore the impact teachers' perceptions about incorporating yoga into the classroom have on the incorporation of yoga techniques into the classroom.





Chapter 2: Literature review



Chapter 2: Literature review

2.1 Introduction

The aim of this research is to understand teachers' perceptions towards integrating yoga techniques into the classroom and how this can be accomplished. This aim is based on the presumption that yoga techniques are beneficial to the classroom and learning. This chapter examines relevant literature to establish the rationale regarding the potential benefits of the use of yoga techniques in classrooms. During this research, several areas of study emerged in relation to yoga and children, namely the physical and socio-emotional benefits of yoga techniques for children, yoga techniques and stress and relaxation, yoga techniques and learning, the fact that yoga techniques lessen distractibility and assist with concentration and focus, yoga techniques as an intervention for attention difficulties, yoga as a therapy, and the possibility of bringing yoga techniques into schools. This chapter also investigates various bodies of knowledge associated with the notion of classroom environment and classroom climate, focusing especially on the importance of classroom climate in relation to student learning.

The literature review process uncovered that little had been researched on the implementation or incorporation of yoga techniques into the classroom and little written about teachers' beliefs regarding yoga techniques in the classroom. There were, however, articles and studies which examined the use of yoga techniques as a treatment for various ailments such as ADHD, autism and asthma, and there were articles focusing on yoga for adults and college students, as well as the use of yoga techniques within the school community. By incorporating yoga techniques into the classroom, teachers could create an environment that is "emotionally, mentally and physically a healthy place to learn" (Morgan, 1996).

2.2 Yoga for children

Yoga for children, as a general concept, arose early on in the literature review, conducted between February 2010 and June 2015. The benefits of yoga are linked together and



interrelated in such a way that it can be difficult to discuss one benefit without relating it to another; therefore it is often difficult to distinguish the physical and socio-emotional or cognitive benefits of practising yoga techniques, as they overlap. The physical benefits of yoga techniques often create emotional or cognitive benefits, for example, as students feel physically better about themselves, their confidence improves (Toscano &Clemente, 2008; Telles, 2009).

2.2.1 Physical benefits of yoga techniques for children

Santangelo White (2009, p. 277) writes that "yoga provides a non-threatening and gentle method to increase physical fitness and enhance health and well-being". Thus, as physical fitness improves, so does self-esteem and self-confidence and, with it, often academic performance. Santangelo White's (2009) article is written from a nursing perspective in the United States and explains the benefits of yoga techniques for children. For her, the focus is on helping students manage and cope with stress, and also learn how to relax. She explains that more schools are beginning to use yoga techniques to "help students manage stress and influence well-being and behaviour"; however, the use of yoga techniques in schools is still not common practice (Santangelo White, 2009, p. 277). Santangelo White (2009) explains how yoga techniques can be taught to and practised by children, and argues for the use of yoga techniques in schools and with children.

Atkinson and Levine-Permuth (2009, p. 3) support the use of yoga techniques in school and explains that "yoga improves physical and psychological conditions". By using yoga techniques regularly and with care, children can improve their breathing, posture, balance, digestion, circulation, immune and nervous systems, and also reduce stress levels (Finger, 2000; Toscano & Clemente, 2008). By using yogic techniques to relax, the heart rate, breathing rate and blood pressure decrease, allowing the individual to feel more relaxed and better able to concentrate (Atkinson & Levine-Permuth, 2009). Studies suggest that work is more efficient and effective after physical activity, which can also apply to yoga techniques (Hopkins & Thomas, 1979; Salmon, Lush, Jablonski, & Sephton, 2009). Cheesbrough, Woodhouse & Griffiths (2006, p. 29) sumarise that the "regular practice of yoga can improve children's physical strength, stamina,



co-ordination, behavior and school work". Lawson, Cox and Blackwell (2012) support the use of yoga techniques with students, stating that students' gross motor skills improve through the use of yoga techniques, and with this, confidence often increases. Yoga techniques can also improve the cardiovascular functions of children, especially those with anxiety, assist with asthma and even improve visual impairments (Jain et al., 1991; Lawson, Cox, & Blackwell, 2012; Platania-Solazzo et al., 1992; Telles, Hanumanthaiah, Nagarathna, & Nagendra, 1993; Telles & Srinivas, 1998; Telles, Gaur, & Balkrishna, 2009).

Benavides and Caballero (2009) conducted a study using Ashtanga Yoga (also known as Power Yoga) as a tool for weight management, as well as psychological well-being. Yoga techniques, specifically asanas, use the body to balance and stretch together while focusing on breathing. This increases strength and flexibility simultaneously, and also calms the mind through breathing techniques (Iyengar, 1976). Benavides and Caballero's (2009) study worked with children between the ages of 8 and 15 with one of the following conditions or risks: 1) risk of type 2 diabetes; 2) obesity; 3) a close relative with type 2 diabetes; or 4) being of Hispanic or African-American descent. The participants completed several inventories and questionnaires before, during, and after the project. At the end of the study, the majority of the participants showed an increase in self-esteem and were less depressed.

Toscano and Clemente (2008) explain that teaching yoga techniques to children also teaches self-control. Peck et al. (2005) support this idea and argue that yoga works with physical and mental self-control, as it promotes self-awareness and body awareness and that this helps children with attention problems and self-control. Powell, Barlow and Bagh (2005) support this by stating that yoga techniques can help students to self-regulate and relax. This gives control over to the student, thus allowing the student to feel empowered. Physical control over the body is one of the physical benefits that yoga and yoga techniques can provide for children (Toscano & Clemente, 2008; Peck et al., 2005; Powell et al., 2008).



Bettts and Betts (2006) are of the opinion that yoga techniques can help students release emotions such as anger, frustration and sadness. They further suggest that yoga techniques used with children provide support with self-control and dealing with emotions. Murray (2002) and Passage, Tincani and Hantula (2012) warn that self-control and self-regulation are not equally innate for everyone; some students need to learn and practise self-control and self-regulation. This supports the notion that yoga techniques could help students learn and practise self-control and self-regulation. Betts and Betts (2006), Peck et al. (2005), and Sumar (1998) explain that yoga promotes self-control and self-regulation through the use of breathing techniques and postures. Saraswati (2008) and Toscano and Clemente (2008) elaborate in their studies that once a child feels able to control their body and breathing, they have the tools to control their emotions and themselves. Powell et al. (2008) support this by explaining how yoga techniques can help children learn how to release emotions in a healthy manner.

2.2.2 Socio-emotional wellbeing

Due to the interconnectedness of yoga, improvements in physical aspects of the body also lead to improvements in socio-emotional factors. Benavides and Caballero (2009) support this as they explain how yoga techniques assist with both the physical and the mental issues children might have. They further suggest that yoga techniques have shown a wide range of psychological benefits, ranging from an increase in self-esteem and self-confidence to increased self-awareness and improved mood. Bowen-Irish (2007) argues that yoga techniques help children to feel calm and relaxed, which enables them to sit still and focus for longer; this supports the belief that yoga assists with social-emotional wellbeing as well as the physical body. Kirp (2014) and Ehud, An and Avshalom (2010) further support this idea as they explain how yoga techniques have been shown to help students deal with difficult situations they may live in; this further supports the idea that yoga techniques can assist with physical and mental issues. Kirp (2014) found that after a school district embedded the practice of yoga into the school day, there was less school violence at the school and the students were better able to handle the social pressures they were under.



Case-Smith, Sines and Klatt (2010a, p. 227) conducted a study focusing on how "to promote self-control, concentration, self-effacing, body awareness and stress reduction" through the use of yoga techniques, while simultaneously investigating how students felt about their yogic experience. Their study suggests that yoga could benefit students in the classroom by aiding the students with their own personal growth and self-esteem, as well as helping the students with interpersonal relationships with their peers (Case-Smith et al., 2010 a). The students explained that the yoga techniques helped them to feel calm and relaxed, and also improved their focus in the classroom. "The students also associated learning to breathe deeply with improved control" over their behaviours, especially feelings of anger and frustration (Case-Smith et al., 2010 a, p. 232). The students stated that they felt better equipped to deal with conflict among their peers and teachers (Case-Smith et al., 2010 a).

The study of Case-Smith, Sines and Klatt (2010a) was conducted with the purpose of discovering the perceptions of third-grade students from a low socio-economic neighbourhood on their experience while involved in an eight-week yoga programme. The students in the study linked learning how to breathe deeply with improvement in their control over their feelings, moods and behaviours. The students described feelings of calmness, focus, relaxation and increased body awareness, as well as feeling physically stronger. Overall, the students made positive associations with practising yoga as they felt that their stress was reduced (Case-Smith et al., 2010 a). Case-Smith, Sines and Klatt (2010a) conducted their study outside of the classroom, with school-age children.

Tummers's (2004) study found there to be a 20% improvement in students' feelings towards themselves through the use of yoga techniques. She found that by participating in yoga classes, students' negative behaviours decreased while their positive behaviours increased. Bhardwaj and Agrawal (2013) support this concept in their study; they found that after just one month of yoga practice there was a significant increase in levels of self-esteem and confidence among students; this suggests that yoga techniques can help students to feel better about themselves. Khalsa, Hicky-Schultz, Cohen, Stiener and Cope (2012) and Rizzolo, Zipp, Stiskal, and Simpkins



(2009) argue that the idea yoga techniques provide a wide range of psychological benefits and that the use of yoga techniques has been shown to improve overall behaviour in students, assist students with personal relationships, aid students who suffer from depression and help students to be able to concentrate which, in turn, meant that they were better equipped to learn. Conroy, Sutherland, Snyder, & Al-Hendawi (2009) and Khalsa et al. (2012, p. 89) further argue that through the use of yoga techniques, students felt more equipped to handle their anger and were thus able to keep their equanimity; "this is especially noteworthy given the lack of existing school resources dedicated to resilience enhancement". This creates a classroom environment conducive to learning (Conroy et al., 2009; Shapiro, 1993).

2.3 Yoga techniques and learning

Slovacke, Tucker and Pantaja (2003) explain that teachers find that yoga techniques assisted students as individuals, but also aided in the creation of a classroom environment where learning flourished. Yoga techniques can help students relax and focus on learning (Cheesbrough et al., 2006; Sumar, 1998; Telles, 2009). Napoli, Krech and Holley (2005, p. 106) state that learning is a skill which takes practice; "in order for children to learn in the classroom, they must be able to focus their attention". If a student is agitated, tense and distracted, learning becomes difficult and strained; students are able to learn best when they are relaxed and focused (Adelman & Taylor, 1997; Anderson, Hamilton, & Hattie, 2004; Bostrom & Lassen, 2006). Johnson and Proctor (2004) and Rinne and Evans (1984) support the idea that learning requires that students pay attention and concentrate on what they are doing. "Attention is essential to learning"; without it learning is lost (Allington, 1975, p. 22). Allington (1975) goes on to explain that if students are not paying attention to their tasks, they will not complete them and will, as a result, not learn. Cheesbrough et al. (2006) and Telles (2009) support Alington's (1975) idea that if students are not paying attention to the teacher or tasks, they will not know what to do or will not learn the new skills being taught and will therefore not learn.



Gillen, Wright & Spink,, Wright and Spink (2011) explain how yoga techniques can improve attention and concentration while encouraging classroom participation. Tummers (2004) supports the idea by arguing that yoga techniques can help create a classroom environment where learning flourishes. Steiner, Sidhu, Pop, Frenette and Perrin (2012, p. 2) state that, "mind-body techniques [such as yoga] teach children to improve their attention skills, which can help their performance in school,";; they further support the idea that yoga techniques can support learning. When students have the tools needed to focus their attention, i.e. when they feel relaxed, calm, and confident, this causes academic performance to improve (Kahneman, 1973; Milligan, 2006; Rizzolo et al., 2009; Slovacke et al., 2003). Cheesbrough, Woodhouse and Griffiths (2006, p. 37) argue that "yoga in school enhances learning, because yoga is able to bring children such an improvement in the quality of their attention and concentration".

Limited capacity theorists believe that people only possess only a certain amount of mental capacity which can be used at any one time. The theory of limited capacity explains why students lose focus or become overwhelmed (Bourke, 1997; Geiger & Reeves, 1993a, 1993ba, 199b; Kahneman, 1973; ; Lang;1991; 2007 Pool et al., 2003). Since one can focus on only a limited amount at any given point in time, a bottleneck can be created when a new stimulus is introduced (Kahneman, 1973; Lang, 1991; 2007; Pool et al., 2003). Yoga techniques can help students to narrow their focus, thus limiting the stimulus and stopping the bottleneck from occurring (Burkett et al., 2006; Galantino, Galbavy, Quinn & Quinn, 2008; Granath, Ingvarsson, von Thiele & Lundberg, 2006; Kahneman, 1973; Lang, 1991; 2007).

Hopkins and Thomas (1979) wrote about yoga and concentration; they explained that yoga can be used to help with relaxation while simultaneously aiding focus and concentration. The study focused on breathing and stretching, what this study refers to as yoga techniques. Their study supports claims that yoga techniques could help children not only to relax, but also to improve their concentration, and could thus assist with teaching and learning. Hopkins and Thomas (1979, p. 345) Sumarise this by stating that "the results strongly suggest that working efficiency was improved following periods of physical activity". Galantino et al. (2008), Cheesbrough,



Woodhouse and Griffiths (2006) and Telles (2009) – more recent studies – support findings that students need to focus their attention in order to acquire new knowledge and skills, and that yoga and yoga techniques can assist with the process of focusing students' attention. Napoli, Krech and Holley explain that, "if children develop their attention skills, teaching and learning can become more meaningful," (2005, p. 106); this supports Galantino et al. (2008), Cheesbrough, Woodhouse and Griffiths (2006) and Telles (2009). "Learning to balance in a variety of challenging yoga poses can help you reach new and improved levels of concentration" (Coulter-Parker, 2003, p. 67).

The above-mentioned studies and articles focused on yoga as therapies done outside of classrooms and schools. The studies found that yoga techniques were able to increase focused attention while reducing distractibility, but the actual practice was done outside of the physical classroom and not taught by classroom teachers. Sometimes yoga was practised at a yoga studio or, at other times, before or after school, but on the school premises. This affirms the thesis that, with all the benefits of yoga techniques, research is needed on how teachers feel about the incorporation of yoga into the classroom. In the next section the concepts of focusing attention and lessening distractibility will be elaborated on. The next section focuses on the phenomena of ADHD and ADD and how yoga techniques can assist teachers with students suffering from these.

2.4 Yoga techniques as an intervention for attention difficulties (ADHD/ADD)

Peck et al. (2005, p. 415) stated that, "students with attention problems often fail to finish assignments, are easily distracted, have difficulties listening to directions, concentrating, organizing their work and most often require supervision to accomplish tasks". The authors argue that yoga is one alternative therapy that shows promise for assisting with these issues. Cheesbrough, Woodhouse and Griffiths (2006, p. 32) support Peck et al. (2005) when they explain how children with ADHD who need to move constantly, "yoga can slow down and channel these impulses; it can instil a peacefulness and calmness" in the child. As explained



previously, yoga techniques promote self-awareness, attention, concentration, body awareness and so on which, in turn, helps children with attention problems (Peck et al., 2005).

Peck et al. (2005) used yoga techniques as an intervention for children with attention problems. The participants were not officially diagnosed with ADHD, but were referred by the school psychologist and had attention problems. The students participated in 30 minutes of yoga techniques twice a week, for three weeks. They followed an instructor on a video tape (Yoga Fitness for Kids by Gaiam). The children greatly enjoyed using the video tapes and this form of intervention was easy to implement. Peck et al. (2005) found that yoga did in fact improve the children's concentration, decreased their anxiety and improved their behaviour. However, these results need to be replicated on a larger scale and with a wider variety of students. It is interesting to note that none of the participants in Peck et al.'s (2005) study were officially diagnosed with ADHD. They simply had attention problems at school. It would be of interest to find out at what time the yoga practice was given and where it took place. Was yoga practised at home or at school? Did it take place in the morning, afternoon, or during recess, or did the students miss class sometimes? Also, what specific yoga techniques were used? It would also be of interest to see whether all the students in the class improved, even those who were not noted for having attention difficulties. Would these students' attention also improve or is there a limit to how much one's attention can improve? Peck et al.'s study supports the concept that yoga techniques not only assist with concentration, but also improve behaviour, decrease anxiety and reduce stress. Other studies also found this to be true (Barnes & Nagarkar, 1989; Bhardwaj & Agrawal, 2013; Chaya, Nagendra, Selvam, Kurpad & Srinivasan, 2012; Case Smith et al., 2010 a; Khalsa, Hicky-Schultz, Cohen, Stiener & Cope 2012; Krusche, 1999; Kutter, Chambers, Hardial, Israel, Jacobson & Evens, 2006; Lawson et al., 2013; Rizzolo et al., 2009; Sirven, 2003; Slovacke et al., 2003).

Burkett, Todd and Adams (2006) support Peck et al. (2005) by stating that yoga techniques can be used to increase and maintain focused attention, which is what students who suffer from attention difficulties need help with. The use of yoga techniques has improved the amount of



time that students with ADHA were able to sit still and focus on their work, and also decreased how often the students felt distracted and frustrated (Burkett et al., 2006). Slovacke et al. (2003) suggest that students without diagnosed attention difficulties may also benefit from the practice of yoga and the use of yoga techniques.

Harrison, Manocha and Rubia (2004) conducted a study involving yoga, ADHD and the treatment of the entire family. The focus was on treatment at home that would help the children with ADHD throughout the day. The treatment involved Sahaja Yoga Meditation (SYM)¹. Meditation is one aspect of the practice of yoga and therefore should not be overlooked when understanding the benefits of yoga. A key aspect of meditation is breath control and focus on breath (Harrison, Manocha, & Rubia, 2004; Iyengar, 1976; Sumar, 1998). The intention was for SYM to be used in conjunction with the primary treatment of ADHA and not as a replacement, thus to further assist with treatment. "The meditation involved practicing techniques whereby participants were helped to achieve a state of thoughtless awareness" (Harrison et al., 2004, p. 484). Parents were also asked to carry out shorter meditation sessions twice a week at home. This would mean that participants would be meditating four times a week. Assessments were conducted three times throughout the study: at the start of the research, half-way through, and again at the end of the programme (Harrison et al., 2004).

Harrison et al. (2004) found that there appeared to be an improvement in the ADHD symptoms and that students were better able to focus their attention. It is important to note that, "in a number of cases, parents stated that they had been able to reduce their child's medication during the course of the SYM program" (Harrison et al., 2004, p. 487). This is interesting, as it was not stated as a goal of the programme, but seemed to be an unexpected benefit. The children stated they felt they were "more focused", "able to concentrate more" and that they had fewer social problems (Harrison et al., 2004, p. 487), which implies an improvement in

¹ Even though this study does not focus on or use meditation, it is important to understand previous research relating to all aspects of yoga.



social and emotional behaviour as stated in section 2.2.2.² The children also reported that they felt less panicky, less stressed and felt calmer, which helped them to focus on schoolwork. The symptoms associated with ADHD also decreased, for example, poor confidence and anxiety decreased (Harrison et al., 2004). Harrison et al.'s (2004) study supports the argument that yoga techniques (mainly pranayama, breathing techniques) and meditation can be used to improve students' focus and concentration, as was put forward in section 2.2.

Yoga is often grouped as a complementary or alternative therapy to attention concerns (Jensen & Kenny, 2004). Weber and Newmark (2007) and Rojas and Chan (2005) discuss these complementary and alternative therapies, focusing heavily on ADHD. Weber and Newmark (2007) look at a wide variety of complementary and alternative therapies, such as nutrition therapies, electroencephalography biofeedback, herbal products, vitamins/minerals, homeopathy, yoga and massage. Weber and Newmark (2007) support the idea that yoga techniques can assist with ADHD and Autism Spectrum Disorders, as well as the need for further research. Rojas and Chan (2005) investigated the above-mentioned complementary and alternative therapies, as well as play therapies, and the effects of different diets on learning. When looking into yoga techniques, the authors found only a few published studies on yoga. They suggested that yoga may have a role in treating ADHD and improving concentration. However, "more rigorous studies are needed" (Rojas & Chan, 2005, p. 127). Betts and Betts (2006) state that parents are turning to alternative methods due to their frustrations with the limitations of traditional treatments for ADHD, ADD and autism. Yoga is one the alternative methods parents are starting to use (Betts & Betts, 2006).

Jensen and Kenny (2004) wrote about the use of yoga techniques and its effect on ADHD in boys. They looked at boys between the ages of 8 and 13, and mainly Caucasian. The boys participated in 20 weekly one-hour yoga sessions consisting of respiratory training, postural training, relaxation training and concentration training. They found significant differences between the control and the yoga groups, and concluded that yoga techniques could be

² The concepts discussed in this chapter are interconnected and it is therefore difficult to discuss one without relating it to another.



thought of as a complementary treatment with the purpose of assessing improvements over and above those provided by medication (Jensen & Kenny, 2004). In this study it was found that the yoga group showed improvement from the pre- to the post-test. "The use of yoga as a complementary treatment for boys with ADHD appears to have some merit, especially for its evening effect when medication effects wear off (Jensen & Kenny, 2004, p. 214). Their study focused on boys with ADHD and how yoga and yoga techniques could help them. The results showed that yoga and yoga techniques helped to stabilise the boys' emotions and behaviour, thus improving their behaviour both at home and at school. This study shows the possibilities of how much yoga and yoga techniques might be able to assist with students – and not only those with ADHD, but any student. Yoga techniques are especially helpful when the effects of medicine wear off (Jensen & Kenny, 2004). The authors concluded that students need to focus their attention in order to learn, and if yoga techniques can aid the focus of students with ADHD, it should also be able to aid the focus of the average child, thus assisting with their learning (Jensen & Kenny, 2004).

The above-mentioned studies show the potential for yoga techniques to be used as a tool to help address attention and concentration problems in students. The studies showed improvements in ADHD symptoms, general attention problems, as well as in children who fall within the Autism Spectrum. The students were better able to concentrate, felt less anxious, less stressed, more relaxed, and enjoyed the practising of the yoga techniques. The studies conducted focused on school-age children and how to achieve better results in school, reduce symptoms of ADHD and improve concentration. The major limitations of the studies were outside influences. Oftentimes the research stated they were not sure whether the improvements could be attributed 100% to the intervention or to outside factors. Also, the studies worked largely with Caucasian boys. Although all the studies did notice marked improvements in academic performance, focus and behaviour, more research needs to be done on how to integrate yoga practices into the classroom. These studies looked at yoga outside of the classroom.



2.5 Yoga techniques, stress and relaxation

In contemporary society, stress has not only increased for adults, but for children as well (Stueck & Gloeckner 2005; Toscano & Clemete, 2008). Children need to learn how to cope with stress, and yoga techniques can aid with this process (Lohaus & Klein-Hebling, 2000). Techniques for coping with, dealing with, or combating stress are techniques and tools that all students need (Grant et al., 2006; Lohaus & Klein-Hebling, 2000; Rutter, 2006.) Children need to build resilience to stress and they also need to build systems of tools to choose from as ways of coping with stress (Grant et al., 2006; Rutter, 2006). Schools have limited budgets and cannot afford one-on-one counselling for students, "by increasing their awareness of their bodies and body sensation, children can learn to internally control or change uncomfortable feelings" (Case-Smith, 2010 b, p. 235). Students themselves have stated that they were able to use yogic strategies as ways to 'escape' and deal with stressful situations (Case-Smith et al., 2010a).

Lohaus and Klein-Klein-Hebling (2000) found that children who learned how to relax were better equipped to deal with stress. Milligan (2006) found that yoga techniques proved to be a useful way to help students cope with stress and focus. Khalsa and Cope (2006) and Khalsa, Hicky-Schultz, Cohen, Stiener and Cope (2012) support Milligan as they argue that yoga techniques have been shown to decrease stress and improve moods in children and adolescents. Toscano and Clemente (2008) and Rojas and Chan (2005) support this idea too, by explaining how yoga techniques can help children reduce their stress and find ways to handle the stress they experience daily. The key aspect of this is that yoga techniques not only help to reduce stress but also teach children how to better deal with stress (Toscano & Clemete, 2008). Santangelo White (2009) and Toscano and Clemente (2008) argue that the use of yoga techniques help to manage stress by giving students tools to cope with the stress they are under. Khalsa and Cope (2006) Khalsa et al. (2012) support this by stating that students need to be able to cope with stress in order to learn and function in society, and yoga techniques help with this. Khalsa et al. (2012) explain how students mentioned feeling relaxed and more capable of dealing with their stress after participating in yoga techniques, thus supporting the idea that yoga techniques can assist students with dealing with stress.



Lohaus and Klein-Klein-Hebling (2000) explain how children in particular need to learn how to cope with stress and to be able to relax because many of them have not as yet developed coping strategies and may not realise that they are in fact experiencing stress. Relaxation techniques are one of the main coping strategies that children use to deal with stress and improve their stress management, and this should therefore be taught (Lohaus & Klein-Klein-Hebling, 2000). In their 2000 study Lohaus and Klein-Klein-Hebling found that the children were more relaxed and less stressed, which led to an increased ability to concentrate; it also improved overall wellbeing (Lohaus & Klein-Klein-Hebling, 2000).

Relaxation, or the ability to relax, was also studied by Platania-Solazzo et al. (1992). Their study investigated the effects of relaxation on 40 hospitalised children and adolescents. The study showed that participants were more positive and less anxious after relaxation therapy, which involved yoga techniques, such as deep breathing. If children are less anxious they are better able to concentrate, study and learn (Napoli et al., 2005; Stanec, Forneris, & Theuerkauf, 2010; Steiner et al. 2012). The relaxation therapy used in the study included 30 minutes of stretching, followed by simple massage and breathing exercises. This links back to the importance of breathing, as the breathing exercises played a key part in the relaxation therapy (Platania-Solazzo et al., 1992).

Stueck and Gloeckner (2005) support the idea that students need to be able to deal with stress and relax. They focused on the need for students to be able to cope with stress and how yoga techniques might be used to help. Stueck and Gloeckner (2005) argue that children are experiencing more and more stress in their daily lives, but do not have the tools to deal adequately with these stresses. The purpose of their study was to teach children and adolescents self-regulating strategies to reduce stress and better deal with the pressures of life. The students who participated in the study were taught relaxation techniques based on yoga, and a control group was used both in the pre- and post-evaluation. The results showed that the



students improved their ability to cope with and manage stress, as well as improved behaviour which would assist with academics (Stueck & Gloeckner, 2005).

The following three studies are related to the managing or dealing with stress in relation to yoga: Monnazzi, Leri, Guizzardi, Mattioli and Patacchiolo (2002), Rizzolo, Zipp, Stiskal and Simpkins (2009), and Milligan (2006). These studies looked at the importance of teaching stress management to children, adolescents and college students. Monnazzi et al. (2002) focused on the impact that controlled breathing could have on stress. They found that certain breathing methods can have a great impact on specific stress indicators when practised properly, suggesting that yoga techniques could assist students when dealing with stress. Rizzolo et al. (2009) supported the idea that yoga techniques could aid with stress relief when they compared the effects of yoga techniques, humour and reading, on stress, and found that 30 minutes of yoga, humour and reading "acutely reduced physiological and psychological stress in students" (Rizzolo et al., 2009, p. 85). Studies undertaken by Monnazzi et al. (2002) and by Rizzolo et al. (2009) support the integration of yoga techniques into the classroom routine, as both studies argue that yoga techniques can be beneficial to students and can aid with stress reduction.

Milligan's (2006) study suggests that yoga can be considered as an approach for helping students deal with and manage their stress levels – further supporting Monnazzi et al. (2002) and Rizzolo et al. (2009). It was found that "yoga tends to be viewed as an enjoyable way to cope with stress" (Milligan, 2006, p. 185) as well as an alternative to seeking counselling for those students who might feel ashamed or stigmatised for needing help. Milligan (2006) suggests that yoga techniques can be a great tool for students in the management of stress and anxiety in their lives, supporting the concept of yoga techniques in the classroom.

Rowe (2006, p. 80) states "that stress begins during one's education process and continues throughout one's professional career," suggesting that it is important for teachers to find ways of teaching students how to cope with and manage stress. Rowe (2006, p. 80) further supports



yoga as a tool for managing stress when stating, "yoga has been found to modify stress response and a person's attitude toward stress, while improving self-confidence, increasing one's sense of well-being and creating a feeling of relaxation and calmness". The hope is that by finding ways of incorporating yoga techniques into the classroom routine, teachers will not only be able to help students learn more effectively by improving attention, but will also be giving their students tools for how to deal with stress throughout their lives. As Santangelo White (2012, p. 45) writes, "children need a repertoire of coping strategies to effectively manage stressful encounters and develop resilience".

Through the use of yoga techniques, children will be calmer and less anxious and will, as a result, "find it easier to remember what they have been taught" (Cheesbrough& Woodhouse Griffiths, 2006, p. 29). More children are using yoga techniques as a response to the increasing stress they experience in their daily lives, as well as the sedentary nature of their lives (Santangelo White, 2009; Stueck & Gloeckner, 2005). Filisek(2001) explains that there is a growing tendency for children to watch television and play video games instead of playing outside, and that together with the demands of school and family, create stress and cause tension (Filisek, 2001; Rizzolo et al., 2009; Santangelo White, 2012). When the mind relaxes, the body will also relax, thus allowing children to find a way to deal with the stress in their lives (Galantino et al., 2008).

The above studies found yoga techniques to be an effective tool for managing stress, not only for adults, but also for children and adolescents. It was found that yoga techniques were helpful with stress reduction and with improved concentration and attention. Yoga techniques were used in addition to the school day and, in one study, was used while the participants were hospitalised. This study focuses on teachers' perceptions on incorporating yoga techniques into the classroom in order to understand how yoga techniques can be integrated into the classroom by teachers, hopefully as a tool to create a classroom environment that is conducive to learning.



2.6 The application of yoga techniques for learners with special needs and as a therapeutic tool

One way in which yoga techniques have been used in schools is as therapy for students with special needs (Barnes & Nagarkar, 1989; Betts & Betts, 2006; Sumar, 1998; Telles, Hanumanthaiah, Nagarathna, & Nagendra, 1993; Uma, Negendra, Nagerathan, Vaidehi. & Seethalakshmi, 1989). This is important for this study because it shows the impact that yoga techniques can have on students. The improvements seen in the special needs students show the potential that yoga techniques have to help other students who have learning difficulties. The use of yoga techniques has helped children with a variety of special needs, ranging from attention problems and autism to intellectual disabilities (Barnes & Nagarkar, 1989; Betts & Betts, 2006; Sumar, 1998). Special needs students have shown an improvement in academic performance as well as physical improvements through the use of yoga techniques (Uma et al., 1989). Telles et al. (1993) found that after nine months of using a variety of yoga techniques, the children they worked with who were cognitively challenged showed noticeable improvements in their "general mental ability, psychomotor coordination, and intelligent and social behaviour" (Telles et al., 1993, p. 1264). This study focused on children with cognitive difficulties and how the use of yoga techniques as a therapy helped the students to improve in certain areas.

Uma et al. (1989) focused their research on the use of yoga techniques with students with mild intellectual disabilities. Ninety children were selected from four different special needs schools in India. This was a follow-up study to the authors' previous study in 1984, which involved ten children for six months. In the first study it was found that yoga therapy could be useful for students with intellectual disabilities. It is important to note that yoga therapy is tailored to the individual in one-on-one sessions over long periods of time (Monro, 1997). During this second study, the students were treated for one full academic year, equalling ten months. The children in the yoga group were taught breathing exercises, joint loosening exercises, postures and



meditation³. The yoga group practised five hours of yoga each week, using a variety of yoga techniques. During the yoga time, the control group engaged in regular school activities (Uma et al., 1989). The results showed significant improvements in all the areas studied. The study also showed how yoga techniques improved academic performance and social adaptation for students with intellectual disabilities.

Betts and Betts (2006), Uma et al. (1989) and Sumar (1998) all explain that yoga techniques enable all children to safely explore their bodies while helping them to improve physically. Betts and Betts (2006, p. 19) explain that "yoga breathing may relieve stress, release anger and pent up emotion from the body, and balance the nervous system quickly and quietly". Children who have an Autism Spectrum Disorder often have difficulty dealing with and expressing their emotions. They are prone to violent outbursts, screaming and tantrums. Yoga techniques give these children a healthy way to address and release these emotions (Sumar, 1998; Uma et al., 1989). Betts and Betts (2006) give evidence from a variety of sources about how yoga techniques have been shown to help children with intelligence disabilities, how yoga techniques have improved performance in schools and also how it has helped with relaxation (Betts & Betts, 2006). For children who live with Autism Spectrum Disorders, non-competitive activities are important; these children often do not have the muscle tone and coordination or balance to compete with average children (Betts & Betts, 2006).

Sumar (1998) used her daughter as a narrative case study with evidence on the use of yoga as a therapy for Down's Syndrome. Sumar (1998, p. 56) explains, "the way we breathe also has a profound effect on the nervous system. Our brain cells use three times more oxygen than other body cells. By regulating the breath and increasing oxygenation to brain cells, we help to strengthen and revitalize both the voluntary and automatic nervous systems." Sumar (1998, p. 56) further argues, "when practiced consistently, pranayama (breath control) has a powerful stabilizing effect on the mind and emotions", and this is true not only for special needs students

³ As previously mentioned, this study does not focus on meditation; however, as meditation is seen as an important aspect of the practice of yoga, it is important to be aware of studies that did focus on meditation.



who use breath control, but for all students. Sumar (1998, p. 45) then elaborates that "because yoga works on so many different levels, it has great potential as an effective therapy for chronic disease and conditions", such as autism, intellectual disabilities and arthritis.

2.7 Yoga techniques in schools

Research on the use of yoga techniques in the classroom environment or as part of classroom activities, is limited. Previous studies regarding the benefits of yoga techniques were conducted outside of school settings, outside of the classroom and often outside of school hours. Recently a few countries have started to incorporate yoga techniques into the school setting (Corliss, 2001; Ehud, An, & Avshalom, 2010; Kirp, 2014; Smith, Greer, Sheets, & Watson, 2011). Slovacke et al. (2003) concluded that students' attitudes, behaviours and academic performance improved from participating in yoga techniques at school. Saraswati (1990) gives insight into yoga techniques being used in schools and in the classroom. The argument is made that yoga techniques can be used as a tool for teaching. Saraswati (1990) even gives some lesson ideas for classroom teachers to use, as well as school programmes. Yoga techniques give children an opportunity to create healthy body images without competition, which is important for children to learn and understand (Saraswati, 1990; Slovacke, 2003).

One of the first ways that yoga techniques have been incorporated into the education system in the United States was through the physical education or PE programme (Love, 2006; Toscano & Clemente, 2008). This integration of yoga techniques focused on the physical aspects of yoga, mainly the poses and stretches (Santangelo White, 2009; Toscano & Clemente, 2008). This enabled children to see physical exercise in a non-competitive way, as opposed to feeling as if they constantly had to compete with their peers (Betts & Betts, 2006; Toscano & Clemente, 2008). School communities tend to feel more comfortable with yoga techniques as part of the physical education programme, where meditation is not involved, as many people are concerned about the meditation from a religious point of view (Morgan, 2011; Williamson, 2012). The use of yoga techniques during PE keeps yoga focused solely on the physical and usually does not require any special explanation to parents or administrators (Stanec et al.,



2010). Toscano and Clemente (2008) argue that the use of yoga techniques allows all students to enjoy physical education, rather than only the naturally athletic, thus promoting lifelong health. It is therefore postulated that if children learn to enjoy being active early on, they will continue to be healthy active individuals throughout their lives. However, if school physical education is unnerving for children and they feel that they are unable to succeed, they will avoid such sports and being active (Toscano & Clemente, 2008).

In Israel, where students live in stressful conditions, "yoga has been endorsed by the Ministry of Education" (Ehud, An & Avshalom, 2010, p. 44). The use of yoga techniques has been funded by the government in Israel and, as a result, yoga classes are being taught in many schools throughout the country. The teaching of yoga techniques in schools takes place during school hours, although it is not done by classroom teachers or in the classroom (Ehud et al., 2010). One of the reasons Israel decided to incorporate yoga techniques into the school routine, was to help the students deal with what was happening around them; the students live in stressful and dangerous situations, and need ways to deal with it (Ehud et al., 2010). The aim is to "direct the person's concentration to the present and reduce anxiety about what may or may not happen in the future" (Ehud et al., 2010, p. 43).

Slovacke et al. (2003) studied the relationship between the use of yoga techniques in an inner city school in the United States and academic performance, discipline, attendance and students' feelings. They found that the use of yoga techniques improved the students' behaviour, physical health, academic performance and their attitude towards themselves. However, the use of yoga techniques did not improve students' attitudes towards school itself. Slovacke et al. (2003) found that previous research tended to focus on adults and suggested that children needed to be researched as well. The students who participated in the study came to a yoga class which was taught on school premises, but not during class time or in the classroom, and was not taught by the classroom teacher. The class focused on the breathing and stretching aspects or techniques of yoga. Students who had high participation in the yoga



class had fewer discipline problems at school; their overall behaviour improved (Slovacke et al., 2003).

A study by Kirp (2014) looked at how yoga techniques were being used in one of the most challenging school districts in the United States as a way to decrease violence, drugs and truancy and increase attendance, and improve academic performance and positive behaviours. The entire school practised a variety of yoga techniques for a small part of the morning each day; this was called quiet time, focusing on teaching students how to 'clear' their minds and breathe deeply (Kirp, 2014). After only a few months, favourable results became evident. The first year in which the quiet time was introduced, suspensions dropped by 45%, and within four years attendance rates were up to 98% (Kirp, 2014). Students reported feeling less stressed, having improved self-esteem and less depression (Kirp, 2014). Due to these improvements, academic performance also improved (Kirp, 2014).

Chaya, Nagendra, Selvam, Kurpad, and Srinivasan (2012) conducted a study with the objective of assessing the effect of yoga techniques compared to the effect of other physical activities on 7-9-year-old children from a socioeconomically disadvantaged background in the US. The focus was on stretching and breathing. The results showed that both the yoga technique group and the physical activity group had improved cognitive performance after the intervention. By the three month check-in, the yoga technique group had increased attention and visual-spatial abilities (Chaya et al., 2012). The study suggests that the use of yoga techniques compared favourably with other physical activities in terms of the benefits for children, and in particular in terms of attention, as was discussed in section 2.4.4 The study focused on yoga techniques in school, but not used by a classroom teacher and took place in India where yoga is an accepted part of the culture.

Lawson, Cox and Blackwell (2012) conducted a study focusing on the use of yoga techniques as a type of classroom intervention for preschoolers in the United States. The purpose of their

⁴ As noted previously, the concepts discussed here are interrelated and therefore appear throughout the chapter.



study was to determine whether yoga techniques could be an effective tool for improving fine and gross motor skills, classroom behaviour and academic performance of preschool children. This was one of the few studies where yoga techniques were used in the classroom. There were 33 children who participated in the study. Lawson, Cox and Blackwell (2012) found that yoga techniques seemed to be a promising intervention for children, but that "current literature fails to provide evidence specific to school-based" programmes (Lawson, Cox & Blackwell, 2012, p. 127). Lawson, Cox and Blackwell (2012, p. 134) did, however, find significant improvements and suggested that, "perhaps yoga has a greater effect on school-age children who have more fully developed".

Steiner, Sidhu, Pop, Frenette and Perrin (2012) found that 12-13% of school age children have emotional or behavioural disorders, thus causing teachers to spend up to one fifth of their time disciplining rather than teaching. Steiner et al. (2012) proposed that, because only a few schools have the budget to pay for one-on-one counselling services for needy students, yoga techniques could be used to help children overcome stress and maximise their academic as well as social performance. They reported that teachers concluded that there was improved attention in the classroom and that the intervention was, overall, well accepted by teachers, parents and students (Steiner et al., 2012). Their study focused on the use of yoga techniques within a school setting, as they explained that they did not find other studies focusing on the use of yoga techniques with children in a school setting. Their objective was to look at the feasibility of the use of yoga techniques for children with emotional-behaviour disorders in a school setting. The results were positive. However, they did not incorporate the use of yoga techniques into the classroom setting (Steiner et al., 2012).

Stanec et al. (2010) write about the concept of yoga as part of the school community. They explain that the implementation of yoga in school communities could be very helpful. In their study, they focused mainly on yoga as an afterschool or before school programme, and not as part of the school day. However, they explained that yoga techniques should only complement current quality physical education programmes and not replace them. Even though Stanec *et al.*



(2010) write about yoga as a concept, the focus of their article appears to be on the physical aspect of yoga techniques, such as stretching and breathing (Stanec et al., 2010).

Filisek (2001) argues for the importance of teaching yoga techniques to school children and incorporating yoga techniques into school. She explains the importance of proper posture and breathing techniques. Filisek (2001) reports that yoga techniques have a calming effect on children, reduce obesity, reduce discipline issues in class, lead to less anger and anxiety as well as more imaginative play, and increase concentration and academic performance. She explains that PE is a good starting point for integrating yoga techniques into the school community, but that the integration needs to continue past that point (Filisek, 2001).

2.8 Challenges to incorporating yoga techniques into the classroom

As discussed in previous sections, yoga techniques have been shown to reduce stress, decrease distractibility, increase concentration, enhance academic performance, improve student behaviour, and aid with chronic diseases (Stanec et al., 2010). Not much is written about why yoga techniques are not incorporated in classrooms on a more regular basis; this is often only alluded to in small sections of studies. This question is one that may need to be asked of teachers, as it takes teachers to integrate yoga techniques into the classroom.

Some believe yoga to be a form of religion and feel that is has no place in schools (Morgan, 2011; Williamson, 2012; Willis, 2007-2008). Yoga itself is not a religion although there are 'spiritual' aspects to yoga (Love, 2006). All branches of yoga are and can be practised by people from any religion or belief system (Morgan, 2011, p. 6). The idea that yoga is a kind of religion appears to be one of the strongest reasons why it is not being used more widely in the classroom. It can be seen as controversial. Christians and Jews share concerns with regard to yoga (Morgan, 2011; Williamson, 2012; Willis, 2007-2008). Research suggests that they are suspicious of the practice of yoga because of its ancient connections to Hinduism and Buddhism (Morgan, 2011; Williamson, 2012; Willis, 2007-2008). Some churches in the UK have gone as far



as banning yoga from the church premises and, in the United States, prominent pastors have alleged that yoga is demonic in nature (Kremmer, 2013).

Yoga is often associated with a more alternative lifestyle, which implies that yoga often falls outside the world view of the average individual (Love, 2006). A majority of people think of yoga as a spiritual activity (Quilty, Saper, Goldstien, & Khalsa, 2013). Yoga's core principles are based on the interconnection of the mind, body and soul or spirit, and this view is not in line with the view of many conservative Christians (Morgan, 2011; Williamson, 2012; Willis, 2007-2008). People often perceive someone who practises yoga as not religious, as having different or alternative dietary habits, and possibly even as dressing differently (Morgan, 2011; Williamson). These negative preconceptions dissuade people from practising yoga (Atkinson & Levine-Permuth, 2009). It might be very difficult for teachers to incorporate yoga techniques into the classroom due to the belief that yoga is a religion or part of an alternative lifestyle (Falk, 2005). Administrators of the Public School System are not always open to new ideas, especially if such ideas may be controversial (Falk, 2005; Filisek, 2001). Public schools have a wide range of people attending their schools and, as a result, have to be inclusive of a wide range of beliefs (Falk, 2005).

The main objections to incorporating yoga techniques into the classroom routine appear to be centred on administration, believing yoga to be a religion and believing yoga to be part of a more alternative lifestyle. But, as studies have shown how beneficial yoga is for both adults and children, it may well be necessary to find ways to overcome these barriers.

2.9 Classroom climate and yoga techniques

By incorporating yoga techniques into the classroom, teachers may be able to create a classroom environment that is a healthy place to learn, one where children want to learn and want to physically be a part of; i.e. a place that is, in essence, conducive to learning (Morgan, 2011). Classroom climate is important for student learning, as classroom climate sets students up to be able to focus on their learning, and can influence student behaviour (Morgan, 2011).



The teacher has the greatest influence on the classroom climate and, as such, it is also the responsibility of the teacher to create a learning environment which encourages learning (Morgan, 2011). Classrooms where students feel that their teachers are supportive and work with them, generally have less discipline and behaviour problems (Jennings & Greenburg, 2009). Yoga techniques can help to create a classroom where students feel safe, calm, relaxed and nurtured because not only do yoga techniques help students physically and mentally, these techniques also prepare them for learning (Benavides & Caballero, 2009; Finger, 2000; Jain et al., 1991; Morgan, 2011; Telles & Srinivas, 1998; Toscano & Clemente, 2008).

Teachers have a responsibility to create a safe learning environment for their students (Jennings & Greenburg, 2009). A lot of mistakes can be made during the learning process. If a child is constantly being made fun of, feels self-conscious, embarrassed, or ridiculed, they will often become afraid of learning and, instead, do the minimum required to make it (Jennings & Greenburg, 2009; Montessori, 1965, 1984). Students need the classroom to be a 'safe zone' for them to practise their new skills and solve problems on their own; and these are not only academic problems, but social and personal problems as well (Montessori, 1965, 1984). By creating a safe classroom, teachers help to build students' self-confidence and self-esteem and by treating students with respect, they build confidence and learn pride and dignity (Cohen et al., 2009; Mooney, 2000).

2.9.1 What is classroom climate?

A single agreed upon definition for the term *classroom climate* does not appear to exist, though it can be explained as the "quality of the classroom setting and is seen as a major determinant of behaviour and learning" (Adelman & Taylor,1997; Gillen, Wright & Spink, 2011, p. 65). Classroom climate can be thought of as the processes put into place which take place during teacher-student as well as student-student interactions (Zedan, 2010). Classroom climate, or atmosphere or environment, can be thought of as the general feeling of the classroom (Gillen, Wright & Spink, 2011). When walking into a classroom, there is an overall sense or feeling to the classroom; some classrooms are lively, active supportive places to be in, while others are



quiet, boring and almost depressing. Some teachers are burnt out, unhappy, feel isolated, angry and overworked, while other teachers are full of enthusiasm, extremely motivated and energetic. Some students follow the rules, are respectful, motivated and interested in learning, while others are bored, misbehave, do not listen to the rules and can be despondent. These differences in classrooms are created by the classroom climate (Zedan, 2010). Teachers aim for a classroom climate that "raises the students' self-esteem and contributes to the improvement in their school performance" (Zedan, 2010, p. 76). Classroom climate is the combination of emotional and physical safety, relationships, and the physical space (Cohen, Pickeral, & McCloskey, 2009).

2.9.2 The importance of classroom climate

A child spends the majority of her/his day in the classroom environment – in fact, studies suggest around 20,000 hours of a student's entire 12 years of schooling is spent in the classroom (Zedan, 2010). The quality of the classroom environment or classroom climate is therefore paramount to students' feelings towards school, teachers, classmates and learning (Adeleman & Tayler, 1997; Cohen, Pickeral & McCloskey, 2009; Gillen, Wright & Spink, et al., 2011; Zedan, 2010). Shapiro (1993, p. 91) explains that "to create an environment necessary for learning to take place, the teacher needs to establish a positive social (classroom) climate". The climate of this environment is essential to how the child will interact with peers and teachers, and how well they will learn (Cohen et al., 2009). Conroy, Sutherland, Snyde r& Al- Hendawi (2009, p. 18) support Shapiro (1993) when they state that "creating a positive and engaging classroom atmosphere is one of the most powerful tools teachers can use to encourage children's learning and prevent problem behaviors from occurring". This atmosphere or climate of the classroom is heavily influenced by the teacher; in fact, the teacher is the major influence on classroom climate (Adeleman & Tayler, 1997; Cohen et al., 2009; Gillen, Wright & Spink, et al., 2011; Zedan, 2010).

Shapiro (1993) and Conroy et al. (2009) refer to the idea of a 'positive' climate or atmosphere in the classroom. In this sense the word *positive* refers to good and happy feelings, a lack of



problem behaviours as well as satisfactory emotions (Conroy et al., 2009; Shapiro, 1993). Shapiro (1993) explains that a positive climate in the classroom can be described as one where students expect one another to do their best academically and to support one another. She continues to explain that positive climate in the classroom will encourage cohesion in the class and acceptance. Conroy et al. (2009) suggest that a positive atmosphere relates to teachers responding in a positive manner to students. The authors explain that this sets the tone, the overall feeling of the class. Noddings (1992, p. 71) further supports Conroy et al. (2009) and Shapiro (1993) by stating that "the academic objectives of schools cannot be met unless teachers provide students with a socially and emotionally healthy classroom environment".

School is the place where students not only learn to read, write and do mathematics, but also where they learn social and emotional skills which will enable them to function successfully in society throughout life (Edward & Mullis, 2003). A positive classroom climate, meaning a climate where students feel accepted, supported and behave in an appropriate manner, is essential for students to be able to learn these skills (Cohen et al., 2009). A classroom climate can either nurture or stifle learning; a positive classroom climate will create a tone of acceptance, perseverance and risk-taking, which encourages learning (Conroy et al., 2009; Shapiro, 1993). Research has shown that students and teachers feel successful in classrooms with positive climates (Cohen et al., 2009; Hofstrand, 2003). Morganett (2001) explains that it is necessary to create a classroom where there are positive relationships as opposed to negative ones and a safe environment with feelings of respect. Positive classroom climates generally include feelings of safety, respect, trust and support (Morganett, 2001). Students need to feel comfortable taking risks without fear of rejection or ridicule (Ruddle, 2011). Research has linked classroom climate to a wide variety of important factors, such as motivation, engagement in classroom lessons and activities, academic values and achievement, and social skills and competence (Anderson et al., 2004; Rowe, Kim, Baker, Kamphaus & Horne, 2010; Brophy-Herb et al., 2007; Furrer & Skinner, 2003; Gillen, Wright & Spink,, 2011; Roeser & Eccles, 1998; Rowe et al., 2010; Urdan & Schoenfelder, 2006).



Classroom climate has a large impact on students in terms of, for example, engagement in the lesson, attendance, self-efficacy and feelings about the quality of life at school (Gillen, Wright & Spink, et al., 2011). These factors can all be negatively affected if the classroom climate is not an encouraging one. When teachers create a classroom climate that is warm, caring, and supportive, "the students feel more connected, behave better and are more apt to succeed in school and grow into successful adolescents and adult citizens" (Brackett, Reyes, Rivers, Elbertson & Salovey, 2011, p. 34).

As stated, research has shown how important classroom climate is to student learning (Brackett et al, 2011; Conroy et al., 2009; Gillen, Wright & Spink,, 2011; Rowe et al., 2010; Zedan, 2010). Teachers need to be able to create a classroom environment that supports and encourages learning, because the teachers' experience and expertise will not be "sufficient to achieve the goal of a positive social climate" or classroom climate (Shapiro, 1993, p. 91). Teachers have two roles to play in educating students: the first is an academic role, and the second is a social developmental role (Brock, Nichida, Chiong, Grimm, & Rimm-Kaufman, 2008). If students are unable to cope socially, their academic output will suffer. The classroom climate is what creates safe social structures for academics to thrive (Brock et al., 2008). Yoga techniques may be able to be used as a way to help create a classroom climate conducive to learning.

2.10 Conceptual framework

A conceptual framework is a road map a researcher uses to keep on track and guide their study. The framework "explains either graphically, or in narrative form, the main things to be studied – the key factors, concepts or variables and the presumed relationship among them" (Miles & Huberman, 1994, p. 18). Within a conceptual framework there is an "argument about why the topic one wishes to study matters and why the means proposed to study it are appropriate and rigorous" (Ravitch & Riggan, 2011, p. 7). This is why the conceptual framework is essential to the research process; it directs the researcher's thinking and allows the researcher to be clear about the purpose of their research.



As previously stated in Chapter 1, the critical question of this research project is:

 How does insight into teachers' beliefs, perceptions and opinions about yoga aid their understanding of the incorporation of yoga techniques into the classroom?

This question makes the assumption, based on previous literature and studies, that yoga techniques should be incorporated into the classroom, because of the many benefits yoga techniques provide to students. In order to be able to learn, students need to be in an environment that is conducive to learning; yoga techniques can help to create such an environment (Brock et al., 2008; Conroy et al., 2009; Shapiro, 1993; Zedan, 2010). The main aim of this study is to understand how teachers feel towards yoga techniques in the classroom and to better understand how yoga techniques can be incorporated into the classroom.

According to the Ecological Systems Theory, psychological human development is affected by a variety of interacting structures or systems. The school, according to this theory, can be seen as a microsystem which is one system removed from the individual (Bronfenbrenner, 1979). The key understanding is that human development is a function of the interactions or connections between the structures or systems and relationships that exist between these different structures. Bronfenbrenner (1979) describes these systems as the micro-, macro-, meso- and exosystems. The microsystem is where the most immediate interaction takes place and relates to the immediate surroundings of the individual. The mesosystem refers to the relationships or connections between the various systems. An example of this relationship is the connection between family experiences and school experiences. The exosystem relates to the connection between a social setting in which the individual does not participate, and the individual's own experience or microsystem in which he/she plays an active role. For example, a child's experience at home may be affected by the parents' experiences at work. Lastly, the macrosystem describes the culture that individuals live in, which includes socioeconomic status, ethnicity and poverty (Bronfenbrenner, 1977, 1979, 1994). The diagram below shows the different systems and how each influences the individual. Each system fits neatly into the system above it.



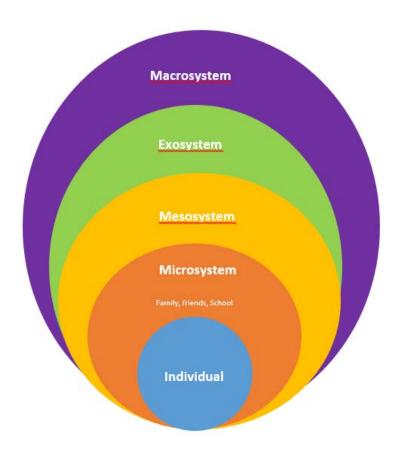


Figure 2.1 Ecological Systems Diagram (Adapted from Bronfenbrenner, 1977, 1979, 1994)

Bronfenbrenner's Ecological Systems Theory supposes that the environment affects the development and behaviour of an individual and that impact of the environment varies, based upon how far the system is removed from the individual. Studies on classroom climate have found this to be true within the classroom, and support this theory (Anderson et al., 2004; Rowe, Kim, Baker, Kamphaus & Horne, 2006; Brophy-Herb et al., 2007; Furrer & Skinner, 2003; Gillen, Wright & Spink,, 2011; Roeser & Eccles, 2000; Rowe et al., 2010; Urdan & Schoenfelder, 2006). The microsystem holds the most influence over a child's development. It is therefore important for teachers who fall within this environment to have ways and means of making it a positive space where students enjoy being.

The focus of the study is on the microsystem of school and how yoga techniques could be introduced into this microsystem. Within the microsystem, the following factors emerge as important with relation to this study: students, teachers, classroom environment/climate and



yoga techniques. The practice of yoga and the use of yoga techniques are an individual experience, one that each student may participate in as group but experiences on their own. Teachers are the key drivers when it comes to education and the quality of education; this is why it is important to understand teacher's perceptions about yoga techniques in the classroom. A teacher's role is essential for preparing youth for life – intellectually, morally, emotionally, spiritually and culturally (Slabbert et al., 2009).

It is important to note that, even though this study focuses on the microsystem, other systems have an influence on teachers' beliefs, perceptions and opinions about the incorporation of yoga techniques into the classroom. An individual's perceptions, beliefs and opinions relating to the incorporation of yoga techniques into the classroom are influenced by: the culture they live and grew up in (macrosystem), the area where they spend the most time i.e. home, work and school (microsystem), places where people who are close to them spend time but they may not (mesosytem), and various connections among the systems (mesosystem). This means that teachers, whose perceptions, beliefs and opinions this study is focusing on, are influenced by a variety of factors. This informs my systemic thinking about the relation of teachers' perceptions, beliefs and opinions about yoga techniques in the classroom and how to incorporate them into the classroom. This study focuses on classroom and teachers' perceptions - mainly the microsystem - which is why data was neither collected nor analysed on all levels; however, Bronfenbrenner's Ecological Systems Theory helps to guide the analysis by providing a way to understand and separate a variety of influencing factors and also to understand how the different influences on school impact each other, the school and teachers. Through the use of Bronfenbrenner's Ecological Systems Theory this study was able to gain a better understanding of the influences teachers face when in the classroom and when attempting to implement new ideas, concepts or curricula.



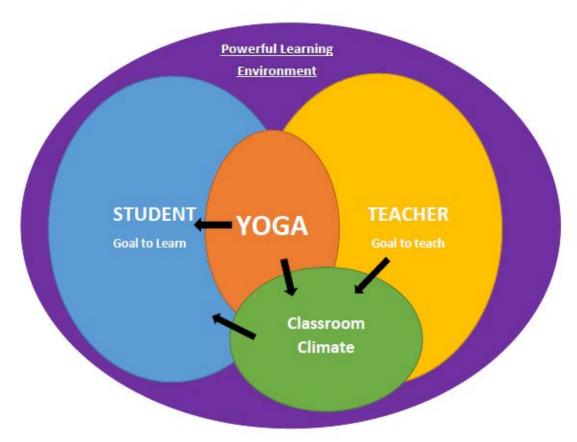


Figure 2.2 Conceptual framework diagram

To be successful as an educator, it is important to create a powerful learning environment as students spend a majority of their day in the classroom (Anderson et al., 2004; Kim, Baker, Kamphaus & Horne, 2006; Conroy et al., 2009; Shapiro, 1993). This powerful learning environment encompasses the students, the teacher, the classroom climate, and within this framework also falls yoga techniques. A powerful learning environment is one which responds to the needs of those involved in it. This classroom climate/environment is linked to students' learning as well as teachers' teaching. Students' perceptions about the classroom affect their ability to function and learn within the classroom (Könnings, Brand-Gruweln& Van Merriënboer, 2005). Some of the goals of teaching include assisting students with the acquisition of knowledge, skills, problem solving as well as being self-directed and independent learners. Research has shown that students' perspectives about their learning environment affect their behaviour and the quality of their learning (Könnings et al., 2005). Learning is active; one cannot be a passive observer and expect to learn. Learning requires the individual to



actively interpret, process, construct and synthesise information (Jonassen, 1991; Könnings et al., 2005). Yoga is red and in the centre of the model to illustrate its importance as a tool for teachers to use. The arrows indicate influence or affect. Yoga has arrows pointing towards students and classroom climate because yoga can have an effect on or influence students and classroom climate. Classroom climate's arrow points towards students because the classroom climate affects students and the arrow from the teacher points to classroom climate to show that teachers can influence or affect classroom climate.

This study is important to education because by understanding how yoga and yoga techniques can be incorporated into the classroom, we can understand the barriers that may exist to incorporating other new concepts. This study contributes to our understanding of barriers that could exist when introducing new concepts into the classroom as well as the impact yoga could have on classroom climate. The study uses a qualitative approach and a case study design. The methodology will be discussed in detail in Chapter 3. Qualitative data is used in order to gain a deep understanding of individual experiences and perspectives. A case study design was used in order to focus on the phenomenon of yoga in the classroom.

2.11 Conclusion

This study looks at how yoga techniques can be incorporated into the classroom, the barriers that exist to the incorporation of yoga techniques into the classroom, and also how these barriers can be overcome, and how teachers feel towards the use yoga techniques in the classroom. Studies have shown a variety of benefits that yoga techniques provide for children and their learning. This literature review focused mainly on yoga techniques as an aid for children. The majority of studies involving yoga and children have been relatively small-scale and were conducted over a short period of time. Studies regarding children, yoga and learning are becoming more common; however, more in-depth research is needed. It is important to continue discovering and understanding the benefits of yoga techniques, both as a therapy for children and as a classroom tool for teachers. Research is very limited on the incorporation of yoga techniques into the classroom routine. Previously conducted research with regard to yoga



has not focused on how yoga techniques could be incorporated in the classroom, but has rather been on how yoga techniques might benefit students and children. Previous studies have shown the numerous benefits that yoga and yoga techniques provide for students and children in terms of education.

There has been little or no research done on yoga techniques in the classroom in South Africa. The majority of research involving yoga has been conducted in India or the United States, where the culture of yoga is more readily accepted. These studies have shown the numerous benefits that yoga techniques provide not only for adults, but also for children and students (Birdee et al., 2009). Research on how yoga techniques can be incorporated into the classroom in cultures where yoga may not be as readily accepted, is essential. The literature has shown the variety of benefits that yoga techniques have for children and learning; now it is necessary to find a way to incorporate yoga techniques into the classroom so as to take advantage of these benefits.

The following chapter will explain the methodology behind the research and how the data was analysed.





Chapter 3: Methodology



Chapter 3: Methodology

3.1 Introduction

The previous chapter described the relevant literature related to the topic of study and gave background information relevant to this study. This chapter explains the research methodology, including data collection and analysis, and the paradigmatic perspective, as well as the ethical principles subscribed to while conducting this research. Furthermore, in order to justify how the research was conducted and analysed, the quality criteria used throughout the research process is explained. First the metatheoretical paradigm and research design will be discussed.

3.2 Metatheoretical paradigm

A research paradigm is used as a set of standpoints about how knowledge or research can be validated or authenticated and collected (Anafara & Mertz, 2006; Denzin & Lincoln, 2008). This affects how the research is designed and conducted and is explained throughout this section. The concept of a paradigm addresses ideas of ontology, which pertains to the nature of reality and being, and epistemology, which is concerned with the nature of knowledge. The paradigm used throughout this study is one of interpretivism.

Through the use of an interpretivist paradigm, the study was able to focus on understanding the participants' perceptions towards yoga techniques in the classroom and what was needed in order to incorporate yoga techniques into the classroom routine. The epistemological basis for this school of thought is that knowledge is derived through observations and interpretation (Creswell, 2007; Strydom, Fouché, & Delport, 2005).

In order to understand how to incorporate yoga techniques into the classroom, first there needed to be an understanding of what concerns or issues teachers may have in relation to the incorporation of yoga techniques into the classroom. Those who are best equipped to understand this are the teachers themselves who spend every day in the classroom, working



with the students, parents and administrators. Therefore, a clear understanding of the teachers' perceptions is needed.

The interpretivist ontology understands knowledge to be derived from people's subjective experiences (Creswell, 2007; MacNaughton & Hughes, 2009; Strydom et al., 2005). This is why is it essential to listen empathetically, and without judgement of participants, so as to gain insight from the individuals themselves (MacNaughton & Hughes, 2009). The epistemology of interpretivism is grounded in the idea that knowledge is gained by interacting with people in an empathetic way and by paying attention to the subjective meaning of their experiences (Creswell, 2007; Denzin & Lincoln, 2008).

Qualitative research focuses on human understanding and interpretation (Creswell, 2007; Denzin & Lincoln, 2008). I argue that by basing my research on a qualitative design, I was able to consider the emotions, opinions, feelings, perceptions and thoughts of the participants. The main focus was on the teachers, as they are the ones who would actually be implementing the yoga techniques. Perceptions can be difficult to quantify, which is why this research was conducted with a focus on qualitative data and did not employ a quantitative approach. It was important to try to ensure that the data focused on what the participants felt, using their words and experiences as much as possible.

3.3. Research design

3.3.1 Case study

A case study design was used to conduct this research as case studies seek to clearly illustrate a phenomenon; in this case the phenomenon of yoga techniques in the classroom. A case study can be defined as a "systematic enquiry into an event or set of related events which aims to describe and explain a phenomenon of interest" (Maree, 2007, p. 75). The inquiry in this research was conducted, focusing on the individual participants' subjective view and using a variety of interviews, observations, exit slips, surveys and focus groups. The phenomenon of



interest for this study was teachers' perceptions, beliefs and feelings about the integration of yoga techniques into the classroom.

A case study approach to research enabled the data to "retain the holistic and meaningful characteristics of real-life events" (Yin, 2003, p. 2). This allowed for an understanding of participants' views on yoga techniques in the classroom, but through the use of a case study insight was gained into participants' understanding and experiences regarding yoga techniques in the classroom. Case study research often uses specific examples to explain findings; this makes the research accessible and easier to understand (Creswell, 2007; Maree, 2007; Yin, 2003).

This was an intrinsic case study because the focus was on the case itself, which in this research is the use and incorporation of yoga techniques into the classroom routine (Creswell, 2007). As Huberman and Miles (2014, pp. 8-9) explain, an intrinsic case study design is a "research strategy which focuses on understanding the dynamics present within a single setting". Phase 1 of this research focused on a single setting, namely a single classroom. Teachers from different schools were interviewed during phase 2, but the yoga techniques were only introduced in one setting as the single setting allowed for a more in-depth investigation of yoga in the classroom and gave me the opportunity to instruct yoga in the classroom as a teacher.

As Creswell (2009, p. 61) explains, "a case study is a problem to be studied, which will reveal an in-depth understanding of a 'case' or bounded system, which involved understanding an event, activity, process or one or more individuals". By focusing on one setting in which to incorporate yoga, a detailed and multifaceted understanding of the subtleties involved in the integration of yoga techniques into a classroom in South Africa was gained (Creswell, 2009; Stake, 1995; Yin, 2003). The case study design for phase 1 employed elements of action research. Action research was developed in the 1930s, beginning with John Collier and Kurt Lewin and started out focusing on social justice (Stringer, Guhathakurta, Masaigana & Waddell, 2008). Action research aims to improve learning with social intent (McNiff, 1988; McNiff & Whitehead, 2011).



One important assumption of action research is that the creation of knowledge is a collaborative process. During action research participants reflect, as does the researcher. This is essential to the collaborative process and is the reason why the participants in phase 1 were interviewed, surveyed and included in phase 2 of data collection (Greenwood & Levin, 2006).

Action research focuses on direct observation (Kemmis & McTargant, 2005; Elliot, 1991). As a researcher I was a participant observer, meaning I was participating in the classroom yoga and at the same time observing. The teachers also made observations about yoga techniques being used in the classroom and shared their perceptions and beliefs. There are three main kinds of participant observation (Whyte, 1991).

- Active participant observation actively engaging in teaching, and observing. As I was
 teaching yoga practices, I as active and made observations as I taught; these were
 written down in my field notes.
- Privileged active observation observation when not directly teaching. When I was not teaching yoga I was able to move around in the class and make observations.
- Passive observer observations when there is no responsibility of teaching. This was not
 possible as when I was in the class at any time and a student needed help, I needed to
 assist them (Elliot, 1991; Kemmis & McTargant, 2005).

The process of action research begins with observations and moves to reflection, evaluation and modification. This is a constant spiral (McNiff, 1988; McNiff & Whitehead, 2011; Sagor, 2010; Whitehead, 1998). Action research is a "spiral of identifying a problem, imagining a solution, implementing the solution, observing the effects, evaluating the outcomes, modifying actions and ideas in light of the evaluation and re-planning for the next action step" (McNiff, 1988, p. 73). Action research has a strong basis for formulating effective solutions for educational issues or concerns; it is a useful tool for day-to-day planning and management (Stringer et al., 2008).



3.4 Data for two phases

As previously stated, this study was conducted in two distinct phases. In the first phase, yoga techniques were integrated into the school day at a Montessori school, and the teachers were interviewed. This first phase gave insight into understanding the practical implications of incorporating yoga techniques into the classroom. This phase also helped to build rapport with the teachers by spending an extended period of time at the school and with the teachers. During the first phase, data about how teachers perceived the incorporation of yoga techniques into the classroom routine was collected and used to assist with the setting of questions for the interviews and focus groups of the second phase. The first phase helped to guide the second phase of data collection and gave credibility to the study by showing the participants that yoga techniques could be integrated into the classroom. In the second phase, teachers and the director of the Montessori school were interviewed, several focus groups with teachers from a variety of schools took place, and teachers from a variety of schools and backgrounds were interviewed. This second phase was important in order to gain insight into the teachers themselves with relation to the integration of yoga techniques into the classroom. This second phase focused on how yoga techniques could be implemented and also on the question why yoga has not as yet been incorporated into classrooms based on teachers' perceptions and beliefs.

3.4.1 Phase 1: Participants

3.4.1.1 School profile

The school where the first phase of the research took place is a Montessori school. The Montessori culture and atmosphere appear to be more accepting of yoga than the more traditional schools. I had also previously taught at a Montessori school, which meant that I was already familiar with the culture of the school and this helped to gain access. Once the choice had been narrowed down to a Montessori school, it was important to find one that taught Grades 4-6, as children in these grades have the ability to write and express themselves independently, and the classroom is still self-contained. There were only two Montessori schools in Pretoria which taught Grades 4-6. One of the schools I had worked at as a substitute



teacher for four months, taking over the 4-6 classroom. Due to role conflict I chose to approach the other school, even though it meant more than double the travel time. I was of the opinion that it would be a better choice based on my previous involvement at the other school; the students and teachers knew me previously and knew about my interest in the use of yoga techniques in the classroom. I did not want the students or teachers to feel they should act in a certain way for this study based on our relationship. When I was working at the school I used yoga techniques in the classroom as part of my teaching. This meant that the students and teachers had been previously exposed and this might influence their responses and perceptions. I was of the opinion that it could influence the data if I were to go back and conduct research at the school. The format of the school day was conducive to allocate a specific time for yoga and discussions as well. Montessori classrooms start the school day with a three-hour work cycle, which ends with a short break. Using yoga techniques to bring the students back to focus after their break fits neatly into the schedule without causing changes or disruptions to the normal daily routine of the students. Furthermore, the teachers and administrators were open to the idea of using yoga techniques in the classroom and eager to see how yoga techniques might fit into their daily classroom routine.

The students came from a middle-class background. Most of the parents had gone to university and worked at full-time careers, owned their own homes and their own cars. The students did not worry whether they would have enough to eat or be able to get new clothes when needed. The students expected to go to university and many had travelled outside of South Africa.

The main objective of the Montessori school where the research was conducted was to provide the children with an environment that is stimulating and exciting. In Montessori schools, classrooms are referred to as environments. The Montessori school where this research took place is of the opinion that a well-prepared school environment fosters a life-long love of learning in children, so that the children's inner needs for growth and creativity are reached and satisfied through self-fulfilment, rather than through external pressure. This is where the



initial data with regard to teacher and student perspectives relating to yoga techniques in the classroom was collected for phase 1.

When I first contacted the director of the school she was receptive to the idea of yoga techniques being used in the classroom. She welcomed me into her school and gave me a full tour of the grounds and classrooms. The grounds had a lot of trees, open grassy spaces and wooden play structures, as well as benches and tables to work at. Students and teachers were able to bring their work and classrooms outside, weather permitting, when they felt the need or desire to do so. The teachers were friendly, curious and receptive. Both students and teachers greeted me warmly and whenever they passed, they offered assistance if I was carrying anything or looked lost. The campus was an inviting place with the grass, trees, ducks, rabbits and monkeys running freely around the grounds. Once inside the classroom, there were windows on three sides of the classroom; therefore the beautiful grounds were always in view.

3.4.1.2 The logic behind choosing one school

Working with one school enabled to me to observe the effects of yoga at multiple grade levels. I was also able to be more involved with the study due to the fact that I could focus on one location and one group of students. I did not have to commute between schools and was able to truly become a part of the school culture and community, without having to adapt to multiple school climates and cultures. Existing research has shown that by focusing on one setting the researcher may be able to provide richer descriptions and understanding, gaining an insightful appreciation of the case (Creswell, 2009, 2007; Walsham, 1995; Yin, 2003, 2004).

In my rationale, I stated the need for more research to be conducted outside of India with more ethnically diverse populations. In order for this study to be conducted, access needed to be gained to schools, teachers and students. Shenton & Hayter and Hayter (2004) explain that gaining access to a site is one of the most fundamental tasks a researcher embarks on. They argue that there are two problems researchers face when securing access, the first being entry into the organisation, and the second being convincing individual participants to contribute to



the research. While conducting research into the lives of Muslim girls, Hamzeh and Oliver (2010) found gaining access to participants and organisations had a great impact on their research and data. They found that access impacted on which participants were involved in the study. The concept of access also had an impact on this study. As a teacher I was already familiar with the culture of Montessori schools, which meant the teachers and directors were open to the idea of me on their campus and working with the students. The main school where the research was conducted is forward thinking, as are many of the parents who send their children to attend. As a result, yoga was not a foreign concept and was accepted relatively easily. This made the idea of yoga techniques in the classroom easier to accept than at a school where yoga is a new idea. By working with a school whose culture was not openly opposed to yoga the research could focus on teachers' perceptions of yoga and not on convincing the school of yoga's benefits.

I acknowledge that using a school that is more accepting affects the generalisability of the study; however, true to qualitative research, this is not the purpose of the research. It could, however, be argued that there is a bias in my sampling, but as this is one of the first studies in South Africa to focus on yoga techniques in the classroom, I would argue that it is justified. It is important to note that the school I chose to work with needed to be an English medium school (i.e. the school needed to instruct and teach in English), as I am English-speaking and felt it was important to have contact with students and teachers without the limitations of translators or language barriers. The student participants were all from the same school. They were aged between 8 and 12 years. There were 20 students in total and two teachers. Of the 20 students, 9 were boys and 11 were girls. Both teachers were female. There were 7 black students, 3 mixed-race students, 1 Indian student, and 9 white students.

3.4.2 Phase 2: Teacher participants

The teachers who were chosen to participate in the focus groups and who were interviewed, were chosen not only from the Montessori school but from a variety of schools. The aim was to try to understand the perspectives from as many different religious, cultural and ethnic groups



as possible, and to gain insight into difficult school cultures with relation to yoga techniques in the classroom. Some came from the Montessori school. As this was where phase 1 of data collection took place, rapport had already been established. One of the other schools I asked to participate was a traditional, government-run Afrikaans school. Teachers from this school were chosen for the reason that the students' parents came from a similar economic background as the Montessori school. Also, the school was in principle open to the idea of yoga techniques in the classroom.

The teachers were able to provide a different perspective on the issues and concerns regarding the incorporation or yoga techniques into the classroom routine. Teachers from an international school, an English medium private school, and a Chinese school were also asked to participate. These schools were asked to participate based on accessibility and availability of schools within the same general area of the main city. The international school provided ethnically diverse teachers and students, and was not opposed to yoga techniques in the classroom. The English medium school had an almost entirely South African population, which could provide greater insight into how South African educators feel towards yoga techniques in the classroom, but was still not opposed to yoga techniques in the classroom.

The reason for asking teachers from a variety of schools to participate was to get the perceptions, viewpoints and beliefs from different types of schools in South Africa, as different schools might respond differently to the idea of yoga techniques in the classroom. This researcher focused on teachers' beliefs, perceptions and opinions about yoga; if the school environment was opposed to yoga it would have been difficult to gain an understanding about their beliefs, perceptions and opinions about yoga. This is why schools that were at least open to the idea of yoga techniques in the classroom were asked to participate. The concern was that instead of being able to collect data, most of the time would have been spent on trying to convince administrators or teachers of the benefits of data — which would affect the validity of the data.



The Chinese school declined to participate as did another government school. A Muslim teacher was also asked to participate to get a non-Christian perspective, as the other participants were all Christians and there were no strictly Muslim school available. As the Chinese school declined I was unable to find any Buddhist or Shinto etc. teachers to participate in the study. These teacher participants provided insight into different groups and what barriers might exist to the incorporation of yoga techniques into the classroom.

This variety of teachers and schools gave insight into how yoga techniques might be incorporated in different ways, and also gave an understanding into the similarities and differences that teachers in different situations face regarding the integration of yoga techniques into the classroom. By contacting and working with teachers from a variety of schools, I was able to gain an understanding of the perspectives of teachers from diverse backgrounds.

After I contacted these schools, I arranged to meet with the teachers in three different groups, as this suited them best. The schools themselves were not involved in the research, with the exception of the Montessori school. The schools allowed me to contact the teachers directly. The teachers were willing to meet with me, but finding a time that would work for everyone was difficult, and this is why I went to them at their convenience. Some teachers I interviewed individually, because this suited them best.

3.5 Data collection

Data was collected in a variety of ways and from a variety of sources in the two phases. As this research was conducted from a qualitative standpoint, a wide range of data needed to be collected. The data from phase 1 was used to help develop the interview and focus group questions for phase 2 of the research and guided the second phase.



3.5.1 Explanation of strategies used

When conducting research it is important to understand the rationale behind the strategies which were used, along with the advantages and challenges each strategy presents. Each strategy used for data collection was used for a reason, with the advantages and challenges carefully considered. Below the strategies used for this research are clarified.

3.5.2 Phase 1: Exit slips

Exit slips are students' responses to how they felt the lesson went and how the yoga practice affected them in both specific lessons and at more general times. (See Addendum A for exit slip questions.) Leigh (2012, p. 190) explains that exit slips help students to reflect on their learning and are a tool teachers can use to document student learning, allowing students to "digest ideas, to question, to ponder, to ruminate over what has been shared and discussed in class". Leigh (2012, p. 195) argues that exit slips "provided a safe place" for students to respond and ask questions. Bafile (2004) and Sterrett, Fiddner and Gilman (2010) agree that exit slips are an efficient way for teachers to check for understanding from their students to get a sense of how their students are feeling. Exit slips allow students to summarise their thinking and reflect upon their learning and give teachers a better idea of how students are feeling (Education World, 2015). The use of exit slips in the classroom is increasing as more teachers discover how useful the information gained from exit slips can be (Education World, 2015; Leigh, 2012; Sterrett et al., 2010).

The exit slips used in this study gave insight into students' thoughts and feelings about the incorporation of yoga techniques into the classroom routine. The use of exit slips enabled the participants to give their thoughts and opinions at the time of the event. However, when using exit slips, I needed to rely on the participants for data. I therefore had to trust that they would be honest and take the exit slips seriously. The students used their own words to express themselves. They told me whether the yoga techniques had helped them and also what they liked and did not like. Some teachers have started using exit slips in their teaching and they are



proving to be a useful form of data collection. The exit slips were analysed for themes and patterns.

3.5.3 Phase 1: Surveys

In order to allow participants to give answers quickly and efficiently after yoga techniques were practised, a survey was used. A survey of the class involved written questions about lessons and students' feelings and thoughts about the use of yoga techniques. This gave insight into how the class and students felt about the yoga techniques being used and also allowed me to track how these feelings changed over time (see Addendum C for questions). Surveys are similar to exit slips, but differ in that the survey provided more controlled answers. The questions were not open-ended as was the case with the exit slips (Denzin & Lincoln, 2008; Patton, 1990; Seale, 2007). The students needed to think over the past month of practising yoga techniques, not simply one specific occasion. This gave more of an overview of the students' perceptions relating to the incorporation of yoga techniques into the classroom.

Using a survey enabled respondents to answer in their own time without me, the researcher, sitting and waiting for a response. It was essential that the questions used were carefully formulated and planned in order to obtain the necessary data (Terre Blanche & Durrheim, 2002; see Addenda A and K). Anonymity was also possible as I knew who answered what (Terre Blanche & Durrheim, 2002). When interviewing, even though I did not write down names, I was still able to see the person who was talking.

The classroom teachers were also given a survey. This was an open-ended survey. By allowing time for the teachers to write down their answers and think about their answers in private, I was able to get greater insight into how they felt than I would have gotten if I had been sitting next to them waiting for a response. The teachers took the time to carefully consider the questions on the survey, which I appreciated.



3.5.4 Phase 1: Observations

Observations are objective notes of what is happening, and includes descriptions of feelings, thoughts and details about proceedings. This can pertain to the weather, the physical room, sounds or noises, and what is actually happening. Observations gave information about how focused students were and how much they were actually working on lessons or whether they were socialising, and also how teachers responded to different conversations. These observations provided insights into students' focused attention, how the use of yoga techniques went, and how the teachers felt about it. These observations also provided information about what the classroom felt like at the time, e.g. what the weather was like that day and how teachers' expressions or body language changed throughout a conversation. For example:

"Extremely windy day today, dust flying everywhere. Students seem a bit wound up. Weather? After break it took longer than usual to get them ready for yoga and settled enough to practise. They seemed on edge. During the practice they were more agitated than normal. I had to focus on breathing often to get them steady. After practice they were much calmer than before, but not as focused and calm as they have been on previous days." (Field notes, 13 June 2012)

Observations during phase 1 allowed me to notice and record what was happening in and around the classroom, as well as teacher and student responses and behaviours. "Observational data permits the evaluation researcher to understand a program or treatment to an extent not entirely possible using only the insights of others obtained through interviews" (Seale, 2007, p. 23). This kind of data can be relatively 'raw', for example an in-the-moment thought or remark about what was seen. These observations about what was happening allowed me to remember details from the day that might otherwise have been lost.

3.5.5 Phase 2: Observations

Observations enable the researcher to bring the reader into the environment where the research was conducted. This gives the reader a feeling for what happened and allows the reader to reach conclusions on their own, to some degree. Observations during phase 2 focused



on teacher reactions, responses, facial expressions, tone of voice and body language, during interviews; as with field notes, details are essential. It was important to capture as much information about the interview and focus groups as possible, while still being active in the conversations. As the interviews and focus groups were recorded, it was possible to focus on jotting down notes about the participants' responses at the time. The purpose was to describe the setting, activities, people, meanings and perspectives with as much accuracy as possible (Seale, 2007).

Observations should be made as objectively as possible. However, this is very difficult as researchers are influenced by the world around them. It was important to be aware of biases while making observations (Creswell et al., 2010; Seale, 2007). Certain biases might, for example, allow the researcher to 'see' some things while being blind to others. It was necessary to be careful to ensure that this would not happen and the best way to ensure this was to be cognizant of any biases. One way to be aware of biases was to remind myself of my beliefs about the topic. This kept the biases in the forefront on my mind and kept me aware that they might affect my research; this was true for both phases 1 and 2.

3.5.6 Phases 1 and 2: Field notes

Field notes capture thoughts about lessons and class focus, as well as classroom teachers and the observations made. A research journal and field notes helped me as a researcher to remember specifics about the data collected. I was also able to gather information about: how the class felt, what was working, what aspects of integrating yoga techniques into the classroom were used in the classroom, which techniques worked and which ones were met with resistance, through the use of field notes and observations.

Field notes are ongoing reflexive records of what the researcher sees, thinks, hears, feels and observes (Creswell et al., 2010; Creswell, 2009). For myself, as a researcher, these notes needed to be hand-written and 'in the moment'. The concept of reflexivity is vital to field work and therefore to field notes as well. Field notes provide a means for the researcher to look back and



reflect on what happened, check their biases and review (Denizin & Lincoln, 2008). The data collected in phase 1 was critical to the data collected in phase 2. Fields notes are where "theoretical ideas can be rehearsed" (Seale, 2007, p. 214) or practised. Keeping field notes provided a way to work towards reliability and validity in the research. I agree with Seale that if I do not take the time to record what I observe, there is no point in observing (Seale, 2007). Field notes are a recording or description of data and details are essential, as is the use of directs quotes whenever possible. As the researcher, I recorded my feelings, ideas and thoughts about what I saw in my field notes (Patton, 1990). For example (see Addendum B):

"I actually wonder if the cold weather has an effect on the kids' ability to concentrate. There are just SO many infinite factors" (Field notes, 13 June 2012).

"I wish I had more control over what is happening in the classroom ... I would like to make sure they had lessons or work directly after yoga" (Field notes, 25 July 2012).

"I am worried that the teachers are too stressed with work to take the time to really think about the topic" (Field notes, 6 February 2014).

"It is very hard to find a time when all teachers can meet, and even when a time is agreed upon, some have ended up cancelling on the day of ..." (Field notes, 9 January 2013).

Field notes are 'pure' in the sense that they are taken in the moment while events are taking place. This means they are not filtered by distance and time (Seale, 2007). The ability to write what I was thinking and feeling in the moment gave me insight I would not otherwise have had. When re-reading my notes, I could feel what it was like to be in the classroom or with the teachers. However, field notes can be subjective due to the fact that the researcher is recording their own personal observations. For example, my mood could have influenced my field notes and must be taken into account when analysing data (Denzin & Lincoln, 2008). If I am not feeling well, my field notes might reflect this, even if I do not openly state it. I needed to make sure that I commented on my mood and feelings as well.



3.5.7 Phases 1 and 2: Student and teacher interviews

The greater part of the teacher interviews were conducted in phase 2, with the majority of the data coming from interviews with students and teachers. Informal interviews gave insight into the teachers' and students' thoughts, feelings and ideas. In this way, I could gain insight into their internal processes and "to access the perspective of the person being interviewed" (Patton, 1990, p. 288). These interviews allowed me to use the teachers' and students' own words, thus giving voice to the participants. These interviews were recorded and transcribed by the researcher (see Addendum B for questions).

By transcribing the interviews and focus groups myself, I was able to get closer to and more familiar with the data (Lapidat & Lindsey, 1999; Tilley, 2003). As Park and Zeanah (2005, p. 246) explain. By choosing to transcribe the data myself, I took "the opportunity to listen carefully and think deeply about the recorded voices and the interview context, using sensory and other memory". By transcribing the interviews conducted, I was able to critique my own work and possibly even improve upon my interviewing skill for the next time. It is also important to note that during transcription, I could add notes, thoughts, feelings and reactions, either on the side or in the text (Anderson & Jack, 1991; Park & Zeanah, 2005). This would not have been possible if the transcription had been outsourced.

Not all the interviews were recorded and transcribed, as some took place casually and were semi-structured, for example where using a recording device would have been inappropriate. As a result, some interviews were written about solely in my field notes. I was able to take notes during these casual or semi-structured interviews, as well as write detailed notes about them as soon as we finished. This enabled me to capture most of the interviews in great detail. I did not need to rely too heavily on my memory as everything was extremely fresh.

Interviews provided in-depth information and also allowed respondents to clarify questions and their own responses (Blanche & Durrheim, 1999). Classroom teachers know their students better than I do as a researcher. The insights and observations from classroom teachers are invaluable. Teachers understand the social structure of a classroom and the general school



atmosphere. This means that teachers would know what would be necessary for the incorporation of yoga techniques into the classroom. The interviews are therefore important in terms of capturing the perceptions and opinions of teachers (Denzin & Lincoln, 2008; Patton, 1990). The interviews allowed for a better understanding of how teachers and students feel about yoga techniques being incorporated into the classroom. Due to the impact yoga can have on how individuals feel, i.e. anxious or calm, it was important to understand and gather data on the participants' feelings (Santangelo White, 2009; Saraswati, 2008; Williams, 2010).

As a researcher, I should not influence an interviewee with my thoughts or biases about the topic. This can be prevented by carefully planning the interview questions so that they are not leading questions (Shento, 2004; Willig, 2001). It was important for me to ensure that the responses or answers I was given were truthful. The interviewer/researcher may influence responses if they are not careful to remain neutral (Blanche & Durrheim, 1999). This can be more difficult than one realises. I needed to be aware of the tone in my voice and facial expressions, not simply of what I was saying.

3.5.8 Phase 2: Focus groups

Kitzinger (1994) argues that focus groups encourage participants to interact with each other. Focus groups emphasise communication between participants and allow participants to explore and clarify their thoughts, according to Kitzinger (1994). Morgan (1996) explains that focus groups are often more efficient than individual interviews when it comes to data collection. Focus groups are unique in that participants are able to question each other and explain themselves to each other, which can lead to greater understanding, according to Morgan (1996). Carey (1994) and Carey and Smith (1994) further suggest that focus groups give participants an opportunity to clarify their own thinking through group discussion. Focus groups allow the researcher to observe how participants agree and disagree to reach a conclusion about a topic discussed; this is unique to focus groups, according to Morgan (1996).



In this study the use of focus groups allowed for interaction and observation of the teachers where they felt comfortable, at their school. The teachers seemed to feel comfortable discussing issues with other teachers, who would be understanding and often agree or have similar experiences. Using a focus group enabled me to focus on solutions for bringing yoga into the classroom in a realistic way. I was also able to reflect on the spot with participants by paraphrasing what I heard being said. Focus groups provided a situation for participants to collectively discuss topics, ideas and assumptions which would normally be unarticulated about their classroom, thus providing valuable data (DiCicco-Bloom & Crabtree, 2006). The focus groups gave participants the opportunity to discuss issues with each other, whereas I was only able to obtain a single person's feelings and beliefs in an interview. In the focus groups, the participants would listen to each other and respond. The following is an example of where the focus group participants discussed an idea with each other, and shows how they moved through several ideas to reach an understanding (see Addendum M):

C: I can say, Lee, if this was a South African, purely South African, um, say Afrikaans school, it would be a no-no. Because, if it's considered a ... a cult, in some countries.

L: Mm hmm.

C: – uh, of, um, it's bowing down to a, a being, which is not necessarily the God that is in the Bible, so from that religious point of view, it will be seen as, uh, not, not happen.

L: So, you would be able to get maybe the teachers on board, but not all the parents? Yes. And especially the Afrikaans teachers. That isn't gonna happen ... either.

C: Yes.

J: Do you see any way of pushing through that barrier?

L: Because we are all so rigid, and because we also are closed-minded, I don't think so.

C: Mm hmm.

L: Yet, it might be coming. I think it's starting to. I think that definitely, especially with the older school people, like ... especially with older people.

G: You know, you don't think yoga has become cooler?



L: That's what I'm saying. It's starting to ... the, the perception is ... changing, so it is becoming possible (Focus group, 6 February 2014).

In this excerpt, the participants began by discussing their perceptions on how Afrikaans schools might feel towards yoga techniques being used in the classroom, and linking this to religion and conservativeness. At first, a couple of people were discussing this and they seemed to agree that yoga techniques would not be allowed into a conservative school, based on religious reasons. However, as the discussion progressed, changes occurred and more people became involved. Towards the end of the discussion, the feeling was that perceptions are changing and that, with time and knowledge, yoga might be accepted into conservative schools also. By listening and observing teachers in a focus group, these types of conversations were possible and allowed for richer data.

3.6 Data analysis: Phases 1 and 2

Phase 1 helped lead the way for the data collected in phase 2. The data collected was read, looking for patterns that may emerge, and similarities and differences in the case being studying. I started by analysing students' exit slips and surveys to look for emerging themes, and then moved to the interview and focus group data, as this data was at the heart of the research. While analysing the interviews, field notes and observations, I began to identify themes as they emerged. My intention was to develop naturalistic generalisations that can be used to understand how yoga can be used as a classroom tool to create an environment conducive to learning (Creswell, 2007). Thematic analysis allowed me to see the themes as they emerged and gave me the tools to organise my data effectively. I focused on finding themes and patterns of behaviour or perceptions with relation to yoga techniques in the classroom (Aronson, 1994).

Basic thematic analysis was used to analyse the data. Thematic analysis emphasises human behaviour and related themes. By this I mean that I looked at transcriptions, notes and observations in depth and reflectively. Studying data for content and emerging themes allowed



for a synthesis of the data. The data was first organised, then put into themes, analysed, and finally discussed (Creswell, 2007). Thematic analysis allowed me as a researcher to be flexible while analysing my data. I immersed myself in the data, reading and re-reading in order to identify, analyse and report on themes or patterns in the data (Braun & Clarke, 2006).

A key aspect of thematic analysis is the use of the word, *emerge*. Some thematic analysts refer to the *discovering* of themes or patterns, or to the idea that themes *emerge* in their data. There is a difference between discovering and identifying themes. Discovering themes implies that research is passive, and does not take into consideration the active role that is played by the researcher (Braun & Clarke, 2006). For this reason I choose to use the terms *identifying themes* or *identify emerging themes*. As a researcher I was aware of the many themes within my data and selected the ones that were of interest to me and specifically related to my research.

Thematic analysis can be broken down into six basic steps, according to Braun (2006). These steps allow the researcher to immerse her-/himself in the data, while remaining flexible at the same time (Braun & Clarke, 2006). The goal is to "capture the quality and texture of individual experience" (Willig, 2001, p. 53; see Addenda A through H, as well as M and N).

3.6.1 Steps in thematic analysis

Number	Step	Definition	Example
1	Familiarise yourself with your data	This means transcribing, reading, re-reading, and then re-reading again, taking notes on preliminary ideas.	I transcribed my own data and spent time re-reading it, while making notes by using highlighters, pens and sticky notes.
2	Generating initial codes	This entails coding aspects of the data which are interesting, but being systematic with your coding and collected data which relates to each code.	Initial codes included: "calm", "improvement", "happy", "less stress", "negative feelings", "body awareness", and "relax" (see Addendum B for examples of highlighting of various codes).
3	Searching for themes	Organising codes into possible themes and collecting data	As codes were identified, initial themes emerged. These themes



		which may relate to these themes.	were: "positive feelings", "improved focus and concentration", "changes in student behaviour", and "unforeseen". Codes were piled underneath the themes in stacks on the floor.
4	Reviewing themes	Checking to ensure that the themes work relative to the coded extracts and the entire set of data. Review and revise themes as needed.	As themes and codes were reviewed, the themes evolved and were revised. The themes now became: "religious concerns", "lack of understanding", "time constraints", "specific details", and "education is needed". The coding and refinement of themes was done manually (without the use of computer highlighting) as it was more efficient to see everything laid out in front of me.
5	Defining and naming themes	Continuing to analyse and refine individual themes and to work towards clear definitions of themes.	Codes were regrouped and placed under new themes which were now clearly defined.
6	Producing a report	The final analysis, including rich, detailed and vivid extracts.	Final thesis.

As can be seen by looking at the six phases of thematic analysis, the researcher must be extremely involved and must take time to interpret the data carefully (Guest, MacQueen & Namey, 2011). Immersing myself in the data allowed me to find the themes as they emerged. The themes were identified in the data once they emerged clearly. As I organised my data and began to identify themes, I kept focused on the intent of my research. The themes are relevant to the topic of this research, which pertains mainly to the incorporation of yoga into the classroom routine.



3.7 Ethical considerations

3.7.1 Description of benefits and/or risks to subjects involved in the project

There were no anticipated risks to participants involved in this research study. The yoga techniques used were not harmful to the children. Parents and students were given a list of contraindications¹ for the asanas and pranayamas used, but it is important to note that the poses chosen were poses with few if any contraindications. Therefore, when a parent gave their consent, they were alerted to any medical issues there might be and asked to inform me (the instructor) if they had any concerns. If a child had one of the contraindications, I would have been able to adjust the sequence for that child without difficulties.

All students were welcome to participate as long as they had consent from their parents and had given their personal assent, as well as the permission of the school. Consent from parents was obtained through permission slips and a letter home. Assent from the students was obtained through a student permission slip (see Addendum U). Teachers were also not required to be interviewed or to participate in the focus groups, but were asked if they voluntarily agreed to do so. The teacher participants chose to participate because they found the topic of interest to them.

3.7.2 Description of how anonymity and confidentiality of subjects were ensured

The confidentiality of the students was maintained because I used pseudonyms for each student as needed, and the name of the school was not mentioned. No teachers' names or students' names were used. The classroom teachers will most likely know the names of the students in their class; however, by the use of pseudonyms, they will not know which student's answer belongs to whom. The teachers who were interviewed and participated in focus groups did not use names, and names were not used during transcription. The data was kept on a password-protected computer and flash drive. Any paper work was kept in a zipped folder in

¹ The term *contraindication* is used in yoga to indicate a possible reason for not participating in a pose or asana. For example, if an individual has had back surgery recently or suffers from blood clots, certain poses should not be practised. If there is a concern, there will be a list of possible warnings and reasons why a certain pose should not be practised by a certain individual. Not all poses have a list of contraindications and most contraindications relate to serious illness or injury.



the top drawer of my desk with a lock on it. There was thus not only anonymity, but also confidentiality and security. Complete anonymity was difficult to keep due to the limited number of Montessori schools in the area and the use of focus groups.

Due to the fact that this study involved children, it is important to note that the children were under no pressure or obligation to participate. The students were able to choose to not participate at any time. I made sure to pay close attention to the participants so that I noticed if any of them were agitated during the research process, for example during the practice of yoga techniques or informal interviews. Open communication was essential; this ensured that if a child felt uncomfortable or anxious, I was aware of it before it could become a concern. The teachers were also under no pressure or obligation to participate in the interviews or focus groups; they did so voluntarily.

3.8 Ethical guidelines

Throughout this study it was my intent to adhere to the following:

- To ensure that the research participants are not deceived and understand the process.
- To be conscious of the participants' feelings and emotions in order to safeguard against harm, both physical and emotional.
- Informed consent from parents and assent from children.
- Permission given by the school and teachers involved.
- To be honest with the participants at all times.
- To maintain confidentiality with respect to participants' personal information.
- To have continued open communication with schools, teachers, parents and students to
 ensure that there will not be any misinterpretation of the data (my field notes and
 observations will be available for participants to read).
- Ethical clearance obtained from the Ethics Committee at the University of Pretoria (see Addendum W).



3.9 Role of the researcher

For the purposes of this study it was my intention to fill the role of:

- An observer of student behaviour with regard to learning, attention, concentration and classroom climate.
- Developer of the integration of yoga into the classroom routine.
- Instructor of yoga to classroom teachers and students.
- Facilitator of the use of yoga in the classroom to help create a classroom environment conducive to learning (see section 3.8).

3.10 Trustworthiness

Research must be valid or credible and trustworthy in order to have an impact. Babbie and Mouton (2001) use the term *trustworthiness* to refer to how the researcher persuades the audience that the results of the research are valuable. Trustworthiness was addressed through the emphasis of detailed field notes and observations, focusing on credibility, transferability, and dependability (Strydom, Fouché, & Delport, 2005). Trustworthiness does not mean proof or evidence; it is open-ended and must be ensured by the researcher (Seale, 2007). Creswell (2007) and Lincoln and Guba (1985) also identify a variety of validation strategies, several of which will be used in this study (Creswell, 2007). This is another assurance of creditability and trustworthiness.

For this study, I put myself in the field; Creswell (2007) and Lincoln and Guba (1985) use the terms "prolonged engagement" and "persistent observation". This builds trust. Prolonged engagement is "the investment of sufficient time to achieve certain purposes: learning about the 'culture', testing for misinformation introduced by distortions either of self or of the respondents, and building trust" (Lincoln & Guba, 1985. p. 301).

One of the main aims was to develop rapport with the participants in the study so that I could ensure trustworthiness and reliability of my data (Patton, 1990). It was important to establish these relationships so that the participants would be honest and provide accurate data



(Shenton & Hayter 2004). I needed to have a bond with my participants so that they understood that their honesty would be vital to the study. During phase 1 I spent time at the school getting to know students and teachers. During phase 2 of my research I had already established a rapport with some of the participants, which helped to build rapport with the other participants. However, I also spent time corresponding with and talking to the other participants, visiting the schools they worked at, and working at establishing trust and camaraderie. By taking the time to create this bond through prolonged engagement with the participants, the possibility for greater reliability and trustworthiness of the data increased, as the aim was to encourage the participants to be honest. The prolonged engagement and persistent observation built trust, allowing me to understand the culture of the school and the classroom, and thus enabling me to check for misunderstandings and misinformation (Creswell, 2007). If we as researchers do not spend enough time getting to know the participants and the surrounding context, we might miss important data or misinterpret the intended meanings (Lincoln & Guba, 1985). The purpose of persistent observation is to find the characteristics and elements which are most relevant to the research. Guba and Lincoln explain that "if prolonged engagement provides scope, persistent observation provides depth" (Lincoln & Guba 1985, p. 304).

Prolonged engagement helped me, as the researcher, to build rapport and form relationships with the participants. Part of creating a relationship with participants was also creating boundaries. Rinke and Mawhinney (2014) discuss the concept of boundaries in their article. They explain that as a researcher it is important yet difficult to remain involved and detached when collecting data. Rinke and Mawhinney write from personal experience about working with participants and struggling to maintain professional distance. As the authors engaged with the participants over extended periods of time, they came to know and like them, even start a friendship. This meant that they cared about the participants in a way that could influence the data. Rinke and Mawhinney explain that it is a kind of balance that needs to be found. As a researcher one cannot be entirely detached; if a participant needs support, friendship or validation it could damage rapport to remain aloof. However, becoming too involved can



influence the data, making it unreliable (Rinke & Mawhinney, 2014). Boundaries are what help keep this balance; they keep the researcher from getting too close to participants and help to increase the level of reliability, validity and trustworthiness of data.

One key aspect of trustworthiness in qualitative research is the idea that we are dealing with humans; i.e. "qualitative methods are humanistic" (Miles & Huberman, 1994, p. 7) this means that we are studying people and people are not easy to control. As researchers, we influence those we study and vice versa. Humans need time to feel confident around new people. This makes it essential for the researcher to spend enough time with the participants to make them feel comfortable being truthful and honest (Miles & Huberman, 1994). This is what I did. I spent enough time with the students and teachers who participated in my research for them to open up and be honest with me. I knew them well enough to be able to tell if they were avoiding the question, and then gently coaxed an answer out of them. This adds to the credibility of my study.

Credibility seeks to ensure that the findings of a study are not based on the researcher's biases. In other words, it is about how accurately data was gathered in the field. Researchers should be asking themselves, How could I be wrong? as they evaluate findings and conclusions. The goal of credibility is to assure the audience that the research was conducted in such a way as to guarantee that the participants and data are accurately described (Strydom et al., 2005). In order for research to be credible, it must be both believable and convincing; i.e. the conclusions must make sense and be sound (TerreBlanche & Durrheim, 2002). This means evaluating oneself throughout the research. As a researcher, I continually reflected on my biases while building rapport and trust with the participants. I used a personal research diary to reflect on how I felt; what I thought went well and what did not. This diary was used throughout my study. The research should be driven by inquiry and not by the biases of the researcher (Mouton, 2001). Lincoln and Guba (1985) emphasise the importance of asking whether the findings could be verified by someone else; in other words, would another researcher find the



same or similar results? We are all human and influenced by our biases. This is not a laboratory experiment which can be controlled, but biases can be mediated by taking certain steps.

My assumptions and biases are clearly stated in the first chapter. As I conducted my research, I continually reminded myself of my biases by writing down my thoughts, feelings and concerns in my field notes and making notes about my biases while making observations. I worked to keep these at the forefront of my mind so as to ensure that I was aware of them. I wanted to ensure that I did not "impose my own ideology" on my participants, data or research (Lincoln & Guba, 1985, p. 289).

Transferability refers to how a similar study could be conducted in different contexts, with similar results. A key aspect of transferability is for the researcher to provide rich, detailed descriptions of the participants and context (Strydom et al., 2005). My study does not seek to represent the entire community, but rather to provide insight into how yoga techniques could be incorporated into the classroom. Triangulation can help with the idea of transferability and refers to the use of multiple, varied, and diverse sources, methods, theories and so forth to research and analyse. I used a wide variety of data sources, including observations (students, teachers), surveys, interviews and focus groups. This will allow readers to gain a wide understanding about the study, and also provide in-depth detail for further research. Using such a variety of methods also compensates for any challenges or limitations of the study, and allows for a focus on the benefits of each method (Lincoln & Guba, 1985; Shenton & Hayter, 2004).

Dependability pertains to the degree to which the audience believes the conclusions of the researcher. This, in turn, relates to the idea that similar results should be found if the study were to be repeated in similar circumstances (Strydom et al., 2005; Terre Blanche & Durrheim, 2002). In order to work towards dependability, I provided detailed descriptions of not only the participants and the setting, but also of the context and process of research that were used (see sections 3.4.1 and 3.4.2).



Peer Review provides external checking of my research. Two professors in the field of education at different universities in the United States of America agreed to read my thesis and provide feedback (see Addendum Y).

By striving for trustworthiness and focusing on my biases through reflection, as well as ensuring that I provided rich, detailed descriptions, I was able to look back at what happened and interpret the situation accurately. The thick, rich descriptions and details in my writing provided with the data, also aided my analysis and interpretation. As I made my own field notes and observations, I was able to keep track of what was written and recorded, which enabled me to be precise and truthful.

Research is not a one-way process; I was also influenced by the study. This can be seen as positive as I truly experienced the study and have gained a deeper understanding of what the participants felt and saw. However, I needed to maintain a certain distance, so that I would continue to be able to see the study for what it is. I needed to remain focused on my descriptions and observations in order to ensure trustworthiness (Mayan, 2009). As an instructor in the classroom, I was able to personally respond to the students and teachers while instructing. I did not need to consult on this and was thus not dependent on someone else to incorporate yoga in the classroom. However, because I was instructing, I was only able to write my observations after the fact. This was mediated by writing down my experiences immediately after instructing yoga, which meant that it was still fresh in my mind.

By using the above methods I was able to ensure the validity, trustworthiness, and dependability of my study.

3.11 Conclusion

I began this chapter by explaining my paradigmatic perspective. I then went on to explain the conceptual framework and research design, describing how the data was collected and



analysed. I clarified the ethical guidelines which led my research and elaborated on the quality criteria I tried to adhere to, as well as the validity and trustworthiness of the study.

In the following chapter I present the results of my study which were acquired by using thematic analysis. Throughout the chapter I relate my findings to the relevant literature, and compare the two.





Chapter 4: Findings



Chapter 4: Findings

4.1 Introduction

In the preceding chapters, this study was explained in terms of the rationale, conceptual framework, paradigm, research aims and methodology. The research design and methodological choices were elaborated on and the quality criteria of this study were discussed, along with the ethical guidelines which were subscribed to throughout the research process.

This chapter discusses the study specifically in terms of the conceptual framework used, and briefly discusses unexpected directions the study led to. The findings of the study are presented based on the thematic analysis conducted. The data analysed in this chapter was collected according to the methods discussed in Chapter 3. The themes and subthemes which were identified are presented with explanations and supportive data. The findings are presented by making comparisons to the relevant literature, against the conceptual framework. A discussion of the findings is integrated throughout the chapter. Both qualitative and quantitative data were collected in this study. The intention was to collect qualitative and quantitative data, but the qualitative data was much richer and lent itself to being analysed thematically. The quantitative data was used to guide and support the analysis.

The conceptual framework kept the focus of this study on teachers and the classroom climate. The framework also guided the analysis and interpretation by acting as a reminder to focus on how yoga techniques could be incorporated into the classroom by teachers, specifically the barriers that exist to yoga techniques being used in the classroom. The conceptual framework illustrates that yoga and yoga techniques being used in the classroom benefits students as well as teachers. As stated in Chapter 1, this study assumes that yoga techniques can have an impact on classroom climate and can influence learning. The aim of this study is to gain understanding about the practical implications of implementing yoga techniques into the classroom. As



teachers are the ones that would be using yoga techniques in the classroom it is imperative to understand their perceptions and beliefs relating to yoga and yoga techniques in the classroom.

Phase 1 of this study focused on the implementation of yoga techniques into the classroom. This phase was needed in order to understand the logistics behind implementing yoga techniques into the classroom. Phase 1 was also important to show teachers and convince school administrators about the benefits of yoga techniques in the classroom, in order for them to be interested in discussing barriers that might exist to using yoga techniques in the classroom. As little if any research has previously been conducted on the use of yoga techniques in the classroom, it was important to be able to speak with teachers from a place of experience regarding the integration of yoga techniques into the classroom. This allowed the conversations to focus on possible barriers to incorporating yoga techniques into the classroom, and not only logistics. Creditability with participants was gained by incorporating an implementation phase into the study.

The logistics of the integration of yoga techniques into the classroom routine relate to the following aspects of the conceptual framework: classroom climate, teachers, students, and yoga. As such, it can be argued that the integration of yoga techniques into the classroom contributes to the practice of teaching. For students to learn effectively they need to be in a classroom that is conducive to learning, i.e. a classroom that is as free from anxiety and stress as possible (Brock et al., 2008; Conroy et al., 2009; Shapiro, 1993; Zedan, 2010;). According to Krashen (1981), the more stress and anxiety students feel, the less they are able to learn effectively. The Ecology Systems Theory explains that school falls into the microsystem, which is only one system away from the individual, thus explaining how and why stress can have such an impact on learning (Bronfenbrenner, 1979).

As explained in Chapter 2, Bronfenbrenner's Ecology Systems Theory helped to shape the conceptual framework for this study. Phase 1 of the data collection and analysis fits into the individual and microsystem of the Ecology Systems Theory, as this system includes the school



and the individual (Bronfenbrenner, 1977, 1979, 1994). The student participants in this study discussed how yoga techniques affected them and how they felt about yoga techniques being incorporated into the classroom (Addenda C, I, L, R, and S). The Ecology Systems Theory helps to link yoga to the individual and to the school. Yoga and the practice of yoga techniques is an individual experience which can influence not only the students, but the classroom climate as well; this falls within the microsystem, which is the system that influences the individual most (Bronfenbrenner, 1977, 1979, 1994). However, as explained in the Ecology System Theory, each system can influence the other systems.

Yoga can fit into each microsystem, depending on the context. Starting with the individual, yoga can fall into the microsystem if yoga techniques or yoga is practised at school. However, yoga can also fit into the mesosystem or exosystem if the parents, teachers or other important people in the individuals' lives practise yoga. Yoga can also fall into the macrosystem, depending on the individuals' ethnicity, cultural heritage, where they live and so forth. As can be seen, a theme often falls into more than one system, thus showing the interconnectedness and relationship of the individual and yoga.

Bronfenbrenner's Ecology Systems Theory supposes that the environment affects the development and behaviour of an individual. The microsystem holds the most influence over a child's development. It is therefore important for teachers, who fall within this environment, to have ways and means of making it a positive space, a space that is conducive to learning and a space where children enjoy being.

4.2 Findings

Based on the thematic analysis conducted in regard to phase 1, three main themes emerged, namely: positive feelings, improved focus and concentration and changes in student behaviour. Out of this, one question emerged: with all of the benefits, why is yoga no tin the classroom? The analysis of this data explores the barriers that exist to the incorporation of yoga techniques into the classroom and how these barriers might be overcome. This relates to the critical



research question for this study: How does insight into teachers' beliefs, perceptions and opinions about yoga aid the understanding of the incorporation of yoga techniques into the classroom? Also to the following subquestion: What do educators feel are the barriers to the use of yoga techniques in the classroom?

4.3 Phase 1: Data analysis

As previously explained in Chapter 3, the data for this study was collected in two separate phases. The data from phase 1 largely focused on the students' perceptions towards yoga techniques in the classroom, and on the logistics of implementing yoga techniques into the classroom, as well as what the two teachers involved observed and perceived. This data is discussed in the first section of this chapter. After the data had been analysed, several themes emerged which supported previously conducted research on how students perceive yoga and yoga techniques being integrated into the classroom. The following illustrates the themes which emerged from the phase 1 data: positive feelings, improved focus and concentration, and changes in student behaviour. The themes which emerged during the analysis of the data from phase 1 led to the question: With all these benefits, why have yoga techniques not as yet been implemented in the classroom? This question relates to the critical question of this research; how does insight into teachers' beliefs, perceptions and opinions about yoga aid the understanding of the incorporation of yoga techniques into the classroom? Both questions focus on creating a greater understanding surrounding how yoga techniques can be integrated into the classroom. These questions focus on the microsystem from Bronfenbrenner's Ecological Systems Theory (Bronfenbrenner, 1994, 1979, 1977). This theory helped direct the analysis of the data collected by a presenting a way to understand and separate a variety of factors that may influence the incorporation of yoga techniques into the classroom.



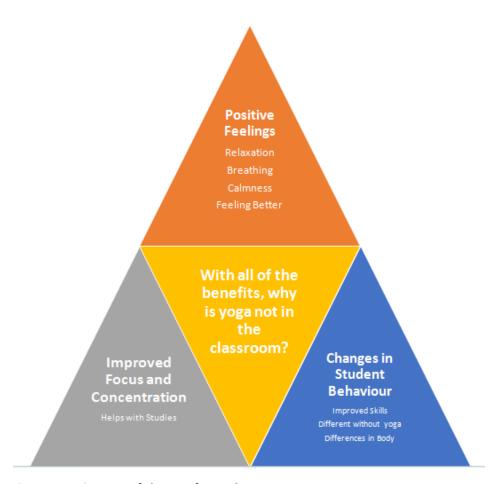


Figure 4.1 Diagram of themes from Phase 1

4.4 Theme 1: Positive feelings

The theme of *positive feelings* refers to students' and teachers' reactions towards yoga, which were upbeat in nature, and the use of yoga techniques in the classroom. This theme focused on students and teachers and therefore fell into the microsystem. This system holds the most influence over an individual (Bronfenbrenner, 1977, 1979, 1994). Examples of positive feelings include: happy, calm, relaxed, good, and better. Students' and teachers' perceptions of yoga after the integration of yoga techniques into the classroom were generally positive, and they tended to express emotions related to increased feelings of calmness and happiness. The students and teachers in this study experienced a variety of positive feelings towards the yoga techniques they practised. Students found the use of yoga techniques in the classroom on the



whole to be a positive experience and wished to continue with the exercises. The teachers found the incorporation of yoga techniques into the classroom to be positive for their students as well as for themselves. "T said she has noticed improvements with the kids" (Addendum B, p. 175). "T and J said they have both noticed the kids being much calmer and concentrating more" (Addendum B, p. 210).

The students felt that they were better able to complete tasks assigned to them. The teachers perceived the students to be more responsive after using yoga techniques in the classroom and more receptive to learning. The students listened more attentively and therefore followed directions more efficiently. Observations from field notes and from conversations with teachers supported this conclusion. "J observed that today the kids were much quieter. She wondered if the yoga was having an effect on them. She remarked that they were calmer and more on task" (Addendum B, p. 202). The teachers commented on the students' increased concentration and how this influenced learning. "T commented on how she totally sees improved concentration in a few of the students who had really poor concentration. She was very impressed. She said she was surprised how quickly she noticed a difference in the students" (Addendum B, p. 174). The teachers reacted and responded positively to the use of yoga techniques in classroom due to the fact that their students responded in such a positive way. "T explained how she was surprised to see such a difference in the students. She was even more surprised by which students took it [yoga] so seriously" (Addendum B, p. 202).

It appears that the students' positive responses to practising yoga techniques at school influenced the teachers. "A few of the kids came up today to tell me the exercises helped them study for exams and they really enjoyed them. They said they felt good about their exams because they were better able to study because of the yoga techniques. A group of 5 girls and then 3 boys nearby agreed" (Addendum B, p. 210). Should the students not have responded in such a positive way, it seems likely that the teachers would have been less positive about yoga techniques being used in the classroom. All 11 of the students interviewed commented on the fact that practising yoga techniques made them feel good or better. "I feel more comfortable"



(Addendum L, p. 270) was a statement several students shared when asked about how practising yoga made them feel. "Happy" (Addendum L, p. 277); "It's really amazing" (Addendum L, p. 278); and "I feel open" (Addendum L, p. 287) were other expressions of positive feelings.

The exit slips and surveys supported these observations that students, on the whole, felt positive towards the integration of yoga techniques into the classroom. Most of the responses included words such as *good*, *nice*, *better*, *happy*, *calm*, *fun*, *super* and *awesome*. One student responded by saying that the exercises made her/him feel "like I was flying" (Addenda S, C, p. 217). When asked how the exercises made them feel, the students answered: "like superman", "happy and stretched", "good", "relaxed", "asom" [awesome], "calm refreshed and chilled" (Addenda S, C, p. 217). The idea of feeling happy came up 26 times on the exit slips. Feeling good came up 24 times. These two ideas were the second and third most repeated concepts on the exit slips. When asked if they liked the exercises, 18 students said yes and only one said no (Addendum I).¹

4.4.1 Subtheme 1: Relaxation

The subtheme of *relaxation* refers to students' and teachers' experiences or observations surrounding their feelings of calmness, quietness and less tension, which they relate to the practising of yoga techniques. Relaxation relates to the idea that students felt more comfortable in their surroundings, and due to this, experienced an overall relaxed state which enabled them to focus and concentrate better. The subtheme *relaxation* falls into the microsystem as the focus is on students feeling more relaxed and teachers observing a more relaxed atmosphere in the classroom (Bronfenbrenner1977, 1979, 1994).

The student and teacher participants found that by practising yoga techniques during the day they were more relaxed, and that these feelings of relaxation helped with their work: "It relaxes

¹ Not all the students who participated in the study turned in exit slips or surveys. This is why even though 20 students participated, there are not always 20 answers.



you so much. It relaxes your muscles" (Addendum L, p. 273). The students continually expressed their feelings of relaxing during interviews. "It gets me actually like smooth and relaxed" (Addendum L, p. 278), and: "More relaxed" (Addendum L, p. 278). One student spoke about how feeling relaxed had a positive influence on her work. This student explained that she could "think properly" (Addendum L, p. 278) when she relaxed. I observed that students were often better able to focus on the task at hand and the quality of work improved when they were relaxed. The following extract supports this idea: "It just relaxes me. I just feel relaxed and that I can DO the work" (Addendum L, p. 273), and: "It forces you to relax, it relaxed me, and it forces you to concentrate" (Addendum P, p. 321). The following excerpt from the field notes supports the finding that being relaxed helped students with their learning: "Before break the students are looking for any reason not to work; there is a tense feeling, maybe just because they know break is coming. But now after break and yoga, they appear to me more relaxed and trying to stay on task" (Addendum B, p. 204).

The exit slips supported these findings, as students wrote that they felt relaxed and that they enjoyed breathing deeply. Students repeatedly answered that they felt relaxed after practising the yoga techniques on the exit slips. Oftentimes they would answer they felt "stressed", "tense" or "bad" before using the yoga techniques (Addenda C and S). The students answered that feeling relaxed was a reason why they liked the exercises. The concept of relaxation came up 33 times on the exit slips. This is the idea that was repeated most often (Addenda S and T).

4.4.2 Subtheme 2: Breathing

Breathing refers to the act of breathing deeply in and out in a steady manner. The subtheme breathing falls into all systems to some extent, as individuals breathe everywhere (Bronfenbrenner, 1977, 1979, 1994). However, in this situation the students and teachers describe how breathing makes them feel in the classroom, therefore breathing could be considered to be part of the microsystem. Students and teachers repeatedly mentioned how breathing helped them to feel calm and relaxed. The students spoke about how breathing properly is important, while the teachers observed that the breathing seemed to be the key to



calming the students down and helping them re-focus after a break, or when they were losing focus and could no longer concentrate.

The children equated breathing to helping them relax or feeling calm: "I like the breathing cuz it makes a lot of us calm" (Addendum L, p. 267). When asked why the students enjoyed breathing, they explained how it relaxes them: "Ummm ... errr ... it just relaxes me. [Happy smile] You breathe, quietly, and yeah" (Addendum L, p. 273). One student went on to explain how it is important to breathe properly: "Well, it actually ... sometimes it ... before we start I actually don't breathe very properly; I get caught somewhere in my throat. It makes me not breathe properly, but then when I breathe slowly it makes it very properly to breathe for me" (Addendum L, p. 279). The students themselves realised the importance of breathing properly and how it affected their ability to study, relax and feel calm. As indicated in the field notes and interviews with the students: "It helps me with my work when I'm working. When I feel cold or something, I just start breathing or something then it helps me" (Addendum L, p. 280).

The students and teachers explained how breathing properly had a positive effect on them. "I like the breathing cuz² it makes a lot of us calm" (Addendum L, p. 267). The idea that breathing created a feeling of calmness was repeated in multiple interviews with both students and teachers, as well as in exit slips where students stated that they enjoyed the breathing and felt calm afterwards (Addenda C and S). In an excerpt from the field notes taken a few months after the research had ended, T indicated that breathing deeply had had an impact on the students: "she said she still does deep breathing with the students before tests and after break if they are struggling to settle down and work. She said it really does calm them down" (Addendum B, p. 215). The students realised that by breathing carefully or properly they were able to help themselves, as observed by one of the teachers: "J has said how she sees a real difference with the students and a few of the students even use the breathing on their own when they are struggling" (Addendum B, p. 213).

² This is a direct quote from the student and therefore the exact language was used; *cuz* equates to *because*.



On the exit slips, students were specifically asked how they felt about the breathing exercises, and of the 15 answers, 14 were positive and cited an improvement in their overall feeling. The one answer which was not positive stated that it was boring (Addenda C and S). When students were asked on the in-class survey if they enjoyed the breathing exercises, 16 replied yes, two said no, and one left it blank (Addenda C and S). This majority of the students enjoyed the breathing exercises and this shows that taking the time to breathe properly does appear to have an impact on students. The quantitative data supports the findings of the subtheme of breathing.

4.4.3 Subtheme 3: Calmness

The subtheme of *calmness* refers to students and teachers' statements of feeling calm, releasing tension, and feeling at ease. Calmness can be a behaviour or a feeling. The subtheme *calmness* falls into the microsystem, as the focus is on students feeling calm and teachers being able to observe a calmer atmosphere in the classroom (Bronfenbrenner, 1977, 1979, 1994). Students repeatedly reported feeling calm, while the teachers and I observed the students behaving in a calm manner and the atmosphere of the class as being calm. Students and teachers also reported that they felt they were able to calm the students down easier and quicker. As a behaviour, the teachers explained that when the students were calm, they were more focused or concentrated more, and were better able to complete tasks.

This is supported by the following excerpt from the field notes: "She (J) even commented that usually after break, the lessons don't go so well because they are riled up from break, but since a majority of the class practises yoga after break the class is calm and ready to focus" (Addendum B, p. 211). All 11 students who were interviewed reported feeling calm after practising the yoga techniques. The concept of feeling calm was repeatedly brought up in exit slips by the students. Students explained that they appreciated and enjoyed feeling calm after working all morning and having a break where they ran around. The students mentioned that their muscles were stiff or tight and they needed help to focus. As observed in field notes on 7 June, 2012, "The students really do calm down when they are 'forced' to breathe deeply"



(Addendum B, p. 201) The students' own observations supported this finding: "it's really calming. I like the breathing cuz³ it makes us calm" (Addendum L, p. 267), and: "They keep you calm" (Addendum L, p. 269).

The teachers also noticed that the yoga techniques had a calming effect on the students, allowing them to start teaching sooner and with fewer distractions. "J remarked that they (students) were calm, more prepared to listen. She wondered if yoga (techniques) was having an effect" (Addendum B, p. 202). The same calming effect did not appear to happen with recess alone. When students did not practise the yoga techniques they were not as calm when they came back from recess. "They did calm down immediately when we started yoga" (Addendum B, p. 203). "The students calm down. It really calms them down, and quickly" (Addendum B, p. 166). One teacher remarked, "The students do calm down ... They are much calmer. It definitely calms them down and quickly. I can see progress" (Addendum P, p. 320). When the students come in from break, they can be very energetic; as noted in my field notes, they are rowdy at times. Calming down appeared to assist with the transition back to class time. In the exit slips the majority of the students reported feeling calm and relaxed after practising the yoga techniques.

4.4.4 Subtheme 4: Feeling better

The subtheme of *feeling better* relates to feelings of improvement by students and teachers. The participants (students and teachers) felt an overall improvement in their mood and how their bodies felt. The subtheme *feeling better* falls into the microsystem as the students and teachers explain that they feel better overall after practising yoga techniques in the classroom (Bronfenbrenner, 1977, 1979, 1994). This theme could fit into multiple systems if yoga techniques were practised outside of school and similar feelings were expressed by participants. Students indicated that after practising yoga techniques, they felt better. This was

³ Original spelling of students has been used for authenticity "I like the breathing [because] it makes us calm" (Addendum L, p. 232).



often said in a surprised tone, as if they did not expect to feel better: "I feel better than before" (Addendum L, p. 276).

The concept of feeling better related to their ability to complete work; as one student said, "It helps me with my work, when I'm working, when I feel cold or something, I just start breathing or something and then it helps me. When we do them [yoga techniques] I feel better and not tired" (Addendum L, p. 281). Students not only referred to how they felt calmer or happier, but also to how their body felt better. "My back muscles are smoothed out after. Normally when we do yoga, as I explained before, I feel open and my muscles are smooth. And when we don't do yoga then it's all hard and stiff, not nice" (Addendum L, p. 287). The concept of feeling better appeared to surprise the students; as noted in my field notes: "several students have remarked they like yoga because they feel better; they say this in such a way as to show they are surprised by it. I asked why they seemed surprised and they just said, don't know" (Addendum B, p. 213).

The subtheme of feeling better was also supported by students' responses on the exit slips. Common responses were: "better", "stronger", "exercised", "not sad anymore", "not so stressed", and "greater than ever". One student wrote that the yoga helped with her/his headache (Addenda C and S). The use of the comparative form of the adjective implies that students felt improvements in their moods after practising the yoga techniques. Students often responded that before practising the yoga techniques they felt: "stressed", "pained", "bad", "mad", "uncalm", "like I am angry", "stiff" and "sad" (Addenda C and S). The overall feeling given was that before they practised the yoga techniques they had negative feelings. However, after practising the yoga techniques, the students responded with more positive feelings, stating that they were calm, relaxed, better, nice, and happy. These answers were more positive on the whole, especially when compared to the more negative responses related to how the students said they felt before practising the yoga techniques.



4.4.5 Discussion of Theme 1: Positive feelings

The first theme which emerged was one of positive feelings towards the practice of yoga techniques, and the first subtheme that emerged was feeling relaxed, followed by feeling calm and feeling better. These themes fit into the microsystem almost exclusively due to the focus of the study being on feelings, perceptions and opinions about yoga techniques in the classroom. Theme 1, positive feelings, focuses on the individuals' feelings while in the classroom; this is why the theme fits neatly into the microsystem as the microsystem is one system removed from the individual and is where the individual spends a majority of their time. (Bronfenbrenner, 1977, 1979, 1994). Students explained that practising yoga techniques enabled them to relax at school. The students learned that feeling calm helped them to feel better and perhaps enhanced their concentration on their studies. In this study I found that students were able to feel more relaxed after practising the yoga techniques. In the conceptual framework, yoga is shown to affect students and classroom climate, and this does appear to be the case as this study found the use of yoga techniques in the classroom to increase students' positive feelings overall. One could argue that the use of yoga techniques made it possible for students to focus on the task of learning because the students felt relaxed and more positive overall, thus leading to a theoretical contribution to the teachers' knowledge about how to create a classroom climate that is conducive to learning.

Cowen and Adams (2005) also found in their study that participants' positive wellbeing increased with the practice of yoga. Yoga and yoga techniques seem to help increase positive emotions. As the participants in this study found themselves more relaxed, they also found that they had an easier time of staying on task. Both teachers noticed that when the students were more relaxed their work improved. This observation relates to Cowen and Adams's (2005) study, which found that yoga can decrease stress and therefore increase productivity. Stressed students struggle in the classroom, have difficulty learning and staying on task, and often show disruptive behaviour (Lohaus & Klein-Hebling, 2000; Powell et al., 2008; Stueck & Gloeckner 2005; Toscano & Clemente, 2008). Yoga and yoga techniques can help students to reduce this



stress and relax, as well as improve self-control, attention and concentration (Case-Smith et al., 2010a; Peck et al., 2005).

In addition to feeling relaxed, students felt calm and the teachers remarked about the positive influence on the classroom atmosphere. As the teachers confirmed, it is quite normal to struggle with settling kids down after recess time (Addenda O, P). It seems as if the integration of yoga techniques into the classroom helped to calm the students and thus prepared them for the next lesson. In their 2010 study, Wisner et al. found that school-based yoga and meditation programmes enhanced students' ability to pay attention, improved their concentration and decreased anxiety. Harrison et al.'s (2004) study, involving students with ADHA and their families, found improvements in the symptoms of ADHD through the practice of yoga. The students in their study also indicated feeling calmer and described yoga as relaxing or calming. The overall effect of yoga and yoga techniques was that students felt better on the whole. The participants in Cowen and Adams's (2005) study felt more relaxed and calm. They reported feeling better and happier. In Cowen and Adams's (2005) study, they suggest that yoga practice can help reduce stress and therefore increase productivity.

By increasing positive emotions and feelings in the classroom, the classroom becomes a place that is not only conducive to learning, but is also supportive. I observed that as the participants in my study found themselves more relaxed, they found they had an easier time staying on task and completing work. The students and teachers supported my observations by explaining that yoga techniques helped the students with their studies because it helped them to relax (Addenda D, E, O and P). This is also true of Bhardwaj and Argawal's (2013) study which found that yoga increased self-esteem in students, thus increasing overall positive feelings. By decreasing stress and increasing feelings of calmness, the classroom climate improves, which in turn increases the efficiency of learning. Yoga and yoga techniques have been found to help students to relax during tests, learn how to cope with stress, and reduce panic (Nelson, 2003).



As discussed in Chapter 2, classroom climate is important to learning. Classroom climate can be understood as the general feeling in a classroom or the "perceived quality of the classroom setting" (Gillen et al., 2011, p. 65). This quality or feeling influences student learning. Studies have found that classrooms where the atmosphere is positive, as in not negative, are the most conducive to learning (Brock et al., 2008; Conroy et al., 2009; Gillen et al., 2011; Rowe et al., 2010; Shapiro, 1993). This study found the same to be true; i.e. as the classroom climate improved through the use of yoga techniques, students felt better and were then able to learn better. After practising yoga techniques, the students reported feeling more positive and the classroom felt better as well (Addenda E and L). Teacher participants from this study suggested that the classroom felt calmer and more positive (Addenda E, O, and P).

Classroom climate affects students' behaviour and scholastic achievement; positive feelings and a positive classroom climate can promote positive behaviours and increase academic performance (Fraser & Tobin, 1991; Zedan, 2010). Creating a classroom climate where learning is encouraged and promoted is important. Students do not only need to be calm, but they also need to be able to focus and complete their work (Cohen et al., 2009; Edward & Mullis, 2003; Noddings, 1992). Yoga and the use of yoga techniques were found to improve student behaviour as well as academic output due to the improvements in self-esteem, reduced stress and overall positivity (Bhardwaj & Argawal, 2013; Slovacke et al., 2003).

I would propose that students need to be taught how to create positive feelings in order to help themselves learn better. Seligman et al. (2009, p. 293) argue for the importance of teaching skills and techniques to our students which can enable them to be happy and positive. They suggest the idea of Positive Education which is "defined as education for both traditional skills and for happiness". Seligman et al. (2009, p. 295) advocate the importance of "teaching both skills of well-being and skills of achievement"; there needs to be balance. Teachers from phase 1 of this study found that when students were calmer and more relaxed, the classroom had a more positive feel and the students' work was completed more effectively and efficiently (Addenda E, O and P). Seligman et al. (2009, p. 295) support this finding as they suggest that



positive feelings are "synergist with better learning" and that a "positive mood produces broader attention" and better learning.

Previous research suggests that students' psychological wellbeing needs to be taken care of in order for them to learn effectively. Emotions play a major role in the classroom climate and learning (Goswami, 2004; Scoffham & Barnes, 2011). Positive emotions, such as happiness, lead to more creativity and attention (Scoffham & Barnes, 2011). Emotions are an important part of thinking and experience, and positive emotions support cognition (Immordina-Yang & Damasio, 2007). This is why classroom climate is essential; emotions can be thought of "as the platform for learning" (Scoffham & Barnes, 2011, p. 539). This study found yoga techniques to help create positive emotions and thus a positive classroom climate. Immordina-Yang and Damasio (2007, p. 9) state that "when we educators fail to appreciate the importance of students' emotion we fail to appreciate a critical force in students' learning. One could argue, in fact, that we fail to appreciate the very reason that students learn at all". This statement illustrates the important role that emotions play in the classroom and in learning. Yoga and yoga techniques could therefore become critical as it has been shown, in this and other studies, to help regulate emotions and create positive feelings in students (Adelman & Taylor, 1997; Anderson et al., 2004; Barnes & Nagarkar, 1989; Benavides & Caballero, 2009 Bhardwaj, A., & Argawal, 2013; Bostrom & Lassen, 2006; Bowen-Irish, 2007; Case Smith et al., 2010a; Chaya et al., 2012; Cheesbrough et al., 2006; Khalsa et al., 2012; Krusche, 1999; Jennings & Greenburg, 2009; Kutter, Chambers, Hardial, Israel, Jacobson, & Evens, 2006; Lawson, Cox, & Blackwell, 2012; Rizzolo et al., 2009; Sirven, 2003; Slovacke et al., 2003; Sumar, 1998; Telles et al., 2009; Tummers, 2005).

Emotions play a large role in education. "Pupils do not generally gain much from education when they are unhappy or distressed" (Goswami, 2004, p. 4). It is the role of the teacher to help students deal with these emotions and create a learning space where students can learn. As this study has found, yoga techniques can assist with this. When students are feeling stressed, fearful or unhappy, the brain produces chemicals that respond to the stress or fear; this is not



conducive to learning (Goswami, 2004). Looking back at the conceptual framework for this study, one can see the importance of the role played by the teacher in creating a classroom climate free from stress and fear.

4.5 Theme 2: Improved focus and concentration

The theme of *improved focus and concentration* refers to students' ability to focus their attention on the task they intended to complete. This theme relates to concentration when working on a task. Theme 2, *improved focus and concentration*, falls into the microsystem as the focus is on the individual and school (Bronfenbrenner, 1977, 1979, 1994). According to the students and teachers, there was an improvement in focus and concentration. The students noted that yoga techniques helped with their school work by enabling them to focus and concentrate better: "It helps me to in my work, I umm, it helps me to concentrate on my work" (Addendum L, p. 265). When asked why the yoga techniques were able to help, one student explained that he could "concentrate more" (Addendum L, p. 285). "On the days that we don't, I'm ... mmm more hyper ... don't concentrate as much" (Addendum L, p. 285). It appears that students realise that they need to focus their attention and concentrate in order to learn. The difficult part seems to be figuring out how.

The teachers found that the students were able to stay on task and focus for longer periods of time. One of the teachers explained, "In the beginning they didn't focus as much as they do now" (Addendum O, p. 314). Another teacher explained how the children were able to concentrate better now: "They focus and concentrate, it is amazing to watch" (Addendum P, p. 356). Both students and teachers agreed on the importance of concentration with regard to learning. One teacher wrote: "you need to concentrate in order to succeed" (Addendum O, p. 249). Another explained the importance of concentration: "Because if you cannot concentrate you cannot take in what you are reading" (Addendum O, p. 351). The students' concentration improved after practising yoga techniques, which the teacher not only observed but also appreciated (Addendum T). In the exit slips students answered that when they are distracted it



is difficult to finish their work, and that they try to focus their attention by relaxing and staying calm (Addendum S).

4.5.1 Subtheme 1: Helps with studies

The subtheme *helps with studies* falls in the microsystem; the subtheme pertains to individuals' feelings and working within the classroom (Bronfenbrenner, 1977, 1979, 1994). This theme focused on students' feelings about their academic work in the classroom. The students explained in their own words how yoga techniques helped with their studies: "it makes your brain work more. And it just makes you laugh, and if you laugh it just makes you focus more, you get rid of all the tension and bad things that stop you from focusing. It helps me focus more" (Addendum L, p. 390). I observed that the students were focused and attentive after practising yoga techniques: "they focus very intently for about 15 min afterwards" (Addendum B, p. 236). This trend continued over the period of time the students practised yoga techniques; "Immediately after they sat to complete their task they were calm and super focused" (Addendum B, p. 239).

In support of these observations, the teachers confirmed that the students' ability to focus their attention and complete tasks increased. "They focus and concentrate; it is amazing to watch them. They are calmer. They have to do it and they do; they sit and breathe and they are more manageable" (Addendum P, p. 321). "Some of the children that have serious concentration⁴ problems which has improved, focus is better" (Addendum T, p. 414). "Focus has improved after the exercises" (Addendum T, p. 414). The teachers felt that the yoga techniques helped the students with their class work: "specific exercises help children to focus" (Addendum T, p. 414). One teacher explained that "after they are more manageable" (Addendum P, p. 321). The teachers observed that yoga techniques helped students learn how to concentrate, because "it forces you to relax, it relaxed me and it forces you to concentrate" (Addendum P, p. 321). By being forced to concentrate the students understood what it feels like to concentrate. I argue

⁴ Three of the students in the study were on medication for ADHA. No other students were diagnosed as ADD or ADHA, though some difficulty with concentration was still observed by the teachers.



that the yoga techniques acted as a catalyst to help students concentrate which, in turn, helped with their studies. As students were calmer and felt more relaxed they were better able to concentrate, which led to improvements in their studies and feeling better able to study. Students mentioned that yoga helped them to concentrate; "it helps me to constarat⁵ (concentrate) in class" (Addendum S C, p. 220).

Students explained that their brains could "work more" and answers came more easily. "A few students came and explained how they would miss yoga, because after they practised the yoga techniques they could do the work more easily. "'My brain can work more.' I asked why, and most said, I don't know, but one said she "just felt better, calmer and the answers came easier" (Addendum B, p. 214). Students noticed an improvement in their overall skills and in their studying: "I think it's really improved on my skills" (Addendum L, p. 269). One student spoke about his brain functioning more smoothly: "helps on my, with my brain ... helps it to go smoothly ... and not hard" (Addendum L, p. 270). When asked to elaborate, he said that it was easier and "just works" (Addendum B, p. 206).

Students felt that the exercises helped with their class work, as shown by the student survey. Not all felt as strongly; six students felt that the exercises helped quite a lot, while six others placed themselves in the middle. However, no students disagreed with the statement that the exercises helped with their class work; it was simply a matter of degree (see the student survey, Addendum U). This was reaffirmed on the survey when students were asked if they were able to get more finished in class on the days when yoga techniques were practised. Once again, not a single student disagreed strongly. All the students agreed that when they practised yoga techniques, more work was completed. It was simply a matter of how strongly they agreed (Addendum R).

⁵ This is a direct quote from the survey kept as is for authenticity; "constarat" is "concentrate".



4.5.2 Discussion of Theme 2: Improved focus and concentration

This study found that the students and teachers observed an improvement in focus and concentration. They also made the connection that by improving their focus they were better able to study and learn. Harrison et al.'s study (2004) found that the students reported that yoga helped them focus on their work in the same way the students in this study reported that yoga techniques assisted with their studies. The idea that improved concentration or focused attention will help with studies is not a new one. Barnes and Nagarkar suggested this in their 1989 study, which looked at how yoga could improve scholastic achievement. In this study students reported that they were less distracted and could focus their attention on their work better after practising the yoga techniques. In Barnes and Nagarkar's (1989) study, the students also commented on the fact that they were more attentive and remained relaxed during lessons. In 1975, Richard Allington wrote that, "Attention is essential to learning" (Allington, 1975, p. 22). The concept of concentration connects to the conceptual framework in relation to learning. In the conceptual framework, both students and teachers have goals related to focus on learning and the notion that learning requires concentration (Allington, 1975).

Attention, concentration and focus can be linked to mindfulness or awareness about oneself. Mindfulness is often considered to be an aspect of yoga (Ponder, 2012; Salmon et al., 2009). I would suggest that the concept of mindfulness could be researched and written about independently from this study. Mindfulness "describes a particular kind of attention that is characterized by intentionally, present moment focus and non-evaluative observation of experience" (Broderick & Jennings, 2012, p. 115). Research with adults on mindfulness training has shown numerous benefits, such as that it enhances body awareness, improves emotional control, increases attention and positive mood, improvements in immune system functioning, reductions in depression, increased empathy, less substance abuse, and decreases in levels of stress (Broderick & Jennings, 2012). Research regarding mindfulness with students appears to be more limited. However, there has been documentation showing improvement in attention, social skills, quality of sleep, improved wellbeing, and decreased anxiety and stress (Broderick & Jennings, 2012). Napoli et al. (2005) conducted a study on mindfulness training for elementary



students. The idea was to help students focus and pay attention which, in turn, would help them with their studies. Napoli et al. (2005, p. 100) argue that "they (students) can increase the quality of their learning performance by being more focused". This study found that the teachers felt better able to teach students who were calm and able to listen without needing to wander. The students were able to sit still for their lesson, which meant they were prepared when it was time to work at their desks.

It would seem that mindfulness can have an effect on behaviour; as such, I would argue that the conceptual framework for this study which looks at yoga could be replaced with mindfulness. As mindfulness is one aspect of yoga this might narrow the results. Mindfulness is believed to be a result of yoga practice (Ponder, 2012). In a 2010 study, researchers were interested in seeing what impact, if any, providing mindfulness training to parents and children with ADHD would have (Singh et al., 2010). They found that positive interactions were enhanced through mindfulness training. As being mindful is a key aspect of yoga, the two are interlinked. Students who are mindful of their behaviour and their studies have been shown to have greater success in school and after school (Napoli et al., 2005; Ponder, 2012; Singh et al., 2010). Theme 2, improved focus and concentration, along with theme 1, positive feelings, falls into the microsystem as this theme focuses on the individual's feelings in the classroom and how those feeling may have changed with the integration of yoga (Bronfenbrenner, 1977, 1979, 1994).

4.6 Theme 3: Changes in student behaviour

The theme of *changes in student behaviour* refers to observations made by teachers, students and the researcher relating to changes in how students behaved on days when the exercises were performed and on days when they were not. Theme 3, *changes in student behaviour*, fits into the microsystem; the focus is on the individual's behaviour at school (Bronfenbrenner, 1977, 1979, 1994). The teachers and I observed that students were calmer, more compliant, more focused on their work, and there were less behaviour-related issues on days when yoga techniques were integrated into the classroom. The students remarked that they felt better,



calmer or more relaxed on days when they practised the yoga techniques. They reported that the work was easier to complete and that they felt like they could do it on days when yoga techniques were practised, suggesting that the work felt harder on days when they did not practise yoga techniques in class. Students and teachers alike found that there were differences in behaviour on days when the students practised yoga techniques compared to days when they did not. The teachers felt the students were more on task and more responsive in lessons on days when yoga was practised, they were more compliant, and the students focused on what they needed to study with fewer reminders to stay on task.

This theme is closely linked to theme 2, *improved focus and concentration*, as many of the changes in behaviour revolved around improvements in focus and concentration. The difference is that theme 3, *changes in student behaviour*, focuses on the observations students and teachers made regarding days when yoga techniques were integrated into the classroom and days when they were not. The other major difference is that *changes in student behaviour* encompasses changes in mood, students' descriptions of how their bodies felt different, as well as compliant and/or non-compliant behaviour in the classroom.

4.6.1 Subtheme 1: Different without yoga

This subtheme, *different without yoga*, explains how the students noted that they felt different on days when they did not practise yoga techniques in the classroom. The subtheme falls into the microsystem as the focus is on the students' feelings while in the classroom (Bronfenbrenner, 1977, 1979, 1994). The students said they felt calmer, more relaxed, that the class felt "better behaved" and that this helped them to complete their work (Addendum L, p. 230. "It helps me to do my work" (Addendum L, p. 265). Notes taken in field notes confirm the students' observations: "it seems that now that we are practising yoga the students are less rowdy, they are on task, but more than that, they are behaved as in doing what they are asked to do" (Addendum B, p. 316) The students seemed to find that on days when they practised yoga techniques they felt better overall.



When asked if there has been a difference in students' work, one teacher commented that "there is definitely a difference, some children have definitely progressed" (Addendum P, p. 329). When asked if student behaviour changes on days when the exercises are done, another teacher wrote, "yes, they definitely focus better" (Addendum T, p. 414). When asked how the exercises influenced student behaviour, she explained that "I can see they listen and follow directions, even the ones who never sit will sit a bit and do what I ask" (Addendum P, p. 320). This can be linked to theme 2: *Improved focus and concentration*, meaning that as the students felt more relaxed they were better able to focus their concentration, and this in turn may have led students to follow directions better. These relaxed feelings could have led to students not only listening better, but also following directions better.

As explained, students felt and behaved differently on days when they practised yoga compared to days when they did not. "On the days when we don't I'm more hyper, don't concentrate as much" (Addendum L, p. 285). This was also observed in my field notes: "I noticed this week that the students are calmer after recess. Last week they came in, it took 15-20 minutes to get them settled and working. Now they come in and prepare for yoga, then get to work after" (Addendum B, p. 208). One student even suggested that the students who practise yoga techniques are quieter than the students who did not practise yoga (Addendum L). This implies that the students noticed a difference in the behaviour of the children who practised yoga techniques and those who did not. The teachers supported these findings that on days when we practised yoga techniques the students were calmer, more focused and better behaved: "Oh yes, I have noticed a difference. They listen better, and follow instructions" (Addendum O, p. 313). The students noticed that they felt better overall and that classroom felt better: "I feel better than before" (Addendum L, p. 276).

4.6.2 Subtheme 2: Differences in body

This subtheme refers to student and teacher observations about differences in feelings, specifically how their bodies felt. Subtheme 2, differences in body, falls into the microsystem. The theme looks at how the participants experience yoga techniques in the classroom in a



physical way (Bronfenbrenner, 1977, 1979, 1994). Students reported feeling less tense, muscles being less stiff, less stress, being better able to work, feeling open, more relaxed and ready to work. "My back muscles are smoothed out after" (Addendum L, p. 286). The students were able to explain how their bodies felt different; one student wrote that yoga helped reduce her/his headache. Another explained that muscles were smoothed out (Addendum L). These differences were noted not only by the students, but also by the teachers and through observations made by me.

I observed that the students' overall demeanour would change after practising yoga. The students would be rowdy and energetic during break and while lining up inside. Once yoga was finished, the feeling in the classroom would be calm and focused. "They were subdued after practising yoga techniques – calm would be the best description – and would follow directions quicker and with much less if any reminders. They listened to directions J gave and were compliant. The feeling was just more relaxed and calm; they were not energised and were happy to sit and study without whining about being bored" (Addendum B, p. 199). The teachers made these same observations of changes in behaviour: "T and J agreed that the students were much calmer than before or during break. T said that they were wild all morning and that after yoga they calmed right down. She was surprised because of how crazy they had been all day" (Addendum B, p. 204). These changes were not only physical, but the students were also more compliant. The atmosphere in the classroom was one of calm and focus.

4.6.3 Discussion of Theme 3: Changes in student behaviour

The third theme identified is *changes in student behaviour* and within this theme, two subthemes emerged: *differences in body* and *different without yoga*. Theme 3, *changes in student behaviour*, fits into the microsystem in the same way that themes 1 and 2 do; the theme focuses on the individuals' feelings, opinions and perceptions relating to yoga techniques at school. These themes could fall into other systems depending on the influencing factors or where the yoga techniques are being incorporated (Bronfenbrenner, 1977, 1979, 1994). However, the focus of this study is on yoga techniques in the classroom. Students and



teachers both noticed and felt a difference in their behaviour and their ability to stay on task. Students even commented that they felt their skills had improved and that they learned better. In Jenson and Kenny's (2004) study, they also found an improvement in focus and attention through the use of yoga. Peck et al. (2005) found that yoga improved students' time on tasks and behaviour. The students in the study improved their ability to pay attention and focus on tasks. This is similar to what was found in this study. Students found that their skills improved as they were able to pay more attention.

It would appear that the students started to learn one of the important concepts of learning, namely: self-regulation. Self-regulation is important for students to learn, not only in terms of increased learning efficiency, but also as an important life skill (Cleary et al., 2008; Kaplan, 2008). With self-regulation often comes self-reflection or evaluation, which the students who practised the yoga techniques began to understand, as shown through their comments (Addendum L). For example, one student reflected on completing school work after practising yoga techniques, "when I do work after, its easier cuz I am relaxed and fresh (Addendum L, p. 278) this comment shows the student was thinking about how they feel and what is best for them as students when it comes to studying. Another student reflected that the yoga techniques "help to go smoothly and not hard" (Addendum L, p. 278), again showing how the students are reflecting on themselves and their feelings. As recorded in the field notes, students mentioned that they needed to practise yoga techniques in order to calm down after break. These students were evaluating what was best for them as individuals (Addendum B, L). Self-reflection allows students the chance to learn from themselves and to learn about themselves, thus to learn what they as individuals need (Kitsantas et al., 2004). Self-regulation is an essential skill to learn and children who struggle with self-regulation are at risk for social and academic issues as they grow (Pelco & Read-Victor, 2007). Students need to be able to prioritise and choose what to accomplish and when. "To study effectively, students need to regulate their learning process" (Järvelä et al., 2012, p. 65). This links to the conceptual framework's emphasis on yoga's impact on students. Through the use of yoga techniques,



students were able to gain an initial understanding of self-regulation, which adds to the existing theoretical knowledge about how teachers can help students self-regulate.

4.7 Link to phase 2

Previous research and also data from this study show that yoga and yoga techniques could have a positive influence on students and the classroom. Therefore, what challenges do (South African) educators face in terms of incorporating yoga techniques into the classroom, and how could these be addressed? Also, how does insight into teachers' beliefs, perceptions and opinions about yoga aid the understanding of the incorporation of yoga techniques into the classroom? For these questions to be answered more data needed to be collected, which led to phase 2. Teachers needed to be consulted in order to answer these questions. These questions focus on the individual and the microsystem. However, they also look at the macrosystem, mesosytem and exosystem to some extent. By asking about the challenges teachers face and the barriers that may need to be overcome, the focus shifts slightly to influences outside of the microsystem (Bronfenbrenner, 1977, 1979, 1994).

By going into the classroom and actually incorporating yoga techniques into the classroom during phase 1, I was able to gain knowledge first-hand about what integrating yoga into the classroom was like, which enabled me to convince teacher participants of the value yoga techniques held as well as the viability of yoga techniques in the classroom. This also allowed teachers to see what yoga techniques in the classroom looked and felt like. When I went back to interview teachers during phase 2, they were able to speak from first-hand knowledge rather than from mere speculation, because they had actually observed and participated in the yoga instruction. When I interviewed teachers and conducted focus groups, I too could speak from a place of knowledge about incorporating yoga techniques into a classroom. I could explain what it really felt and looked like which added credibility.



4.8 Phase 2

During the analysis of data from the data collected during phase 2, four themes emerged: religious concerns, lack of understanding, time constraints and education is needed. The first three themes were classified as barriers to the integration of yoga techniques into the classroom routine, whereas the final theme was seen as a solution to these barriers.

Figure 4.2 presents the four major themes that emerged throughout the analysis process of phase 2; these will now be discussed.

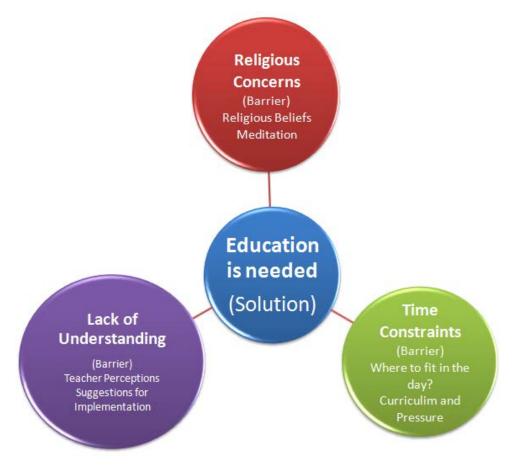


Figure 4.2 Themes from phase 2 data



4.9 Theme 1: Religious concerns (barrier)

The concept of religion emerged early on and repeatedly throughout the data analysis. The theme of *religious concerns* refers to teachers' beliefs as well as parents' and administrators' perceptions about the use of yoga techniques being incorporated into the classroom, as well as the concept of yoga itself. Theme 1 of phase 2, *religious concerns* (*barrier*), falls into all four systems because these *religions concerns* appear to stem not necessarily from the individuals themselves (Bronfenbrenner, 1977, 1979, 1994). The concerns seem to come from teachers' perceptions, opinions and feelings about what the culture (macrosystem) might think, what parents and administrators might believe (exosystem), and the various connections that others may make (mesosystem), while still dealing with the microsystem or school. Participants believed that some would think of yoga as a form of religion or that it would interfere with existing religious beliefs and, as a result, some people took issue with its possible influence on children. This belief was strongly supported by the preconception that links meditation to praying.

Throughout the data analysis phase, inclusion and exclusion indicators were formulated and refined in order to have a clear understanding of the themes that emerged (Babbie & Mouton, 2001; Sandelowski & Barroso, 2003). Sandelowski and Barroso (2003, p. 905) explain that one of the key elements of data analysis is determining what aspects of data are "eligible for inclusion". By determining what items might be "eligible for inclusion" the researcher "provides a frame of reference for the researcher to work from" (Sandelowski & Barroso, 2003, p. 905).

Below is a chart which explains the inclusion and exclusion indicators for theme 1 and for the subthemes and categories (Charmaz, 2000, 2006; Merriam, 1998).

Theme 1: Religious concerns		
Subthemes and categories	Inclusion indicators	Exclusion indicators
Subtheme 1:	This subtheme includes participants' own understandings about	
Religious beliefs	yoga and religion and their perceptions about how parents,	
	administrators and other teachers	s might see yoga in relation to



	religion.	
Category 1:	This category includes data	This category excludes beliefs
Yoga seen as religion	related to the perceived belief that yoga is a religion.	about religion.
Category 2	This category includes data	This category excludes
The word "yoga"	related to the stigmatisation of the word "yoga".	definitions of the word "yoga".
Subtheme 2:	This subtheme includes factors relating to the participants' beliefs	
Meditation	towards meditation, as well their perceptions about how others believe meditation relates to yoga and religion.	
Category 1:	This category includes data	Category 1:
Praying	related to perceptions linking meditation to a form of prayer.	Praying
Category 2:	This category includes data	Category 2:
Form of religion	related to beliefs that yoga is a religion.	Form of religion

4.9.1 Theme 1: Religious concerns (barrier)

The theme, *religious concerns*, refers to participants' perceptions and beliefs that there would be objections to the implementation of yoga techniques in the classroom based on religious reasons. Teachers believed that parents would react negatively to being told that their children would be taught yoga techniques or be practising yoga: "What is it, are you teaching religion to my kids?" one parent said about yoga (Addendum N, p. 305). Throughout almost all of the interviews and focus groups, religion was discussed as a major cause for concern and therefore appeared to present a large barrier to be overcome. "Religious beliefs are a concern and would be an issue for most" (Addendum E, p. 235). Teachers believed that parents in particular, but also other teachers and administrators, would perceive yoga to be connected to a religion and that this would be a problem (Addenda D, E, F, H, O, P, and Q). "Yoga can be linked to religion because they [parents] haven't got the knowledge, like with many other things, if you haven't got the knowledge you link where you can, and don't like the unknown" (Addendum E, p. 236). What parents, teachers and administrators know about yoga leads them to the belief that yoga is a form of religion and therefore does not belong in school or the classroom. It appeared that



teachers felt that the issue might have to do with the fact that yoga was seen as a non-Christian religion and less with the idea of it being a religion itself, although some felt this could be a concern as well. One teacher explained that concerns with yoga might be particularly strong within the Christian community (Addendum D, p. 225; Addendum M, p. 291-292).

4.9.2 Subtheme 1: Religious beliefs

The subtheme, religious beliefs, refers to participants' beliefs about religion and about their perceptions of other people's beliefs regarding religion and yoga. Subtheme 1, religious beliefs, fits into all four systems for the same reasons that theme 1 does. However, subtheme 1 focuses more on the macrosystem and exosystem, while still falling under the microsystem. This is because the religious beliefs that many of the participants refer to come from the culture and at times aspects that they individually themselves do not participate in, yet these beliefs impact the individual and the microsystem (Bronfenbrenner, 1977, 1979, 1994). The belief that yoga is a form of religion creates many issues, according the participants. One of the main reasons that yoga appears to be perceived as a religion, is due to the meditation. "The focus [of yoga] is on lots of elements that our religion wouldn't appreciate or accept, share, like" (Addendum H, p. 247). Yoga is perceived as encouraging individuals to focus on something that should only come from God: "We believe in complete control and the only guide to relaxation is God" (Addendum H, p. 253). "That background isn't good for us, we shouldn't be exposed to that – nor should our children, nor should our family members, so that is why a teacher, especially with the Afrikaans community, with our background being so strong in religion, we wouldn't even think about it" (Addendum H, p. 248). Religion comes from the church, not from yoga, and allows you to be "centring your thoughts and your, your spirituality to something that shouldn't be, except for God" (Addendum M, p. 292).

Parents do not want their children to be exposed to forms of religion or perceived forms of religion that they themselves are not experts in. Yoga is perceived to be "bowing down to a being which is not necessarily the God that is in the Bible, from that religious point of view, it will be seen as uh, not, not, not to happen" (Addendum M, p. 291). Yoga is said to be a different



belief system for most and, as a result, there is strong resistance to it, according to the participants (Addendum F). This preconception or stigma came up repeatedly in interviews and focus groups: "just the mere fact that they connect it [yoga] maybe to religion just out of pure knowledge" is going to cause issues and resistance (Addendum E, p. 232). The concept of yoga is still relatively new, especially in South Africa, and people generally do not like the unknown as they make links where they can, and shy away from things that are foreign to them. Fear of the unknown makes people and parents wary (Addenda E and F).

4.9.3 Subtheme 2: Meditation

The subtheme, meditation, refers to participants' beliefs about meditation and their perception that meditation is similar to or a form of praying, and therefore part of a religion. Subtheme 2, meditation, fits into all four systems too, because this theme focuses on the participants' beliefs about meditation with relation to yoga. Once again the participants themselves are looking outside of their microsystem to the macrosystem and exosytsem. This appears to lead the participants to also think about the mesosystem (Bronfenbrenner, 1977, 1979, 1994). It is believed that this will cause concerns among parents and administrators. Even though meditation was not used in this study, the concept of meditation came up throughout interviews and focus groups, emerging as a theme, therefore is important to discuss. According to one teacher, it will not be possible to convince staunch religious South Africans about the benefits of yoga and yoga techniques, because of the meditation (Addendum H). This link between meditation and praying or religion came up in one of the focus groups as well. A teacher explained that there is an Afrikaans school of thought that involves chanting quietly by yourself, oftentimes using a Bible verse (Addendum O). It was also mentioned that some believe yoga to be part of a cult (Addendum O). "They hear the word yoga and they think it's about meditation and all of that, and they think there's religion involved" (Addendum O, p. 311). These preconceived notions about yoga were agreed upon by participants and thought to be a rather difficult barrier to overcome.



The belief that yoga could be seen as a form of religion was a perception shared by teachers from all the participating schools. This appeared to be unanimous among the participants. When the idea that yoga might be met with resistance because some perceived yoga to be a religion was brought up by teachers during focus groups, and later in interviews, the participants themselves were unsurprised. Teachers stated that parents or administrators might feel that by incorporating yoga techniques into the classroom, they are teaching religion in school. Teachers explained that in more traditional and conservative schools, yoga is seen as negative for students because of what it is perceived to stand for. One teacher explained that her upbringing was in a very conservative Christian environment and that yoga was viewed in a very specific way. She elaborated that, "we don't believe in meditation from a Christian point of view" (Addendum M, p. 292). As this was explained, the belief is that meditation gives power to the individual and takes it away from the Church and from God, and that only God should assist with relaxation and spirituality, not the individual (Addenda F, H, P). One of the main reasons for the link between yoga and religion appears to be meditation which can be seen as a form or prayer. "I think the meditation is the most crucial thing you are going to have to work around or leave out. If you don't do the meditation part I don't feel there will be a problem" (Addendum N, p. 306).

4.9.4 Subtheme 3: The word "yoga"

This subtheme refers to the idea that even the word "yoga" appears to carry with it a stigma and negative connotations. Subtheme 3, the word "yoga" falls mainly into the macrosystem because the word "yoga" appears to hold cultural meaning for the participants, or they perceive that it does or will for others (Bronfenbrenner, 1977, 1979, 1994). Many teachers believed that if one were to leave the word yoga out of the equation, much of the resistance would be alleviated. However, the concern was brought up that if parents or administrators found out that what was being incorporated into the classroom was in fact yoga or yoga techniques, there would be serious ramifications (Addenda F, H, O, P, Q). "I wouldn't use the word yoga at all. I think there is really a negative connection to the word yoga in the Afrikaans community. They are very conservative and it would not sit well" (Addendum N, p. 306). In a



few of the focus groups and several of the interviews, the agreement was that if the word "yoga" was omitted and replaced with "breathing and stretching exercises", there would be little if any resistance (Addenda D, F, O, P, Q). "Cuz they hear the 'Y' word and they, they have no idea what it is really about" (Addendum O, p. 323). Many teachers even admitted to already using certain yoga techniques, either knowingly or unknowingly, but never calling it yoga. The agreement was that "it [the word *yoga*] is a very heated word. It [the word *yoga*] offends people" (Addendum M, p. 265).

4.9.5 Discussion of Theme 1: Religious concerns (barrier)

The issue of religion in schools is not a new concern. Education began as substantially religious and primarily private, and even though "schools were nonsectarian their teaching and practices were significantly religious" (Greenawalt, 2005, p. 14). This has created a legacy of tension between schools and religion. As discussed, theme 1, religious concerns, fits into all four systems of Bronfenbrenner's Ecological Systems Theory (Bronfenbrenner, 1977, 1979, 1994). This theme shows that the various systems interact with and impact each other. Integrating yoga techniques into the classroom does not appear to affect only the school or classroom (microsystem). It would seem that other systems have an interest as well.

In America, the issue of religion in schools is strongly debated on both sides. It was the church in America that originally decided religion did not belong in public schools. The church did not believe teachers capable of teaching religion; this was something only a trained religious person was competent to do (Blashfield, 1926). There are many who argue about the dangers of taking religion too far and of not allowing students the freedom to choose religion on their own.

Others argue that religion is how morality and ethics are taught. Still others argue for the importance of keeping schools a religion-free zone (Killman, 2007; Passe & Willox, 2009). It is important to note the argument for having religion in schools in America, Australia and South Africa, as they focus on different forms of Christianity. There has been little or no mention of different religions such as Islam, Buddhism or Hinduism and so forth (Blashfield, 1926; Byrne, 2012; Killman, 2007; Mawdsley et al., 2008; Passe & Wilcox, 2009). It is also important to note



that the religion most often cited against yoga being taught in school is Christianity (Williamson, 2012; Addenda D, E, F, H, O, P, Q). However, it seems that the debate over religion in schools is not only an issue in America, but is a worldwide phenomenon, one for which there does not appear to be an easy answer (Byrne, 2012; Mawdsley et al., 2008). Public schools are seen as the "primary vehicle for transmitting the values on which society rests". This allows the child to understand cultural and societal values, thus preparing the child for a professional career (Mawdsley et al., 2008, p. 83). This means that society as a whole must agree with what is being taught in public schools, as public schools are designed to "help him [the student] to adjust normally to this environment" (Mawdsley et al., 2008, p. 83).

One issue with religion in schools is the problematic relationship between religion and science. Religion and science have formed a relationship of mutual disagreement (Nord, 1999). Religion is faith in something unseen, whereas science looks for proof. Historically, religion and science have often disagreed. The issue of evolution is likely the most famous disagreement the church has had with science. It has also been shown that religions are often not accepting of religions different from their own (Byrne, 2012; Killman, 2007; Mawdsley et al., 2008; Passe & Willox, 2009). This is a problem with regard to the implementation of yoga in the classroom. With yoga being seen as a form of religion, the difficulties with incorporating yoga techniques into the classroom are compounded. The belief that meditation is a form of praying, coupled with the fact that many Hindus practise yoga, has created a belief that yoga itself is a form of religion. This classification of yoga makes yoga integration or the use of yoga techniques in schools difficult.

Studies have found that yoga and yoga techniques support students with ADHD and Autism Spectrum Disorders (Beart & Lessing, 2013; Castleman, 2002; Nelson, 2003). Students have been quoted explaining that yoga makes them feel better and less panicked about tests (Castleman, 2002; Nelson, 2003). The students have even asked to practise yoga. One teacher explained that yoga "calms them and helps them to re-focus their attention on learning" (Castleman, 2002, p. 91). However, even if with such evidence the participants were not sure



yoga would be accepted by parents, "if they [parents] are informed [about yoga] they still won't necessarily like it because of religion" (Addendum N, p. 309).

The above-mentioned and many other studies illustrate the enormous benefits yoga and yoga techniques provide to students, yet yoga is still met with resistance in school situations. This resistance is often caused by parents and administrators who believe that yoga stems from an Eastern religion and that this means yoga or yoga techniques should have no place in schools. Some of the "devout Christians feel it could lead young minds toward other religious beliefs or mysticisms" (Williamson, 2012, p. 28). Yoga has even been banned in some districts in the United States. This study shows that the belief that yoga is a religion is prevalent in South Africa and is a barrier that must be overcome if yoga or yoga techniques are to enter the school system (Williamson, 2012.)

Even though there are many studies showing the benefits of meditation, with no link or mention of religion, the connection has been made and it is difficult to persuade people otherwise. Helber et al. (2012) conducted one study showing the cognitive benefits of meditation. They found a strong correlation between the amount of time spent meditating and cognitive improvement in class. Wisner et al. (2010, p. 150) explain that meditation programmes show an "enhanced ability to pay attention, improved concentration and decreased anxiety", as well as improvements in emotional self-regulation, behaviour, frustration levels and self-control.

The idea that the word "yoga" is perceived negatively is not a new one. When yoga was first introduced into a school in San Francisco, the teacher explained that she did not even call it *yoga* when she first began: "I was afraid the kids would reject it as too flaky", so she called it stretching (Castleman, 2002, p. 91). In the end, the students said they loved it and made the connection to yoga on their own. This teacher's fear was more closely related to students' responses rather than parents'; however, this illustrates the issues of yoga being a stigmatised word. Another teacher explained that he views yoga as physical exercise and when the



breathing exercises are taught he does not use the word meditation, simply visualisation (Castleman, 2002). Word choice with regard to yoga in schools appears to be critical; some districts in the United States have banned visualisation practices and meditation instructions (Williamson, 2012). The teachers in the present study agreed from the start that meditation should not even be discussed as related to yoga for yoga to be implemented into the classroom routine.

Teachers thought that parents and administers would link yoga to a religion and would therefore conclude that yoga should not be part of the classroom routine. These teachers were all speaking from a Christian background. When I spoke with a Muslim teacher, she stated that "for us I do not see how religion would be an issue. Even the prophet Mohamed (Arabic) said we must or encouraged exercise – people are supposed to do any kind of exercise; swimming, running, darts, any kind. It is not a religious thing in my mind" (Addendum G, p. 246). This suggests that the issue of religion might not be a concern in a Muslim school. The Chinese school declined to participate in this study. Research has suggested that Christians appear to have the most concerns with yoga as a religion (Williamson, 2012; Willis, 2007-2008). The concern about religion does not appear to be confined to South Africa. Some schools in the United States have banned meditation, visualisation and yoga, because these are believed to be connected to a religion in one way or another (Williamson, 2012).

With reference to phase 1 of the study and mindfulness, I suggested that the conceptual framework for this study could be used by replacing the word "yoga" with the word "mindfulness". This might eliminate the connotations the word "yoga" appears to hold, while still being truthful to parents, teachers and administrators. This adds to our theoretical knowledge about the power of ideas, perceptions and beliefs with regard to yoga and religion in schools, as well as our knowledge of how to overcome ingrained cultural beliefs. The conceptual framework for this study focuses on teachers and students, and the importance of understanding teacher perceptions is linked here with the cultural beliefs around yoga.



4.10 Theme 2: Lack of understanding (barrier)

The theme, *lack of understanding*, refers to teachers' limited understanding of what yoga means and what is meant by incorporating yoga techniques into the classroom, as well as parents and administrators' lack of understanding concerning yoga. Theme 2, *lack of understanding*, fits into the microsystem as it deals with the individuals' feelings in relation to their understanding of yoga, but it also fits into the macrosystem because the participants feel they need a better understanding in order to integrate yoga techniques with the culture they live and work in (Bronfenbrenner, 1997, 1979, 1994). *Lack of understanding* refers to teachers' feeling that they do not possess enough knowledge to incorporate yoga techniques into the classroom. They feel they would need some kind of yoga training, not only to be able to integrate yoga techniques into the classroom, but also to be able to justify the use of yoga techniques in the classroom to administrators and parents. This is all understanding and knowledge that teachers feel they need to possess. *Lack of understanding* also refers to parents' and administrators' lack of knowledge with regard to yoga and yoga techniques, and breaking through their preconceived ideas of yoga.

Below is a chart which explains the inclusion and exclusion indicators for theme 2 and for the subthemes and categories (Charmaz, 2000, 2006; Merriam, 1998).

Theme 2: Lack of understanding		
Subthemes and categories	Inclusion indicators	Exclusion indicators
Subtheme 1: Teachers' beliefs, feelings and perceptions about yoga	This subtheme includes factors relating to how teachers perceived yoga in the classroom and how they felt about the implementation of yoga techniques into the classroom.	
Category 1: Parents' and administrators' beliefs about yoga	This category includes data related to teachers' perceptions that parents and administrators do not understand yoga and why it is of value.	This category excludes teachers' beliefs about yoga and ideas focusing on yoga as a religion.
Category 2: Teachers are not yoga	This category includes data related to teachers elaborating	This category excludes teachers who are yoga instructors and



instructors and they need training and information	that more teachers are not trained yoga instructors and need to be properly trained and shown what to do. They do not want to do something wrong and cause harm.	teachers' beliefs or feelings relating to yoga.
Subtheme 2: Suggestions for Implementation	This subtheme includes ideas of hand yoga techniques in the classro	
Category 1: Training	This category includes data related to having a yoga instructor train teachers and parents.	This category excludes teachers' perceptions about yoga.
Category 2: Parents and administrators need to support yoga techniques in the classroom	This category includes data related to the school community supporting the implementation of yoga techniques in the classroom.	This category excludes teachers' perceptions about yoga.

The theme, *lack of understanding*, relates closely to theme 1 *religious concerns*, due to the fact that this lack of understanding by teachers, parents and administrators appears to lead to the concerns about religion. There appears to be a stigma or preconception that yoga is spiritual and mystical in nature (Williamson, 2012; Quilty et al., 2013). As previously discussed, teachers believe that there are preconceived ideas and beliefs with regard to yoga. "There is a bit of stigma, maybe because people are not well informed" (Addendum N, p. 309). Teachers believed that not only do they need to gain a better understanding of yoga, but that parents and administrators would need to be educated about yoga as well. The participants generally agreed that yoga and the use of yoga techniques would benefit students and were in favour of incorporating yoga techniques into the classroom, with the right support. They felt it would help calm the students and assist with concentration, attention and learning (Addenda O, H, P, E, R, F). "It is good for the children, we are here for the children and if they can benefit out of it then, yes" (Addendum O, p. 313). However, one teacher pointed out that, "they [teachers] do not know enough about it [yoga] to understand it [yoga]. It [yoga] is something new and some might have views similar to the parents" (Addendum Q, p. 324). She explained that for many in



South Africa yoga is new and not much is known about yoga, except from the gym or possibly TV. Teachers also need to be educated about yoga in order for them to feel comfortable using yoga in the classroom. The teachers might just be more open-minded because teachers will do what is best for the students (Addenda S, R, H, Q, E, and O).

4.10.1 Subtheme 1: Teachers' beliefs, feelings and perceptions about yoga

This subtheme explores teachers' feelings that they are not equipped with the right information, knowledge and skills to integrate yoga techniques into the classroom because they are not yoga instructors and many of them had never practised yoga before and knew very little in relation to yoga; this fits into the microsystem where the individuals' feelings are more prevalent (Bronfenbrenner, 1997, 1979, 1994). "If I was trained properly," was one teacher's response when asked if she would feel comfortable incorporating yoga into her classroom (Addendum H, p. 250). This opinion was shared by the rest of the participants and supported by the literature. The teachers felt they needed information on the background of yoga, why it is helpful, which poses to use when, what the benefits are, what to be careful of, "so that I don't mess up" (Addendum H, p. 250), where to practise yoga (inside or outside), also what materials are needed. These logistical questions were of concern to the teachers. The teachers felt they needed to see how yoga works, be trained, and have yoga modelled for them; then be able to practise themselves before they could integrate yoga into their classroom routine (Addenda P, E, D, O, G, R). Teachers need to feel comfortable teaching yoga, they themselves must believe it is important and be passionate about it, or the students will not buy into yoga and then the implementation will fail (Addendum G). The teachers explained that in order to teach something they need to be trained in it and know how to teach it, so the yoga techniques being incorporated must be simple, easy to use, and they must feel comfortable and well trained with it (Addenda H, Q, O, E, G). One administrator went so far as to explain that in an ideal world trained yoga instructors would come to class at a set time and teach the kids. These instructors would be experts who would 'easily' be able to convince the parents on the merits of yoga and yoga techniques (Addendum D). This of course would cost the school more and would require organisation and set timetables, but as the administrator explained, would relieve some fears



parents might have and could take the pressure off the teachers (Addendum D). However, this solution does not help teachers use yoga as tool in their own classroom. The teachers agreed that training was needed for them to integrate yoga into the classroom (Addenda H, Q, O, E, G).

4.10.2 Subtheme 2: Suggestions for implementation

The subtheme suggestions for implementation relates to the participants' beliefs that overall yoga was unknown to people and the best way to overcome this was to find ways to educate and convince the school community of the benefits of yoga and yoga techniques (Addenda F, O, D, E, P, Q). Subtheme 2, suggestions for implementation, fits into the microsystem as well as the macrosystem. The suggestions focus on the school and culture (Bronfenbrenner, 1997, 1979, 1994). The possible solutions for integrating yoga techniques into the classroom fall under the theme lack of understanding because the majority of the ideas revolved around teachers' beliefs that they need to acquire greater knowledge and a better understanding of yoga in order to be able to integrate yoga techniques into the classroom. The school community consists of administrators, teachers, parents and students. Teachers believed that they needed the support of their administrators, and in some instances the administrators were going to an obstacle to overcome (Addenda P, F). With the support of the administrators the implementation of yoga techniques into the classroom is believed to be easier, since admin can create an environment where the entire school is involved and working towards the same goal (Addendum O). For yoga techniques to be incorporated into the classroom, the administrators need to support the idea and parents need to agree with it. Finally, teachers need to be trained and also see the value of yoga and yoga techniques in the classroom (Addenda P, O, H, F, Q, and E). For the school community to encourage yoga and yoga techniques in the classroom, parents, administrators and teachers need to be shown evidence of yoga's value, benefits and importance to student learning and classroom climate.

Teachers feel that they must be a sort of yoga expert to be able to explain and justify why they are using yoga techniques in the classroom to parents and administrators. However, this means time and money in order to become an expert or at least knowledgeable. The participants felt



that it needs to be proven that the use of yoga and yoga techniques in the classroom is not wasting precious time, that it will not cost extra money and will not interfere with academics (Addenda O, F, D, and G). "I believe this is new and will be misunderstood and difficult to apply, especially with parents. They will feel that this time might be wasted and it is not part of the curriculum and not good enough to help students" (Addendum G, p. 245).

One way to convince parents, teachers and administrators is to show them evidence from studies conducted with regard to yoga and children and yoga and schools. Another way is to bring in a yoga specialist, such as an instructor, to speak to the community about yoga and answer questions as an expert. The participants felt these were ideas that could help sway the minds of the school community to be in favour of yoga and yoga techniques (Addenda D, E, H, and G). "Just tell them what it's all about I think it'll, it – will go," (Addendum F, p. 239) – meaning give out the information, provide parents and administrators with the knowledge and understanding needed, and they will support the integration of yoga techniques into the classroom.

Teachers agreed that parents would be the hardest to convince, but also that parents were crucial. "Just as you have to train the teachers, you must teach the parents. You need the parents to understand why yoga techniques, why yoga, and if they believe in it they will support you. There must be a school and home connection – the two must work together; this is why parents are so important" (Addendum G, p. 246). Parents are believed to be the least educated about yoga and informational meetings were suggested (Addenda P, O, H, Q, E, and G). "I think you must educate the parents" (Addendum E, p. 233).

4.10.3 Discussion of Theme 2: Lack of understanding (barrier)

The importance of teacher training with regard to concepts other than yoga has been documented in past research. Studies have found that teachers need to feel prepared in order to be successful (Snoeck & Struyf, 2012). Breslin et al. (2008) explained that if a teacher does not understand or value the curriculum, does not have resources or training, or is not confident



in their knowledge and abilities, they will struggle to implement a new curriculum or activities in their classroom. Much has been written about pre-service training, in-service training and professional development for teachers. Research has found that the training teachers receive both before and after starting their teaching career is essential to their confidence as a teacher (Gürgür, 2012). Student achievement and the quality of teaching has been linked to teachers' preparedness or training (Darling-Hammond, 2000; Roofe & Miller, 2013). These studies focus primarily on preparing teachers teaching academics and classroom management; however, teachers' need to be trained in order to feel confident; this can be applied to yoga as well as academics in the classroom (Roofe & Miller, 2013; Street & Stang, 2009). Studies found that teachers felt better prepared, more confident and that students performed better when teachers were prepared and trained (Gürgür, 2012; Leland, 2013; Roofe & Miller, 2013; Street & Stang, 2009). Nundy, Dillon and Dowd (2009) found that the effectiveness of teaching varied based on teachers' confidence. This was found to be true, not only for academics but for outdoor learning as well, suggesting that the same could be true for yoga (Nundy et al., 2009). Dierking and Fox's 2012 study emphasises the importance of teacher training and teacher confidence, and explains how the two are linked. As teacher knowledge increases, through training, their confidence increases, "which seems to link directly to their [teachers'] feelings of being able to make decisions and conduct classes in ways to better help their students" (Dierking & Fox, 2012, p. 140).

Castleman (2002) would agree with these teachers' feelings on the subject of training. He researched Sanchez's incorporation of yoga into San Francisco schools, which many classified as low income, difficult and rough schools. To get the programme up and running yoga training courses were offered for teachers and the programme then took off. Training the teachers was seen as an integral part because the schools could not afford to pay for yoga specialists to come in and teach yoga each day. Linking to theme 1, *religious concerns*, Sanchez was not the first to attempt to introduce yoga into San Francisco schools; however, "those who went before didn't get far because they were viewed as 'too spiritual, too religious'" (Castleman, 2002, p. 92). Therefore, not only do teachers need to be trained but they need to be trained in a way that



will fit into the school community's belief systems. The culture of the school is important to understand when implanting new ideas, as Castleman (2002) suggests. Bronfenbrenner's (1977, 1979, 1994) Ecological Systems Theory supports this idea by showing how all systems impact each other and the individual. Teachers' lack of understanding in relation to yoga appears to be impacted by their belief or understanding of what the cultures they live and work in believe. In this way we can see how the macrosystem can have an impact on the mircosystem as well as the exosystem.

The focus of this study was on yoga techniques being integrated in the classroom, not the school community; previous literature focused more on how yoga could be incorporated into the school community. The literature suggests that yoga and yoga techniques can be implemented as part of a physical education programme, as this lends itself to an easy transition for yoga or the use of yoga techniques at school (Toscano & Clemente 2008; Stanec et al., 2010). Yoga as an aspect of the physical education curriculum in the United States is becoming more common (Castleman, 2002; Slovacke et al., 2003; Tummers, 2004). Stanec et al. (2010) suggest five different ways in which yoga and yoga techniques can be incorporated into a school community: warm-up or cool-down activities, a physical education unit, during lunch or as after school programmes, through school counsellors, for staff to practise before or after school. These suggestions are ways to incorporate yoga and yoga techniques into the school community, but they do not assist teachers with the integration of yoga techniques into the classroom.

Slovacke et al. (2003) conducted a study where students practised yoga as part of a yoga class, with a yoga teacher. The students were not in their regular classroom, but this was a part of the school day. Slovacke et al.'s (2003) study shows various benefits of yoga and yoga techniques and gives an idea of ways to incorporate yoga into a school setting similar to those previously mentioned, but again not in the classroom itself. Most schools that offer yoga offer it as a part of the physical education curriculum or as an after school activity (Castleman, 2002; Nelson, 2003; Stanec et al., 2010; Williamson, 2012). This contributes to our theoretical knowledge



about how best to implement changes in the classroom routine and therefore influence classroom climate.

4.11 Theme 3: Time constraints (barrier)

The theme *time constraints* refers to teachers' feelings that they do not have enough time in the day to incorporate yoga techniques into the classroom and still be able to meet the other demands or requirements of their job. The theme *time constraints* fits into the microsystem where school falls; however, it also fits into the macrosystem because teachers are feeling the pressure from the school culture and possibly their culture (Bronfenbrenner, 1977, 1979, 1994). Teachers feel pressured to complete academic tasks and make it through the curriculum. They feel overwhelmed by the needs of students and working to ensure all students succeed. Teachers believe that they need to be able to justify their choice to administrators and parents as to why they are taking time out of the day to practise yoga techniques when they could be teaching academics (Blanchard et al., 2013; Dwyer et al., 2003; McGregor, 1999; Tower G. & Tower J., 1996).

The chart below explains the inclusion and exclusion indicators for theme 3 for the subthemes and categories (Charmaz, 2000, 2006; Merriam, 1998).

<u>Theme 3: Time constraints</u>		
Subthemes and categories	Inclusion indicators	Exclusion indicators
Subtheme 1: Where to fit in the day	This subtheme includes factors relating to teachers' feelings that academics must come first.	
Category 1: When under pressure, 'extras' are the first to go.	This category includes data related to teachers' beliefs that when the day is too busy and there are too many things to complete, 'extras' like yoga techniques, recess and closing circle will be left out.	This category excludes feelings of pressure for parents and administrators.
Category 2:	This category includes data	This category excludes feelings



New all the time	related to teachers feeling they constantly need to be learning new information.	of pressure for parents and administrators.
Subtheme 2: Curriculum and pressure	This subthemes includes teachers' feelings of pressure from parents and administrator to complete the curriculum and ensure students do well on assessments.	
Category 1: Pressure from parents	This category includes data related to teachers' feelings of pressure from parents to complete the curriculum and ensure students do well on assessments.	This category excludes pressure from administrators to get through the curriculum.
Category 2: Pressure from administrators	This category includes data related to teachers feeling pressure from administrators to complete curriculum units and justify their decision for teaching items included in the curriculum.	This category excludes feelings of pressure from parents.

The theme *time constraints* explores teachers' feelings that they are very busy and have a curriculum they must complete; they are not sure there is time for anything else in the teaching day. "I do know that a lot of teachers feel pressure to get through what they need to teach. Our parents expect a certain quality of education and for certain things to be covered each year. It does add up" (Addendum D, p. 227). Teachers feel overwhelmed by the amount that needs to taught and what needs to get done each year. They are constantly having to find time to learn the new curriculum and to stay on top of the education trends and reforms: "we have too many things going on right now, and too many different rules, and too many teachers are, are, I think, are just full of new concepts coming at us" (Addendum M, p. 291). Adding a new curriculum or changing a curriculum adds stress to teachers, as they feel pressured as to time to learn the new curriculum and fit it into the day (Blanchard et al., 2013).



4.11.1 Subtheme 1: Where to fit in the day?

This subtheme includes participants' perceptions about not having enough time in the day to accomplish all the tasks they have to, and falls into both the micro- and macrosystem (Bronfenbrenner, 1977, 1979, 1994). Not only do teachers need to plan and teach lessons, assess, work with parents and monitor kids, but they must find time to learn a new curriculum and follow education trends and reforms – and this is only a tiny list of all that must be done by teachers (Bowers, 2004). "Where does the time come from?" (Addendum M, p. 290). Teachers feel that they "are being bombarded by new curriculum, new things we have to teach and parents thinking we should be handling more of the teaching of emotions and social skills to their kids, and it just never ends. The pressure to get through the materials even in elementary is intense" (Addendum M, p. 290). Once this pressure mounts, teachers do not feel as if they have time for yoga techniques in the classroom, as they can barely find the time to teach the materials in the curriculum, "and there's not enough time" (Addendum M, p. 302). Teachers believe yoga techniques would be beneficial and have tried similar ideas before to help with classroom management and to help kids learn better, but when time is tight yoga will be one of the first items to be dropped (Addenda O and D).

"As a teacher, if you have to, if something's gonna take a long time to do it, you're never gonna do it. So it needs to be a simple thing" (Addendum F, p. 243). When discussing how to implement it, it was agreed that the exercises must be simple, straightforward and not take up too much time, "otherwise it would never happen. We have too much to teach and too much to do. If it is not built into the day, it won't happen. To be honest, even if I have a set time, if I feel really busy or really like we need to get stuff done or through something, I would not do yoga with the kids. I would just do what needs to get done" (Addendum E, p. 243). It seems that it is about priorities. The teachers felt that the administrators' and parents' priorities were getting through the curriculum and doing well on tests; yoga and yoga techniques would not be seen as a priority. As explained by one teacher, "it goes back to the priorities of the school" (Addendum M, p. 301). The teachers agreed that when they feel pressured, the first things to go are the 'extras' like yoga (and yoga techniques) — all the emotional things that are not



academic in nature (Addendum M). Teachers need to do what is asked of them by parents and administrators. Yoga techniques are not a part of the curriculum; therefore time is an issue. "I think it's the time, too. I think also the parents that would have a really major, a big issue with it, are the ones who are very academically driven" (Addendum M, p. 295).

The teachers were supportive of yoga techniques in the classroom as an idea; they were simply worried about where they would get the time during the day to implement it. "I never know how to get to do everything, so this would have to be quick and easy, and even then I wonder if I would get to it" (Addendum F, p. 243). For the teachers to feel they could readily incorporate yoga techniques into the classroom they need to know the logistics, and the amount of time the yoga techniques would take was a major hurdle. "I would have to see how it fit into the day and how much time it takes. We have a lot to do each day" (Addendum N, p. 307). "I'm all for it [yoga]. If there is enough time in the day" (Addendum F, p. 243).

4.11.2 Subtheme 2: Curriculum and pressure

The subtheme *curriculum and pressure* focuses on teachers' perceptions of the pressure they have to teach the curriculum. This subtheme falls within the micro- and macrosystems because teachers may be feeling pressure from the school culture and possibly the culture they live in (Bronfenbrenner, 1977, 1979, 1994). A large part of teacher stress seems to come from being unable to manage students and time. As one teacher explained, "We have a lot of pressure to get the kids ready for grade 1 and yoga takes time out of our day" (Addendum Q, p. 324). Teachers appear to worry about being able to justify time spent in class that is not spent on academics. "I think the issue is that parents will feel that it is not important and is a waste of time, it is not a part of the curriculum" (Addendum G, p. 246).

Ultimately, the teachers are not sure they have enough time in the day for yoga techniques and everything that must be taught and completed. When one teacher was asked whether she thought teachers would be able to find time to use yoga techniques in the classroom, her honest answer was, "Yikes, we have a very busy schedule ... they might have time, but I think



some might be too lazy to do it. It is something new and they have to learn it and they may not be 100% convinced it will work, so, so, so some yes will make it work, and some will maybe not" (Addendum Q, p. 289).

4.11.3 Discussion of Theme 3: Time constraints (barrier)

Teachers from this study suggested that they would need support from administrators, training and time, in order to integrate yoga techniques into the classroom routine. These three ideas were found in previous studies conducted relating to the implementation of a new curriculum. Both the micro- and macrosystem impact the theme *time constraints*, because the perceived constraint felt by the participants come from within both the school and the outside culture (Bronfenbrenner, 1977, 1979, 1994).

Tower and Tower (1996) found that the principal was key to the successful implementation of a new curriculum. Not only was the principal's support needed but the principal also need to be trained in and have knowledge about the new curriculum. The principal is the one who can drive the change; this support is critical (McGregor, 1999). In previous research, teachers stated that they felt that students needed more physical activities, especially in elementary. However, they struggled to find a way to bring this change about (Dwyer et al., 2003). The major barriers they saw were the low priority physical education and physical activities have been given by the school, and the lack of infrastructure (Dwyer et al., 2003).

Blanchard, Osborne, Wallwork and Harris's study (2013) examined teachers' opinions about the implementation of a new teaching style. The study found that teachers were unlikely to try something new if they were not comfortable with it, even when pushed by administration — suggesting that training is important. They also found that teachers commented repeatedly on time constrains, lack of resources and lack of preparation time. "We [teachers] feel the need to push through the curriculum" (Blanchard et al., 2013, p. 40). This sentiment was shared by teachers from this study and is not uncommon. The question became: are we teaching for content or value? What is more important: rushing through a prescribed curriculum or ensuring



students are prepared to enter society and understand the content? This study does not focus on these concerns; they merely came up in the course of analysis and warrant mentioning. Teachers are under an immense amount of stress and pressure and are willing to try something that could help their students (Botwick, 2007; Bowers, 2004; Rieg, Paquette & Chen, 2007; Yong & Yue, 2008). Modern society creates more stress for everyone, teachers and students alike (Botwick, 2007; Bowers, 2004; Rieg et al., 2007; Stueck & Gloeckner, 2005; Toscano & Clemente, 2008; Yong & Yue, 2008). Teachers feel pressured; they need time to get through the curriculum. Curricula are constantly changing and being reformed, and teachers have to adapt (Prestly, 2011). As Bower puts it, teachers who last are survivors, they know how to change with the times and do what needs to be done when it needs to be done (Bowers, 2004).

The data showed that incorporating yoga techniques into the classroom would be supported by most teachers, once they were shown the evidence of yoga's many benefits; previous research also supports this (Addenda F, P, H, Q, E, D, O, R; Beart & Lessing, 2013; Breslin et al., 2008; Castleman, 2002; Kirp, 2014; Lawson, Cox & Blackwell, 2012; Nelson, 2003; Slovacke et al., Stanec et al., 2010; 2003; Toscano & Clemente, 2008; Tummers, 2004; Williamson, 2012;. However, yoga techniques are one more thing that needs to be fit into the day, and when teachers are asked to start using a new curriculum, which yoga could be considered as, it is something new to teachers. They would want to know: what resources are needed, how will it fit into my daily schedule, what will the impact be on me and my students, and what are the outcomes expected to be? (Breslin et al., 2008). This relates back to theme 2, *lack of understanding*, in particular where teachers feel they need training. They need to be trained and feel comfortable, so they know how much time is needed. This way they can plan the daily schedule of their classroom and be assured they will have time to teach what is needed from the curriculum.

Teachers have tallied the hours they would need to fulfill all the needs of their students, plus plan and teach lessons and do administrative work at close to 150 hours a week (Glieberman, 2007). There is simply not enough time in the day to get to all the students, teach the



curriculum and do everything else required, which creates pressure for teachers (Fitzgerald & Waldrip, 2004a; 2004b; Gleiberman, 2007; Rodia, 2004). In order for any new curriculum or programme to be successfully integrated, teachers need to believe in the value of it. If teachers do not see the value, they will not find a way to fit it into their day (Breslin et al., 2008). The pressure keeps adding up as teachers are told what students need and what has to be taught. Teachers need to commit to and value what they teach; this is the key ingredient to the successful implementation of new concepts or curricula: teacher support – and it means teachers need to see the value and find the time (Day et al., 2005). Yoga and yoga techniques are no different; if teachers do not see the value they will not fit it into their day; there are too many other important items that have to get accomplished.

4.12 Theme 4: Education is needed (solution)

Theme 4, education is needed, refers to the participants' perceptions that to overcome the major barriers to incorporating yoga techniques into the classroom, education is the key. The participants believed that not only did teachers need to be trained and educated with regard to yoga and yoga techniques, but parents and administrators needed education on the subject as well. The concept of a solution would appear to need to come from all four systems, otherwise its impact may not be successful as one system would not respond or fit (Bronfenbrenner, 1977, 1979, 1994). This theme focuses on educating teachers, parents and administrators, which illustrates the importance of including all systems in a solution. By education teachers, parents and administrators, all systems are involved and a part of the integration of yoga techniques into the classroom.

The chart below explains the inclusion and exclusion indicators for theme 1 and for the subthemes and categories (Charmaz, 2000, 2006; Merriam, 1998).

Theme 4: Education is needed		
Subthemes and categories	Inclusion indicators	Exclusion indicators
Theme 4:	This subtheme includes factors relating to the participants'	
To overcome the barriers	perceptions that the way to incorporate yoga into the classroom is	



education is necessary	to educate parents, administrators and teachers on the benefits of yoga and yoga techniques.	
Category 1: Educate teachers	This category includes data related to educating teachers on the benefits of yoga and yoga techniques for students.	This category excludes data relating to educating administrators and parents.
Category 2: Education administrators	This category includes data related to educating administrators on the benefits of yoga and yoga techniques for students.	This category excludes data relating to teachers and parents.
Category 3: Educate parents	This category includes data related to educating parents on the benefits of yoga and yoga techniques for students.	This category excludes data relating to teachers and administrators.

In the theme, education is needed, the participants came up with as a solution to the barriers to the integration of yoga techniques into the classroom. Participants agreed that the way to overcome the barriers (religious concerns, lack of understanding, and time constraints) to incorporating yoga techniques into the classroom is to educate teachers, parents and administrators about yoga and yoga techniques. It was also agreed that parents are a critical step. The participants believed that teachers will have the least resistance and be the easiest to convince about the merits of integrating yoga techniques into the classroom. Their main concerns were about time and making sure they understand how to incorporate yoga techniques into the classroom logistically. However, the participants felt that parents would be the ones who will be the hardest to convince, but once the parents are convinced, convincing the administrators should be easy. Another thought was to try to convince the administration first as they would then support teachers in dealing with the parents (Addenda D, E, F, G, H, O, P, S). According to the participants, education is the key, knowledge is power, and once people learn about the benefits of yoga and yoga techniques and understand that it is not a religion, they will be open to the idea of yoga techniques being used in the classroom, which will allow the students to benefit. I propose that support from administration, parents and the community, and awareness of yoga and education are linked. The concepts are interrelated and



overlap. The community may be unwilling to support yoga techniques in the classroom because they are unaware or uneducated on the subject. Likewise, to introduce yoga techniques into the classroom without the support of the community, awareness about yoga and proper education, will prove to be difficult. Support, awareness and education are connected and all three should be in place for yoga techniques to be integrated into the classroom routine.

4.12.1 Subtheme 1: Educate teachers

The participants agreed that teachers would provide the least resistance as teachers are used to trying new strategies for improving classroom climate and student learning. It can be presumed that teachers want what is best for their students. "I think teachers might be easier to convince because you could show them studies and things, and if you can show teachers how good something is for their kids they will go for it. But at first they might think you are wasting their time and making them learn, ahhh something new" (Addendum Q, p. 324). As several teachers and one administrator explained, teachers are frustrated and want to find ways to help their students learn. They are struggling with all the needs in their classroom and need ways to support their diverse student populations (Addenda D, O, Q). Even if teachers will show the least resistance, it is crucial to have the teachers' support, as one participant explained. If a teacher is passionate about something, the students will be too, and that passion can be passed on to parents and administrators (Addendum G). If a teacher does not believe in what s/he is teaching, the students will sense it and they will not be passionate about it either. This is why teachers must be trained, educated and be in support of yoga in the classroom. One might even consider getting in a professional yoga instructor to give a class to everyone and then discuss the benefits. "I think once you get some people on board they will be able to help you get the rest on board. The hard part is getting a few to start" (Addendum Q, p. 324).

4.12.2 Subtheme 2: Educate parents

Parents were seen as the hardest group to convince about the integration of yoga into the classroom. "It might be longer for the parents than it would be for the teachers" (Addendum H,



p. 249), one participant explained. This idea came up in several interviews and focus groups. The reason was that teachers are more accustomed to having new ideas and concepts about education thrust upon them, and they are thus usually willing to try something new if data suggests that it will help their students (Addenda D, G, H, O). With parents on the other hand, "you're gonna have to meet them on their ground" (Addendum H, p. 248); in other words, you will have to think about their perspectives, as they are worried about what their children are being exposed to and expect schools to have similar views as when they were in school. Therefore there will "be a LOT of education" needed (Addendum H, p. 249) in order for parents to accept, understand and support the integration of yoga into the classroom.

Several suggestions came up during the research process. Some participants thought it would be useful to have a parent night where the parents were able to practise the yoga techniques that would be integrated into the classroom. Parents could be educated about the yoga techniques at an informational meeting or during a parent conference, and information could be sent home about yoga and yoga techniques in the classroom. One idea the participants suggested was to target certain kids who would benefit the most from yoga, and discuss yoga with those parents first (Addendum H). The idea of an information meeting was looked upon favourably, and most participants felt that parents would come. Some felt that more than one meeting might be needed to eventually include all the parents and that this would help parents accept the idea of yoga in the classroom (Addenda F, P). If you have parent evenings, you are able to "tell the parents and that way you include them" (Addendum E, p. 198). According to the participants, the parents do not know anything about yoga and will, as such, have to be taught (Addendum F). "The more you communicate with the parents, the better, and the more you bring in a specialist to do it," the more creditability is provided (Addendum D, p. 226). The key is to "speak to the parents from their perspective"; they want to know that their children are in good hands and that teachers are doing what is best, so you have to show them the evidence by providing training and reasons why you are incorporating yoga (Addendum D, p. 226).



A key aspect that was agreed on was that patience would be needed and that one "will have to explain it very well" (Addendum F, p. 239). Ultimately the participants agreed that given enough time, and if you tell them (the parents) about yoga and yoga techniques and give them time to adjust and evidence to support it, they will probably become more accepting (Addendum F). It was also important to give parents a choice for their child, and to be open about the use of yoga. If a parent, after all the evidence and information, still do not want their child to be exposed to yoga, then that child should be allowed to run errands while yoga is being practised so that the parents' wishes are respected (Addendum O).

4.12.3 Subtheme 3: Educate administrators

Teachers felt that if one can convince the principles and administrators, one would be able to get the support needed from the parents (Addendum P). The teachers believed that "they [parents and admin] are not very well educated" about yoga in general (Addendum E, p. 232), and that evidence should therefore be provided to show why yoga and yoga techniques are beneficial (Addendum D). Some teachers felt that the administrators would be hard to convince because they are conservative and do not want to upset the parents. They felt that it would be important to keep the administration informed about everything that is done in terms of yoga and why, and to provide evidence of the many benefits of yoga. However, they felt that the idea of yoga techniques being in the class would be supported as it would be seen in terms of what is best for the students (Addenda F and P). The participants thought that one way to start integrating yoga techniques into the classroom would be to introduce yoga as an afterschool activity; this would serve as a gentle introduction to the concept of yoga at school to both the administration and parents (Addendum E). The participants agreed that in order to be able to incorporate yoga techniques into the classroom routine, teachers would need the support of the administration; this, they concluded, was key. Without the administration's support a teacher would have a difficult time defending their case to parents. The participants also agreed that integrating yoga techniques into a private school would be much easier than into a public school (Addenda D, E, F, H, O, P, S).



4.12.4 Discussion of Theme 4: Education is needed (solution)

Previous research supports the notion that teachers would be supportive of yoga techniques being integrated into the classroom. Nelson (2003) wrote about her experiences with the integration of yoga into her classroom and found it to help her students focus and concentrate. The benefits of yoga have been shown in numerous studies and can be used to educate and convince teachers about the merits of yoga (Castleman, 2002; Jensen & Kenny, 2004; Kirp, 2014; Peck et al., 2005; Slovacke et al., 2003; Stanec et al., 2010; Williamson, 2012). Previous research helps to illustrate to teachers how valuable yoga and yoga techniques can be in the classroom. When participants were asked if they would have any issues with the incorporation of yoga techniques into their classrooms or if they thought most teachers would, the consensus was that once teachers had seen evidence for the benefits of yoga and had been trained on how to incorporate yoga techniques into the classroom, there would be little if any resistance (Addenda D, E, F, G, H, O, P, S). The participants felt that the way to overcome resistance to yoga was to start small and show evidence; maybe even get experts or professionals in and educate, educate, educate! "I think the best way to start would be by educating teachers, parents and children about the benefits of yoga in general" Addendum Q, p. 324).

As discussed in section 4.9.1.2 which deals with curriculum and pressure, in order for a new programme to be integrated into the classroom or schools, teachers need to understand and value it. "When asked to implement a new curriculum, most teachers want to know: How do I work it into my planning and daily schedule? How will it impact my students and me? What are the expected outcomes?" (Breslin et al., 2008, p. 430). For these questions to be answered, teachers need to be educated and trained. In section 4.8.1 the lack of understanding and the importance of teacher training was discussed. Training teachers relates to educating teachers as the two are closely linked. Papier (2010) argues for the importance of teacher education and training with regard to vocational teaching in South Africa, explaining that teachers need to not only to know what they teaching, but also to understand it and see the value in it. Teachers are the ones in the classroom, the ones who connect students, parents and administrators; they are the ones actually integrating yoga techniques and must, therefore, be educated about it.



Teachers need knowledge and understanding, and need to be educated about the programme they are to use; this applies to yoga as well as academic aspects (Dierking & Fox, 2012).

Past research suggests that parent involvement and support is important when it comes to implementing changes in schools and to student education (Dor, 2012; Mo & Singh, 2008). Parental involvement in academic and school life increases students' academic success, selfconfidence and motivation to study, and decreases discipline issues (Akos, 2005; Dor, 2012; Epstein, 2008; Koutrouba et al., 2009). Much of the research conducted on parent involvement focused on ways to increase involvement in secondary schools. These studies explained that parents tend to be involved during the primary school years and support the teacher, but that parent involvement decreases as students age. Students achieve the best results when they have an extended network of support. Research emphasises the important role played by parents in their children's education and how involvement needs to remain constant (Dor, 2012; Lorardo, Giordano, Longmore & Manning, 2009; Mo & Singh, 2008). This study supports past research that parent involvement and support are important at school. As explained, teachers from this study felt that they needed parents' support to integrate yoga techniques into the classroom; i.e. the home-to-school connection is believed to be essential (Addenda D, F, H, O and P). Past research agrees that parental support at school is essential (Akos, 2005; Dor, 2012; Epstein, 2008; Koutrouba et al., 2009; Lorardo et al., 2009; Mo & Singh, 2008).

Support is an essential component to teacher success (Dierking & Fox, 2012; Schlichte et al., 2005; Watkins, 2005). Previous literature confirms the idea that teachers need support from the administration in order to succeed in implementing new ideas or curricula. Principals must work to retain their teachers and prevent burnout, and this is often done by providing support and helping to create confidence (Schlichte et al., 2005; Watkins, 2005). Dierking and Fox (2012) found that teachers needed support from within the school, thus from the administration, their department and their grade officials in order to be successful. When participants from the various systems, teachers, parents and administrators, are all educated about yoga and yoga



techniques the various systems can hopefully work together and support each other in the integration of yoga techniques into the classroom (Bronfenbrenner, 1977, 1979, 1994).

4.13 Discussion of Ecology System Theory linked to themes

Below is a diagram showing the Ecology System Theory linked to the individual themes which emerged throughout the study. The diagram helps to illustrate how yoga techniques and yoga can impact students, classroom climate, and also other factors outside of the classroom which influence the implementation of yoga techniques into the classroom. As discussed throughout this chapter, various themes fall into different systems of Bronfenbrenner's Ecological Systems Theory (Bronfenbrenner, 1977, 1979, 1994). This study focused on the microsystem and therefore data was collected and analysed for this system. However, as explained, this does not mean other systems were not involved; all systems appear to impact the integration of yoga techniques into the classroom.



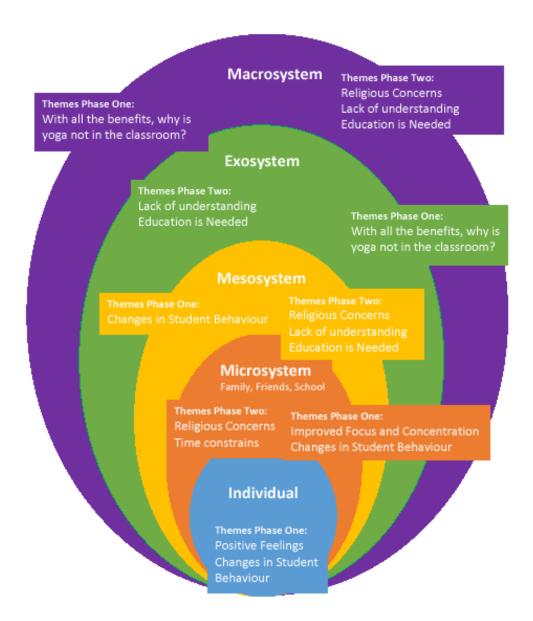


Figure 4.3 Diagram of the Ecological Systems Theory with themes integrated (Adapted from reading Bronfenbrenner, 1977, 1979, 1994)

4.14 Links to Discourse and Critical Theory

The links to discourse and critical theory only emerged towards the end of the data analysis process. In hindsight it would have been beneficial to have been aware of these links from the start so as to discuss them as part of the research approach. Religion and education appear to hold cultural power in South Africa as shown in the statements made by participants in this



study (Addenda D, F, H, M, N and O). Religion is heavily embedded in many South African schools as can be seen from recent issues in the news surrounding religion in South African public schools (SAPA, 2014; Thelwell, 2014). Traditionally, South Africa's public schools were Christian in nature and this has only recently begun to change (Mawdsley et al., 2008). Today South Africa's public schools are still Christian in nature (Mawdsley et al., 2008), and given this fact, it is understandable that religion appears to be the biggest barrier to the integration of yoga into the classroom routine (Addenda D, F, H, M, N and O). This leads to some questions: 1) Why is South Africa not creating a culture of acceptance?; 2) Why is yoga seen as such a threat?; 3) What is read into the word "yoga" that it is met with so much resistance?

Critical theory focuses on reflectively critiquing society and culture with the aim to bring about change and to uncover embedded cultural assumptions which are commonly accepted (Murphy et al., 2010; Peters et al., 2003). From a critical theory perspective, a question to ask might be: If religion is a major barrier to the implementation of yoga into the classroom, what does this say about the system of education in South Africa? And what does this further reveal about the way in which the students are educated? Why is South Africa so strongly opposed to yoga simply because it is perceived to be a form of religion? What perceived power does yoga hold? Research has shown the many and various benefits that yoga can provide to students and to learning (Adelman & Taylor, 1997; Allington, 1975; Anderson et al., 2004; Benavides & Caballero, 2009; Bostrom & Lassen, 2006; Cheesbrough, Woodhouse, & Griffiths, 2006; Finger, 2000; Gillen et al., 2011; Herrenkohl & Metl, 2010; Jain et al., 1991; Lawson, Morgan, 2011; Peck et al., 2005; Platania-Solazzo et al., 1992; Slovacke, 2003; Telles & Srinivas 1998; Toscano & Clemenete, 2008; Tummers, 2004; Young et al., 2009;). Therefore, why is religion seen as such a barrier? Yoga itself it not a religion (Iyengar, 1976; Saraswati, 2008). As critical theory suggests, it is difficult to understand one's own cultural beliefs and they might influence actions as we are immersed in them (Hinchey, 2010). Therefore, the teachers from this study may be able explain that yoga will be difficult to introduce into the school due to religion, but they are unable to explain why. It has been accepted as part of their cultures that yoga is a religion and



that yoga is contradictory to the accepted practised religion in their culture (Addenda D, F, H, M, N and O).

Looking at the discursive power of embedded beliefs the word "yoga" and even "meditation" appear to almost threaten some religious people in South Africa. Discourse focuses on language and what or how language holds influence over culture. The cultural beliefs surrounding yoga suggest that South Africans might find yoga disconcerting. It appears to be an assumed belief, or almost taken for granted, that yoga is religious in nature and therefore something that children should not be exposed to. What is it about this word "yoga" that holds such strong assumed beliefs?

Cultural discourse analysis studies the role between language and power, and takes into account the role that history may play (Wood & Kroger, 2000). In terms of the integration of yoga into the classroom routine, there appears to be some concerns about the influential power that yoga may have on students. As discussed briefly, it seems as if religion holds power in many of the institutions in South Africa, such as education, over what children are exposed to (as, of course, do parents). Whereas yoga would otherwise appear powerless, the meaning of the word "yoga" is seen as intrusive in classrooms and perceived as not belonging to the classroom routine (Addenda D, F, H, M, N and O). As previously stated, this was not the main focus of this study; however, explaining yoga in the classroom through the lens of critical theory and discourse analysis is worth mentioning. Throughout the analysing process, the strong opposition to yoga based on religion encouraged me as a researcher to explore the theme through the lens of critical theory and discourse analysis.

4.15 Conclusion

In conclusion, past research has shown that yoga and yoga techniques have great potential to help create a classroom climate that is conducive to learning. However, it would seem that there are several barriers which limit the incorporation of yoga techniques into the classroom. These possible perceived barriers include religious concerns, lack of understanding, and time



constraints. A solution to these perceived barriers may be education. Teachers feel that yoga techniques would be beneficial in classroom. However, before this can take place, support is needed from the administration and parents, as well as proper training with regard to yoga and yoga techniques. In order to gain support from the administration and parents, these two groups need to be educated themselves on the benefits of yoga and yoga techniques for students in the classroom. This study adds to the existing theoretical knowledge about classroom climate and ways in which teachers can influence classroom climate through the use of yoga techniques.

In the next chapter I summarise my findings and give suggestions as to the way forward. I also discuss the limitations of this study and revisit my research questions. Finally, I reflect on my journey as a researcher and make suggestions for further research.





Chapter 5: Conclusions



Chapter 5: Conclusions

5.1 Introduction

In the previous chapters, the research was introduced, explained and justified. The rationale, methodology, data collection, data analysis, paradigmatic perspective, conceptual framework, related literature and ethical principles were explained and discussed. In this chapter, keeping in mind the interpretivist approach, the aim is not to give definitive answers to the research questions, but rather to give insights into and reflect on the knowledge that was acquired throughout the research process, and then link this knowledge to the research questions. While looking to the future to see what more could be studied and learned with regard to the integration of yoga techniques into the classroom routine, I end this chapter with suggestions for further research and a final reflection on what I have I have gained throughout the process.

Educators, I argue, have a responsibility to not only teach students academic work, but also to teach them how to live up to their full potential. Conroy et al. (2009) echo my view when they state that teachers need to be able to teach their students how to focus their attention and ways to cope with stress. These are skills necessary to succeed. It has been argued in this study that yoga and yoga techniques have been shown to help students reduce stress levels and help focus their attention, thus allowing students to learn more efficiently (Adams & Puig, 2008; Barnes & Nagarkar, 1989; Betts & Betts, 2006; Cheesbrough et al., 2006; Coulter-Parker, 2003; Mackenzie, 2010; Manocha et al., 2005; Milligan, 2006; Peck et al., 2005). This study gave insight into how yoga techniques could possibly be integrated into the classroom routine, and also what barriers might exist to the incorporation of yoga techniques into the classroom routine and possible ways of overcoming these barriers. This insight was gained through an understanding of teachers' beliefs, perceptions and opinions about the incorporation of yoga techniques into the classroom.



5.2 Overview of preceding chapters

5.2.1 Chapter 1: Introduction

Chapter 1 introduces this study and provides clarification for the focus, aims and purpose of the research. The purpose of the study was to gain insight into teachers' perceptions about the incorporation of yoga techniques into the classroom routine, in order to contribute to an understanding of how yoga techniques can be integrated into the classroom.

The main research question:

 How does insight into teachers' perceptions about yoga aid the understanding of the incorporation of yoga into the classroom?

Subquestion relevant to the research:

 What challenges do (South African) educators face in terms of incorporating yoga into the classroom, and how can these be addressed?

5.2.2 Chapter 2: Literature review

Chapter 2 examines the existing literature on children, yoga, school and education in order to solidly place the study within an academic framework and ground the study in a context. The chapter illustrates the connection between yoga and improvement in concentration, focus and attention, and also shows how it can improve the classroom climate. This chapter also identifies where more research is needed, mainly with regard to South African schools and yoga, and asks why, if yoga has shown such promise with regard to learning and students, has it not been integrated into schools more readily?

5.2.3 Chapter 3: Methodology

Chapter 3 provided an explanation of the research methodology for this study which included data collection, analysis, paradigmatic perspective, ethical principles, and quality criteria.

Chapter 3 detailed this study as using an interpretivist approach and qualitative data principles.



This chapter explained how the data was analysed using thematic analysis, as well as the various sources of data collected and the two different phases of data collection used during the research process.

5.2.4 Chapter 4: Findings

In Chapter 4 the data collected was analysed and the findings were presented using thematic analysis. This analysis and discussion took place against the backdrop of current literature. Both phase 1 and phase 2 of data collection were analysed and the various themes that emerged were discussed with relation to current available literature.

5.3 Reflecting on the primary research question

5.3.1 How does insight into teachers' beliefs, perceptions and opinions about yoga aid the understanding of the incorporation of yoga into the classroom?

By gaining insight into teachers' perceptions of yoga, I was able to gain an understanding of what barriers and challenges exist in South Africa, and possibly other countries, to the incorporation of yoga techniques into the classroom routine. Teachers in this study had concerns about time and fitting everything into the day. However, none of the participants showed concern about learning something new, such as yoga techniques. They seemed to believe that if yoga and the use of yoga techniques was as beneficial as the data suggested it to be, then it would be worth the time (Addenda E, F, G, H, K, M, N, O and P).

This study provides knowledge about the possible preconceptions that teachers in South Africa may hold towards the implementation of yoga techniques into the classroom, and how these might be overcome. Past literature has focused on the numerous benefits of yoga and yoga techniques, and also on ways in which yoga can be incorporated into the school community (Castleman, 2002; Jain et al., 1991; Lawson, Cox & Blackwell, 2012; Platania-Solazzo et al., 1992; Telles et al., 1998; 1993; Slovacke et al., 2003; Stanec et al., 2010; Telles & Srinivas, 1998; Toscano & Clemente, 2008; Tummers, 2004). However, little has been discussed in relation to



ways to integrate yoga and yoga techniques into the classroom routine and what barriers might exist or how to overcome them. Teachers' beliefs about how best to incorporate yoga techniques and what barriers need to be overcome in order to do so are discussed in this study, adding to the existing knowledge about not only yoga, but also ways of introducing new tools or concepts to teachers.

The beliefs and perceptions of teachers, administrators and parents should most likely be addressed in order for yoga techniques to be successfully introduced into the classroom routine. The underlying belief systems and preconceptions about yoga seem to create resistance to the implementation of yoga techniques into the classroom. This leads me to conclude that perceptions and beliefs can influence the ease or complexity of the implementation of yoga techniques and possibly other concepts.

5.4 Revisiting the secondary research questions

5.4.1 What challenges do (South African) educators face in terms of incorporating yoga techniques into the classroom and how can these be addressed?

Teacher participants believed that there would be heavy resistance to yoga techniques being integrated in the classroom based on religious concerns in particular. They also felt that there would be, and is pressure from administrators and parents to teach the curriculum and not use up teaching time on integration of yoga techniques. In other words, they believed that for yoga techniques to be incorporated into the classroom, they would need to be able to justify the use of teaching time on yoga. This meant that they themselves would need to feel able to justify using yoga techniques in the classroom through the use of studies conducted, completed research, and by having acquired the knowledge and skills necessary to instruct yoga or incorporate yoga techniques in the classroom. The teachers felt that this would be possible, but only if they were given the knowledge and skills needed to do so. Teachers did not feel comfortable incorporating yoga techniques into the classroom without proper training themselves (Addenda E, F, G, H, K, M, N, O, and P).



The main challenges which emerged with regard to the incorporation of yoga techniques in the classroom were as follows (as discussed in Chapter 4):

- Religion
- Lack of training, understanding or experience
- Lack of time
- Need for support from administration, staff and parents

Participants from this study suggested that educators would most likely be generally accepting of the integration of yoga techniques into the classroom routine. If yoga techniques can help students to be better learners, to have less stress, be healthier and improve the quality of the classroom classmate, they are willing to try. The participants believed that educators would be mostly receptive to the yoga techniques in the classroom. They were curious about the details involved and personally did not have major concerns. One teacher participant felt that if her child were to practise yoga techniques in the classroom, she would want to be fully informed so that she could make an informed decision. She would not have wanted her child practising yoga without her consent, but she was not opposed to the idea (Addendum M, pp. 291-292). The biggest concern that educators appeared to have was: how parents and administrators might feel about yoga techniques being incorporated into the classroom. There were also concerns about their own personal lack of knowledge with regard to yoga in general.

The participants believed that educators would feel that the support of both the administration and parents is necessary in order to integrate yoga techniques into the classroom routine. They also believed that they would need to be given some kind of training in order to feel comfortable using yoga in their classrooms. The teachers participating in the study were all open to the idea of yoga techniques in the classroom as a concept, but felt that they needed support from the administration and parents for it to work.



5.5 Limitations of the study

It is important to know and understand the limitations of this study in order to assess and comprehend the value of the conclusions reached and the applicability of the study. The limitations of this study are limitations brought by the research design and access to participants. For example, a case study design does not lend itself to generalisabality (Stake, 1995); however, as was mentioned, generalisabality was not the aim of the study.

I acknowledge that in different contexts the study may have produced slightly different results. The transferability of this study relies heavily on the readers' ability to determine similarities under different circumstances. However, as stated in previous chapters, generalisation and transferability were not the major aims of this study. Rather, this study sought to gain an understanding and knowledge of yoga techniques as part of the classroom routine. The study focused on the South African context, and my goal was to enable the reader to reach conclusions for her-/himself based on the data analysed (Janesick, 2000; Patton, 2002). The aim of this study was to understand teachers' perceptions towards yoga techniques in the classroom.

5.5.1 Similar but different cultures

One limitation of this study is that I am from the United States of America, working with and collecting data from South Africans. This means that I came with my own background and culture that was different to those of the participants I was working with. It also meant that it took time to build a rapport. There is even a possibility that I might have missed cultural nuances, even though all the participants spoke the same language as I do.

During interviews and observations I made it clear that I was seeing things through the lens of someone from the United States of America. I took my time getting to know the participants and made use of prolonged engagement to build a rapport with the participants. I built trust over time and got to know the participants as individuals, allowing them to know and trust me in return. This hopefully allowed me to be able to understand the cultural differences and to



observe where these differences could lead to misinterpretation. I also employed the use of member checking to attempt to ensure that the true meaning of what was said was understood by me and reported accurately (Patton, 2000).

5.5.2 Participants from similar demographics

The teacher participants in this study were all Caucasian females from similar socio-economic backgrounds, with degrees in education. However, they were not all the same ethnicity or religion. This does limit the study to the perspectives of this specific demographic. I tried to interview male teachers but the schools I approached had only a few male teachers who declined to participate or were unavailable. The student participants were all enrolled at the same Montessori school, which means that their parents were exposed to Montessori ideas about education. Montessori promotes physical activities and emphasises the individuality of students. The students were ethnically diverse and most of their parents were open to the idea of yoga techniques in the classroom. One student was not allowed to participate based on religious reasons, which added support to the finding that religion could be a major barrier to the integration of yoga techniques into the classroom routine.

5.5.3 More accepting environment

I acknowledge that the Montessori school that participated, as well as the schools and teachers who participated in the focus groups and interviews, were more receptive to the idea of yoga techniques in the classroom, otherwise they would not have agreed to participate or would have required persuading. I recognise that inviting more teachers to participate in this study could have added more data. However, for a baseline study exploring yoga techniques in school, the Montessori context served as a rich environment to conduct the research.

5.6 Recommendations for future research

Further research needs to be conducted and could focus on how teachers can incorporate yoga techniques into their classroom routines, focusing on specific details, such as time of day,



location, classroom set-up, and creating yoga routines for the classroom teacher to be able to use and follow. Research involving teacher training could also be looked into as teachers felt that they needed training and knowledge about yoga in general. It would be helpful to know what kind of training, what knowledge in particular, and what teachers would be willing to give up for training. For example: would teachers give up free time or would they pay for training? It would also be advised to conduct further research with a wider demographic. Government schools in South Africa need to be consulted, both inside and outside of townships. Religious private schools and non-English medium schools should be consulted, as well as schools outside of South Africa. Finally, it would be beneficial to research parents' perceptions with relation to yoga and yoga techniques in the classroom. Parents are the ones who pay school fees and, as the participants in the study suggested, parents need to support yoga and yoga techniques in the classroom or it will most likely not happen.

Based on this study's findings, I suggest the following possible future research studies:

- This study found religion to be perceived as a major barrier to yoga in the classroom.
 Future studies could explore whether some religions are more resistant to yoga than others, and why, and also how to overcome resistance to yoga.
- The findings of the current study found that teachers felt that yoga training was needed in order to integrate yoga techniques into the classroom routine. Future studies could explore what kinds of training teachers feel they need and how much training.
- Future studies could implement yoga or yoga techniques into the classroom routine at different times throughout the day to see which times prove to be more effective and useful for the students and teachers.



- Teacher participants in this study were all Caucasian female teachers. A future study could possibly be conducted with participants from more diverse ethnic and religious backgrounds.
- Participants in this study were all educators or students. Possible future studies could be conducted with parent participants, working to understand how parents feel towards yoga techniques in the classroom.
- The present study was conducted with English-speaking participants only. Future studies could explore non-English speaking demographics.
- The current data was collected from private schools in Gauteng. I suggest that future research collect data from public as well as private schools from all over South Africa.
- Future research could look into the discursive power of the word "yoga", focusing on the embedded cultural beliefs.
- The present study found that the use of critical theory could, possibly, be applied to yoga integration, and possible future research could thus look further into this.

5.7 Findings as they relate to existing knowledge

Previous studies examined how yoga could possibly assist students with attention difficulties, as well as the benefits that yoga might have for children and students. Students who struggle with attention were found to benefit from yoga academically, behaviourally and socially (Betts & Betts, 2006; Peck et al., 2005; Powell et al., 2008). Research found that yoga has numerous benefits for children, ranging from improvements in strength and increased wellbeing to assistance with asthma (Benavides & Caballero, 2009; Cheesbrough, Woodhouse & Griffiths, 2006; Finger, 2000; Lawson et al., 2012; Toscano & Clemente, 2008; Salmon et al., 2009; Santangelo White, 2009). Students in this study found improvements in the way they felt physically and emotionally. They also expressed that they felt it was easier to study after



practising yoga techniques (Addenda L, R and S). Teacher participants in this study suggested that yoga helped the students prepare for lessons, focus for longer and calm down more efficiently (Addenda E, F, G, H, M and N).

This study sought to gain understanding relating to teachers' beliefs, perceptions and opinions about the incorporation of yoga techniques into the classroom. Insight into teachers' beliefs, perceptions and opinions about the incorporation of yoga techniques into the classroom has added to our knowledge about the use of yoga techniques in the classroom, challenges facing yoga techniques integration, and what barriers may need to be overcome. Teacher participants from this study provided insight into ways in which these barriers could possibly be overcome. The beliefs, perceptions and opinions about the incorporation of yoga techniques into the classroom could be used when looking at the integration of other concepts into the classroom such as: mindfulness, responsive classroom techniques or brain gym. The beliefs, perceptions and opinions educators hold toward yoga techniques into the classroom and the barriers that exist as well as ways to overcome them, could provide insight when attempting to integrate other new concepts and ideas into the classroom.

5.8 Silences and contradictions

The current study found there to be an absence of data relating to how cultures outside of India, the US and UK might feel about yoga techniques being used in the classroom. There were also silences pertaining to why there were negative embedded cultural beliefs about yoga and where these embedded cultural beliefs stem from. The benefits teachers might gain from yoga and yoga techniques were also absent in the data or analysis of this study. These silences led to some of the above suggestions for future research. Contradictions to existing knowledge were not found in this study at this time.

5.9 New insights



This study found that the main barriers to the implementing of yoga techniques into the classroom were religious concerns, time constraints, and lack of understanding. One possible solution suggested in this study was that education is needed, thus providing educators with a way forward as to the integration of yoga techniques into the classroom routine. Teachers felt that they needed support from administration and parents, suggesting that all the various systems involved at the school needed to provide support for the incorporation of yoga techniques into the classroom. The word "yoga" appeared to be an important barrier to the use of yoga techniques in the classroom. This study suggests that it might be important to consider using the term "mindfulness" instead of "yoga". Insights from this study can assist teachers with creating a classroom climate that is conducive to learning through the use of yoga techniques, thus contributing to existing knowledge on classroom climate and classroom management. This study provided insight into why yoga has not been implemented in classrooms in South Africa and how one might consider trying to start integrating yoga in the classroom. The main insights emerged on all systemic levels: administrations, parents and educators suggesting that multiple levels of influence are impacted by yoga techniques in the classroom. The microsystem appears to hold the most influence (Bronfenbrenner 1977, 1979, 1994). However, all levels appear to have an over influence yoga techniques being used in the classroom. For example, for teachers to use yoga techniques in the classroom they need to feel that administrators will support this decision, and for administrators to support yoga techniques in the classroom they need to believe it is beneficial and believe that parents will not object. This is where the perception of yoga as a religion and the hidden discourse the word "voga" holds appear to be powerful.

5.10 Concluding reflection

In concluding this research I would like to add a note about my personal journey. I have tried to keep an objective distance between myself, the data and the participants in order to keep the research and data valid and reliable. However, I have been a part of this study and, as discussed in Chapter 1, it is not possible for me as a researcher to leave this study totally unaffected.



As the research began, I gained knowledge about my participants and they opened up to me. I found that there were many parts of yoga techniques being integrated into the classroom routine which I did not have control over. For example, I was not the classroom teacher and therefore had to sit back and take cues from the classroom teachers. I would have liked to also have had a chance to teach the parents the yoga techniques so they could have worked with their children, if so desired.

When this research project started I wanted to gain an understanding about yoga and the classroom. I wondered how yoga or yoga techniques could be used in the classroom and why yoga was not being widely incorporated into the classroom routine. I had read the literature, which clearly showed how beneficial yoga could be. Phase 1 of my data correlated with findings from previous literature and thus left me more confused. If yoga was beneficial to learning, and both students and teachers enjoyed yoga in the classroom, why was yoga not common practice? This led to phase 2 and the 'heart' or thesis of the research, namely: How does insight into teachers' beliefs, perceptions and opinions about yoga aid an understanding of the incorporation of yoga into the classroom?

This study suggests that yoga is still met with some resistance and holds a (perceived) stigma for some. In order for the benefits of yoga to be realised, teachers, parents and administrators need to be educated about yoga in general. As for myself and my teaching practice, I will be implementing yoga techniques into my classroom routine when possible. This is the next step I will take towards the integration of yoga techniques into the classroom. Possibly by leading by example, yoga will gain better acceptance as a tool for teachers to use in the classroom.





List of References

- Abadi, M. S., Madgaonkar, J., & Venkatesan, S. (2008). Effect of yoga on children with attention deficit/hyperactivity disorder. *Psychological Studies*, 53(2), 154-159.
- Adams, C. M., & Puig, A. (2008). Incorporating Yoga into college counseling. *Journal of Creativity in Mental Health*, 3(4), 357-372.
- Adelman, H.S., & Taylor, L. (1997). Addressing barriers to learning: beyond school-linked services and full service schools. *American Journal of Orthopsychiatry*, 67(1), 408-442.
- Akos, P. (2005). The unique nature of middle school counseling. *Professional School Counseling*, 9, 95-103.
- Allington, R. L. (1975). Attention and application: The oft forgotten steps in teaching reading. *Journal of Learning Disabilities*, 8(4), 22-25.
- Anderson, K., & Jack, D. C. (1991). Learning to listen: Interview techniques and analysis. In S. Gluck & D. Patia (Eds.), *Women's Words*, (pp. 11-26). New York: Routledge.
- Aelterman, A., Engels, N., Van Petegem, K., & Verhaeghe J. P. (2007). The well-being of teachers in Flanders: The importance of a supportive school culture. *Educational Studies*, 33(3), 285-297.
- Anafara, V. A. Jr., & Mertz N. T. (2006). *Theoretical frameworks in qualitative research*. London: Sage Publications.
- Anderson, A., Hamilton, R. J., & Hattie, J. (2004). Classroom climate and motivated behavior in Secondary Schools. *Learning Environments Research*, 7, 211-225.
- Angelaccio, M., & Buttarazzi, B. (2011). EduSHARE: A peer to peer document sharing a system for obtaining adaptive learning procedures. *International Journal of Technology Enhanced Learning*, 3(5), 525-535.
- Armstrong, G. B., Boiarsky, G. A., & Mares, M. (1991). Background television and reading performance. *Communication Monographs*, 58(3), 235-253.
- Aronson, J. (1994). A pragmatic view of thematic analysis. The Qualitative Report, 2(1), Spring.



- Atkinson, N. L., & Levine-Permuth, R. (2009). Benefits, barriers, and cues to action of yoga practice: A focus group approach. *American Journal of Health Behavior*, 33(1), 3-14.
- Azevedo, R. E., & Akdere, M. (2010). Measuring the effects of learning styles: Is a little knowledge dangerous for excellence in management education? *Journal of Leadership & Organizational Studies*, 17(2), 192-200.
- Babbie, E. R., & Mouton, J. (2001). *The Practice of Social Research*. Cape Town: Oxford University Press Southern Africa.
- Bafile, C. (2004). "Let it Slip!" Daily exit slips help teachers know what students really learned.

 Retrieved April 2011 from

 http://www.educationworld.com/a curr/profdev/profdev091.shtml
- Barnes, B. L., & Nagarkar, S. (1989). Yoga education and scholastic achievement. *Indian Journal of Clinical Psychology*, 16(2), 96-98.
- Basil, M. (1994). Multiple resource theory II: Empirical examination of modality-specific attention to television scenes. *Communication Research*, 21(2), 208-231.
- Beart, K., & Lessing A. C. (2013). The perception of band teachers of the influence of yoga on the concentration and co-existing behaviors of learners with attention deficit hyperactive disorder (ADHD). *The Journal for Transdisciplinary Research in Southern Africa*.
- Behere, R. V., Arasappa, R., Jagannathan, A., Varambally, S., Venkatasubramanian, G., Thirthalli, J., & Gangadhar, B. N. (2011). Effect of yoga therapy on facial emotion recognition deficits, symptoms and functioning in patients with schizophrenia. *Acta Psychiatrica Scandinavica*, 123(2), 147-153.
- Benavides, S., & Caballero, J. (2009). Ashtanga yoga for children and adolescents for weight management and psychological well-being: An uncontrolled open pilot study. *Complementary Therapies in Clinical Practice*, 15, 110-114.
- Betts, D., & Betts, S. (2006). *Yoga for children with autism spectrum disorder*. London: Jessica Kingsley Publishers.



- Bhardwaj, A., & Argawal, G. (2013). Yoga practice enhances the level of self-esteem in pre-adolescence school children. *International Journal of Physical and Social Science*, 3(10), 189-199.
- Bigge, M. L. (1976). Learning theories for teachers (3rd ed.). New York: Harper & Row.
- Birdee, G., Yeh, G., Wayne, P., Phillipes, R., Davis, R., & Gardiner, P. (2009). Clinical applications of yoga for the pediatric population: A systematic review. *Academic Pediatrics*, 9(4), 212-220.
- Blanchard, M., Osborne, J., Wallwork, C., & Harris, E. (2013). Progress on implementing Inquiry in North Carolina: Nearly 1,000 elementary, middle and high school science teachers weigh in. *Science Educator*, 22(1), 37-47.
- Blanche, M. T., & Durrheim, K. (1999). *Research in practice: applied methods for the social sciences*. Cape Town: UCT Press.
- Blashfield, H. W. (1926). Religion and the public school. *Blashfield Religious Education*, 1(21), 290.
- Blaxter, L., Hughes, C., & Tight, M. (2010). How to research. Berkshire: Open University Press.
- Borg, M. G., & Riding, R. J. (1993). Teacher stress and cognitive Style. *British Journal of Educational Psychology*, 63, 271-286.
- Bostrom, L., & Lassen, L. M. (2006). Unravelling learning, learning styles, learning strategies and meta-cognition. *Education & Training*, 48(2-3), 178-189.
- Botwick, R. (2007). Dealing with teacher stress. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 80(6), 271-271.
- Bourke, P. A. (1997). Measuring attentional demand in continuous dual-task performance. *The Quarterly Journal of Experimental Psychology A: Human Experimental Psychology,* 50A(4), 821-840.
- Bowen-Irish, T. (2007). Mom, I can't sit still ... but I can for shavasana. *Exceptional Parent*, 37(4), 36-37.



- Bower, G. H. (1992). *How might emotions affect learning*. Hillsdale, NJ, England: Lawrence Erlbaum Associates, Inc.
- Bowers, T. (2004). Stress, teaching and teacher health. *Education*, 3(13), 73-80.
- Brackett, M. A., Reyes, M. R., Rivers, S. E., Elbertson, N. A., & Salovey, P. (2011). Classroom emotional climate, teacher affiliation and student conduct. *Journal of Classroom Interaction*, 46(1), 27-36.
- Brandt, R. (1995). Punished by rewards? *Educational Leadership*, 53(1), 13-16.
- Braun, V., & Clarke, V. (2006) Using Thematic Analysis in Psychology. *Qualitative Research in Psychology*, 3(2), 77-101.
- Breslin, C., Morton, J., & Rudisill, M. (2008). Implementing a physical activity curriculum into the school day: helping early childhood teachers meet the challenge. *Early Childhood Education Journal*, 35, 429-437.
- Broadbent, D. E., & Donald, E. (1958). *Perception and communication*. New York: Pergamon Press.
- Brock, L. L., Nichida, T. K., Chiong, C., Grimm, K. J., & Rimm-Kaufman, S. E. (2008). Children's perceptions of the classroom environment and social and academic performance: a longitudinal analysis of the contribution of response classroom approach. *Journal of School Psychology*, 46, 129-149.
- Broderick, P., & Jennings, P. (2012). Mindfulness for adolescents: a promising approach to supporting emotional regulation and preventing risky behavior. *New Directions for Youth Development*, 136, 111-126.
- Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American Psychologist*, July, 513-531.
- Bronfenbrenner, U. (1979). *The ecology of human development*. Cambridge, MA: Harvard University Press.
- Bronfenbrenner, U. (1994). Ecological models of human development. *International Encyclopedia of Education* (Vol. 3, 2nd ed. pp. 37-43). Oxford: Elsevier.



- Brophy-Herb, H. E., Lee, R. E., Nievar, M. A., & Stollack, G. (2007). Preschoolers' social competence: relations to family characteristics, teacher behaviors and classroom climate. *Journal of Applied Developmental Psychology*, 28, 134-148.
- Brown, R., & Gerbarg, P. (2009). Yoga breathing, meditation and longevity. *Longevity, Regeneration and Optimal Health*, 1172, 54-62.
- Burke, L. A., & Ray, R. (2008). Re-setting the concentration levels of students in higher education: An exploratory study. *Teaching in higher education*, 13(5), 571-582.
- Burkett, L., Todd, M., & Adams, T. (2006). Yoga and distractibility. *Journal of Bodywork and Movement Therapies*, 10, 276-286.
- Burn, M. L. (1993). A paradigm by any other name. *International Journal of Educational Reform,* 2(3), 249-255.
- Byrne, C. J. (2012). Jeesis is alive! He is the king of Australia: Segregated religious instruction, child identity and exclusion. *British Journal of Religious Education*, 34(3), 317-331.
- Carey, M. A. (1994). The Group Effect in Focus Groups: Planning, Implementing, and. *Critical issues in qualitative research methods*, 225.
- Carey, M. A., & Smith, M. W. (1994). Capturing the group effect in focus groups: A special concern in analysis. *Qualitative Health Research*.
- Carter, H. (2012). Institutionalization of caring in an era of accountably: Creating a supportive environment for at-risk students' retention in high school and access to college. *The New Educator*, 8, 177-193.
- Case-Smith, J., Sines, J. S., & Klatt, M. (2010a). Perceptions of children who participated in a school-based yoga program. *Journal of Occupation Therapy, Schools, & Early Intervention*, 3(3), 226-238.
- Case-Smith, J., & Clifford O'Brien, J. (2010b). *Occupational Therapy for Children*. Missouri: Mosby Elsevier.



- Castleman, M. (2002). Making the Grade. Yoga Journal, December, 91-95.
- Carbonneau, N., Vallerand, R. J., & Massicotte, S. (2010). Is the practice of yoga associated with positive outcomes? The role of passion. *The Journal of Positive Psychology*, 5(6), 452-465.
- Charmaz, K. (2000). Grounded theory. Objectivist and constructionist methods. In N. K Denizin & Y. K. Lincoln. (Eds.), *Handbook of qualitative research* (2nd ed., pp. 509-532). London: Sage Publications.
- Charmaz, K. (2006). *Constructing grounded theory: a practical guide through qualitative analysis*. Los Angeles: Sage Publications.
- Chaundhary, A. K., Bhatnager, H. N., Bhatnager, L. K., & Chaudar, K. (1988). Comparative study of the effect of drugs and relaxation exercise (yoga shavasan) in hypertension. *Journal of the Association of Physicians of India*, 36, 721-723.
- Chaya, M. S., Nagendra, H., Selvam, S., Kurpad, A., & Srinivasan, K. (2012). Effect of Yoga on Cognitive Abilities in School Children from a Socioeconomically Disadvantaged Background: A randomized controlled study. *The Journal of Alternative and Complementary Medicine*, 18(12), 1161-1167.
- Cheatum, B. A., & Hammond, A. (2000). *Physical activities for improving children's learning and behavior*. Illinios: Human Kinetics.
- Cheesbrough, M., Woodhouse, S., & Griffiths, R. (2006). *Helping children with yoga: a guide for parents and teachers*. London: Continuum International Publishing Group.
- Chin, C., & Brown, D. E. (2000). Learning in science: a comparison of deep and surface approaches. *Journal of Research in Science Teaching*, 37(2), 109-138.
- Chou, P. (2010). Attention drainage effect: how background music affects concentration in Taiwanese college students. *Journal of the Scholarship of Teaching and Learning*, 10(1), 36-46.
- Cleary, T. J., Platten, P., & Nelson, A. (2008). Effectiveness of the self-regulation empowerment program with urban high school students. *Journal of Advanced Academics*, 20(1), 70-107.



- Cohen J., Pickeral, T., & McCloskey, M. (2009). Assessing school climate. *Education Digest: Essential readings Condensed for Quick Review*, 74(8), 45-48.
- Cohen, L., Warneke, C., Fouladi, R. T., Rodreiguez, M. A., & Chaoul-Riech, A. (2004).

 Psychological adjustment and sleep quality in a randomized trial of the effects of a Tibetan yoga intervention in patients with Lymphoma. *Cancer*, 100, 2252-2260.
- Cohen, L., Monion, L., & Morrison, K. (2007). *Research methods in education* (6th ed.) New York: Routledge.
- Collins, K. W. (1981). Control of concentration during academic tasks. *Journal of Educational Psychology*, 73(1), 122-128.
- Conroy, M., Sutherland, K., Snyder, A., & Al-Hendawi, M. (2009). Creating a positive classroom atmosphere: teachers' use of effective praise and feedback. *Beyond Behavior*, Winter, 18-26.
- Corliss, R. (2001). The power of yoga. *Time*, *157*(16), 44-53.
- Coulter-Parker, N. (2003). Find your focus: learning to balance in a variety of challenging yoga poses can help you reach new and improved levels of concentration. *Awakened Athlete, Yoga Journal*, Jan/Feb, 67-69.
- Cowen, V., & Adams, T. (2005). Physical and perceptual benefits of yoga asana practice: results of a pilot study. *Journal of Bodywork and Movement Therapies*, 9, 211-219.
- Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five approaches* (2nd ed.). London: Sage Publications.
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods Approaches* (3rd ed.). London: Sage Publications.
- Creswell, J. W., Ebersohn, L., Eloff, I., Ferreira, R., Ivankova, N. V., Jansen, J. D., & Van der Westhuizen, C. (2010). In Maree K. (Ed.). *First steps in research*. Pretoria: Van Schaik Publishers.
- Crupi, J. (2005). Keeping fit: Inhale, exhale. *Teaching Pre K-8*, 36(3), 18-18.



- Daniels, H., Lauder, H., Porter, J., & Hartshorn, S. (2009). *Educational theories, cultures, and learning: a critical perspective*. London: Routledge.
- Darling-Hammond, L. (2000). Reforming teacher preparation and licensing: Debating the evidence. *Teachers College Record*, 102(1), 28-56.
- Day, C., Elliot, B., & Kington, A. (2005). Reform, standards and teacher identity: Challenges of sustaining commitment. *Teaching and Teacher Education*, 21, 563-577.
- Denzin, N. K., & Lincoln, Y. S. (2008). *Landscape of qualitative research: Theories and issues*. Los Angeles: Sage Publications.
- DiCicco-Bloom, B., & Crabtree, B. F. (2006). The qualitative research interview. *Medical education*, 40(4), 314-321.
- Diekhoff, G. M. (1982). How to teach How to learn. *Training*, 19(9), 36-40.
- Dierking, R., & Fox, R. (2012). "Changing the way I teach": Building teacher knowledge, confidence, and autonomy. *Journal of Teacher Education*, 64(2), 129-144.
- Doane, N. (2006). It's a wrap. Yoga Journal, June, 91-98.
- Donald, D., Lazarus, S., & Lolwana, P. (2002). *Educational psychology in social context* (2nd ed.). Cape Town: Oxford University Press.
- Dor, A. (2012). Parents' involvement in school: attitudes of teachers and school counselors. *US-China Education Review*, B 11, 921-935.
- Dulberg, N. (2005). "The theory behind how students learn": Applying developmental theory to research on children's historical thinking. *Theory and research in social education,* 33(4), 508-531.
- Dwyer, J., Hansen, B., Allison, K., Goldenberg, E., Bararea, M., & Boutilien, M. (2003). Teachers' perspective on barriers to implementing physical activities curriculum guidelines for school children in Toronto. *Canadian Journal of Public Health*, 94(6), 448-452.



- Education World. (accessed Sept 2013) "Let it Slip!"—Daily exit slips help teachers know what students really learned. Retrieved from October 2014 http://www.educationworld.com/a curr/profdev/profdev091.shtml
- Edward, D., & Mullis, F. (2003). Classroom meetings encouraging a climate of cooperation. *Professional Counseling*, 7(1), 20-28.
- Ehud, M., An, B., & Avshalom, S. (2010). Here and now: yoga in Israeli schools. *International Journal of Yoga*, Jul-Dec, 3(2), 42-47.
- Elik, N., Wiener, J., & Corkum, P. (2010). Pre-service teachers' open-minded thinking dispositions, readiness to learn, and attitudes about learning and behavioral difficulties in students. *European Journal of Teacher Education*, 33(2), 127-146.
- Elliot, J. (1991). Action research for educational change. McGraw-Hill Education (UK).
- Eloff, I., & Ebersohm, L. (2004). Keys to educational psychology. Cape Town: UCT Press.
- Epstein, J. (2008). Improving family and community involvement in secondary schools. *The Education Digest*, 73(6), 9-12.
- Falk, J. P. (2005). Yoga and ethics in high school. Journal of Dance Education, 5(4), 132-134.
- Feldman, M. S., Bell, J., & Berger, M. T. (2003). *Gaining access: a practical and theoretical guide for qualitative researchers.* AltaMira Press.
- Fielding, E. N. (1999). *Learning differences in the classroom*. Newark, DE: International Reading Association.
- Filisek, L. (2001). Teaching yoga to young school children. *Yoga*, November, 70.
- Finger, A. (2000). *An introduction to yoga: a beginner's guide to health, fitness and relaxation*. New York, NY: Three Rivers Press.
- Fitzgerald, M., & Waldrip, A. (2004a). Not enough time in the day: Media specialist, program planning, time management, Part I. *Library Media Connection*, Aug/Sept, 38-40.



- Fitzgerald, M., & Waldrip, A. (2004b). Still not enough time in the day: Media specialist, program planning, time management, Part II. *Library Media Connection*, Oct, 38-40.
- Fraser, B. J., & Tobin, K. (1991). Combining qualitative methods in classroom environment research. In B. J. Fraser & H. J. Walberg (Eds.), *Educational Environment: Evaluation, Antecedents and Consequences.* (pp. 271-202). Oxford, UK: Pergamon.
- Frederick, P. (1986). The lively lecture 8 variations. *College Teaching*, 34(2), 43-50.
- Furnham, A., Gunter, B., & Peterson, E. (1994). Television distraction and the performance of introverts and extroverts. *Applied Cognitive Psychology*, 8, 445-455.
- Furrer, C., & Skinner, E. (2003). Sense of relatedness as a favor in children's academic engagement and Performance. *Journal of Educational Psychology*, 95, 148-162.
- Gagné, R. M. (1985). *The conditions of learning and theory of instruction* (4th ed.). New York: Holt, Rinehart & Winston.
- Galantino, M. L., Galbavy, R., & Quinn, L. (2008). Therapeutic effects of yoga for children: A systematic review of literature. *Pediatric Physical Therapy*, 20(1), 66-80.
- Gillen, A., Wright, A., & Spink, L. (2011). Students' perceptions of a positive climate for learning: A case study. *Educational Psychology in Practice*, March, 27(1), 65-82.
- Geiger, S., & Reeves, B. (1993a). The effects of scene changes and semantic relatedness on attention to television. *Communication Research*, 20(2), 155-175.
- Geiger, S., & Reeves, B. (1993b). We Interrupt This Program. Attention for Television Sequences. *Human Communication Research*, 19(3), 368-387.
- Gaiam, Inc. Retrieved September, 2003, from http://www.gaiam.com/retail/product.asp?product%5Fid=91%2D0192+MSTR (Living Arts).
- Gleiberman, E. (2007). Teaching even 100 hours a week leaves children behind. *Phi Delta Kappan*. February, 455-459.
- Gonzalez, L., & Sellers, E. W. (2002). The effects of a stress-management program on self concept, locus of control, and the acquisition of coping skills in school-age children



- diagnosed with attention deficit hyperactivity disorder. *Journal of Child and Adolescent Psychiatric Nursing*, 15(1), 5-15.
- Goswami, U. (2004). Neuroscience and education. *British Journal of Educational Psychology*, 74(1), 1-14.
- Grant, K. E., Compas, B. E., Thurm, A. E., McMahon, S. D., Gipson, P. Y., & Westerholm, R. (2006). Stress management: A randomized study of cognitive behavioral therapy and yoga. *Cognitive Behavioral Therapy*, 35, 3-10.
- Granath, J., Ingvarsson, S., von Thiele, U., & Lundberg, U. (2006). Stress management: A randomized study of cognitive behavioural therapy and yoga. *Cognitive Behaviour Therapy*, *35*(1), 3-10.
- Greenfield, P. M., & Cocking, R. R. (1996). *Interacting with video*. Norwood, NJ: Ablex Publishing Corporation.
- Greenawalt, K. (2005). Does god belong in public schools? Princeton: Princeton University Press.
- Greenwood, D. J., & Levin, M. (2006). *Introduction to action research: Social research for social change*. SAGE publications.
- Griffith, F. (2001). Principal leadership of parent involvement. *Journal of Educational Administration*, 39(2), 162.
- Guest, G., MacQueen, K. M., & Namey, E. E. (2011). Applied thematic analysis. Sage.
- Gunaratana, H. (2009). Beyond mindfulness in plain English: An introductory guide to deeper states of meditation. Boston: Wisdom Publications.
- Gürgür, H. (2012). Examining the training process of a new teacher educator in the field of education of the hearing impaired. *Educational Sciences: Theory and Practice*, 12(2), 962-970.
- Gutteling, B. M., De Weerth, C., Zandbelt, N., Mulder, E. J. H., Visser, G. H. A., & Buitelaar, J. K. (2006). Does maternal prenatal stress adversely affect the child's learning and memory at age six. *Journal of Abnormal Child Psychology*, 34(6), 787-796.



- Hale, G. A., & Lewis, M. (1979). Attention and cognitive development. New York: Plenum Press.
- Hamzeh, M. Z., & Oliver, K. (2010). Gaining research access into the lives of Muslim girls: researchers negotiating "Muslimness", modesty, "inshallah", and "haram". *International Journal of Qualitative Studies in Education*, 23(2), 165-180.
- Harney, E. (2008). Stress management for teachers. New York: Continuum International.
- Harrison, L., Manocha, R., & Rubia, K. (2004). Sahja yoga meditation as a family treatment programme for children with attention deficit-hyperactivity disorder. *Clinical Child Psychology and Psychiatry*, 9(4), 479-497.
- Hart, R. (2010). Classroom behavior management: Educational psychologists' views on effective practice. *Emotional & Behavioral Difficulties*, 15(4), 353-371.
- Helber, C., Zook, N. A., & Immergut, M. (2012). Meditation in higher education: does it enhance cognition? *Innovative Higher Education*, 37, 349-358.
- Hergenhahn, B. R., & Olson, M. H. (1993). *An introduction to theories of learning* (4th ed.). Englewood Cliffs: Prentice-Hall International.
- Herrenkohl, L. R., & Metl, V. (2010). *How students come to be, know, and do: a case for a broad view of learning.* Cambridge: Cambridge University Press.
- Hill, R., & Castro, E. (2002). Getting rid of Ritalin. Charlottesville: Hampton Roads.
- Hinchey, P. (2010). Finding freedom in the classroom: A practical introduction to critical theory. New York: Peter Lang.
- Hofmeyer, J., & Lee, S. (2004). *Changing class: Education and social change in post-apartheid South Africa*. London: Zed Books.
- Hofstrand, C. S. (2003). *Taking your school's temperature: How school climate affects students and staff.* American School Counselor Association.
- Hook, D. (2001). Discourse, knowledge, materiality, history: Foucault and discourse analysis. *Theory and Psychology*, 11 (4), 521-547.



- Hopkins, T., & Thomas, L. (1979). A study of yoga and concentration. *Academic Therapy*, 14(3), 341-345.
- Humphrey, G. S., & Trotter, J. C. (1988). *Feelings, body changes and stress. a curriculum for preschoolers on stress education.* Atlanta, GA: Pre-School Stress Relief Project.
- Immordina-Yang, M., & Damasio, A. (2007). We feel therefore we learn: the relevance of affective and social neuroscience to education. *Brain Mind and Education*, 1(1), 3-10.
- Iyengar, B. K. S. (1976). *Light on yoga*. London: Harper-Collins Publishers.
- Jacobson, E. (1938). Review of yoga: A scientific evaluation. *Psychological Bulletin*, 35(1), 46-50.
- Jain, S. C., Rai, L., Valecha, A., Jha, U. K., Bhatnager, S. O. D., & Ram, K. (1991). Effect of yoga training on exercise tolerance in adolescents with childhood asthma. *Journal of Asthma*, 28(6), 437-442.
- James, A. (2006). *Preschool success: everything you need to know to help your child learn.* Indianapolis: Jossey-Bass.
- James, C. S. (2000). The wisdom of the body mind: Reflections on yoga and adventure. *Zip Lines:* The Voice for Adventure Education, 41, 42-43.
- Janesick, V. J. (2000). The choreography of qualitative research design: Minutes, improvisations and crystallization. In N.K. Denzin & Y.K. Lincoln (Eds). *Handbook of Qualitative Research* (2nd ed., pp. 379-400). Thousand Oaks: Sage Publications.
- Järvelä, A., Järvenoja, H., & Malmberg, J. (2012). How elementary school students' motivation is connected to self-regulation. *Educational Research and Evaluation: An International Journal on Theory and Practice*, 18(1), 65-84.
- Jennings, P. A., & Greenberg, M. T. (2009). The prosocial classroom: teacher social and emotional competence in relation to student and classroom outcomes. *Review of Educational Research*, 79, 491-525.
- Jensen, P. S., & Kenny, D. T. (2004). The effects of yoga on the attention and behavior of boys with attention-deficit/hyperactivity disorder (ADHD). *Journal of Attention Disorders*, 7(4), 205-216.



- Jensen, P. S., Stevens, P. J., & Kenny D. T. (2012). Respiratory patterns in students enrolled in schools for disruptive behavior before, during and after yoga nidra Relaxation. *Journal of Child and Family Studies*, 21, 667-681.
- Johnson, A., & Proctor, R. W. (2004). *Attention: Theory and practice*. Thousand Oaks, CA: Sage Publications.
- Jonassen, D. H. (1991). Objectivism versus constructivism: Do we need a new philosophical paradigm? *Educational Technology Research and Development*, 39(3), 5-14.
- Kahneman, D. (1973). Attention and effort. Englewood Cliffs, NJ: Prentice Hall.
- Kaplan, A. (2008). Clarifying metacognition, self-regulation, and self-regulated learning: What's the purpose? *Educational Psychology Review*, 20(4), 477-484.
- Karten, T. (2008). Embracing disabilities in the classroom. Thousand Oaks, CA: Corwin Press.
- Khalsa, S. B. (2004). Treatment of chronic insomnia with yoga: A preliminary study with sleep-wake diaries. *Applied Psychophysiology and Biofeedback*, 29, 269-278.
- Kemmis, S., & McTaggart, R. (2005). Communicative action and the public sphere. *Denzin, NK & Lincoln, YS (red.), The Sage handbook of qualitative research, 3*, 559-603.
- Khalsa, S. B., & Cope, S. (2006). Effects of yoga lifestyle intervention on performance related characteristics of musicians: A preliminary study. *Medical Science Monir*, 12, 325-331.
- Khalsa, S. B., Shorter, S. M., Cope, S., Wyshak, G., & Sklar, E. (2009). Yoga ameliorates performance anxiety and mood disturbance in yoga professional musicians. *Applied Psychophysiology and Biofeedback*, 34, 279-289.
- Khalsa, S. B., Hicky-Schultz, L., Cohen, D., Steiner, N., & Cope, S. (2012). Evaluation of the mental health benefits of yoga in a secondary school: A preliminary randomized controlled trail. *The Journal of Behavioral Health Services and Research*, 39(1), 80-90.
- Khanman, A. A., Schdeva, U., Guleria, R., & Deepak, K. K. (1996). Study of pulmonary and autonomic function of asthma patients after yoga training. *Indian Journal of Physiology and Pharmacology*, 40(4), 318-324.



- Killman, C. (2007). One nation many gods. *Teaching tolerance*, 32, 38-45.
- Kimbrough, S., Rancich, A., & Balkin, R. (2007). Effect of inverted yoga positions on short-term memory. *Research Quarterly for Exercise and Sport*, 78(1), A-82.
- Kipps-Vaughan, D., Ponsart, T., & Gilligan, T. (2012). Teacher wellness: Too stressed for stress management? *Communiqué*, 41(1), 25-28.
- Kirp, D. (2014). Meditation transforms roughest San Francisco schools. Retrieved from June 2012 http://wwwsfgate.com/opinion/openforum/article/meditaion-transforms.retrieved Feb 1 2014. Published January 12, 2014.
- Kitsantas, A., Reiser, R. A., & Doster, J. (2004). Developing self-regulated learners: goal setting, self-evaluation, and organizational signals during acquisition of procedural skills. *Journal of Experimental Education*, 72(4), 269-287.
- Kitzinger, J. (1994). The methodology of focus groups: The importance of interaction between research participants. *Sociology of Health and Illness*, 16(1), 103-121.
- Knowles, T. (2010). The kids behind the label: Understanding ADHD. *Education Digest: Essential Readings Condensed for Quick Review*, 76(3), 59-61.
- Koenig, A. L., Cicchetti, D., & Rogosch, F. A. (2000). Child compliance/ noncompliance and maternal contributors to internalization in maltreating and nonmaltreating dyads. *Child Development*, 71(4), 1018-1032.
- Könnings, K., Brand-Gruwel, S., & Van Merriënboer, J. (2005). Towards more powerful learning environments through combining the perspective designers, teachers and students. *British Journal of Educational Psychology*, 75, 545-660.
- Koopman, M., Den Brok, P., Beijaard, D., & Teune, P. (2011). Learning processes of students in pre-vocational secondary education: Relations between goal orientation, information processing strategies and development of conceptual knowledge. *Learning and Individual Differences*, 21, 426-431.
- Kopp, C. B. (1982). Antecedents of self-regulation: A developmental perspective. *Developmental Psychology*, 18, 199-214.



- Koutrouba, K., Antonopoulou, E., Tsitsas, G., & Zenakou, E. (2009). An investigation of Greek teachers' views on parental involvement in education. *School Psychology International*, 30, 311-328.
- Krashen, S. (1981). The fundamental pedagogical principle in second language teaching. *Studia Linguistica*, 35(1), 50-70.
- Kremmer, W. (2013). Does doing yoga make you a Hindu? BBC world service. Retrieved from http://www.bbc.com/news/magazine-25006926
- Krusche, F. (1999). Yoga respiratory therapy helps children with asthma. *Fortschritte der Medizin*, 117, 44.
- Kuhn, I. P. (2006). Add yoga to your singing warm-ups. *Teaching Music*, 13(4), 32.
- Kurtz, L. (2008). *Understanding motor skills in children with dyspraxia, ADHA, autism and other learning disabilities*. London: Jessica Kingsley Publishers.
- Kutter, L., Chambers, C. T., Hardial, J., Israel, D. M., Jacobson, K., & Evens, K. (2006). A randomized trial of yoga for adolescents with irritable bowel syndrome. *Pain Research and Management*, 11, 217-223.
- Lambert, R., McCarthy, C., O'Donnel, M., & Wang, C. (2009). Measuring elementary teacher stress and coping in the classroom: validity evidence for the classroom appraisal of resources. *Psychology of Schools*, 46(10), 973-988.
- Lang, A. (1991). The effects of related and unrelated cuts on viewers memory for television: A limited capacity theory of television viewing.
- Lang, A. (2007). The limited capacity model of mediated message processing. *Theorizing communication, readings across traditions*.
- Langer, E. J. (1993). A mindful education. *Educational Psychologist*, 28, 43-50.



- Lapidat, J., & Lindsey, A. (1999). Transcription in research and practice: from standardization of technique to interpretive positioning. *Qualitative Inquiry*, 5, 64-86.
- Lawson L. M., Cox, J., & Blackwell, A. L. (2012). Yoga as a classroom intervention for Preschoolers. *Journal of Occupational Therapy, Schools and Early Interventions*, 5(2), 126-137.
- Leigh, S. R. (2012). The classroom is alive with the sound of thinking: The power of the exit slip. *International Journal of Teaching and Learning in Higher Education*, 24(2), 189-196.
- Leland, K. (2013). The impact of a teacher preparation literacy course on pre-service teachers' perceptions of teaching young children how to read. *SRATE Journal*, 22(2), 65-70.
- Lerner, M. (1975). Recent medical research on yoga and states of concentration. *Acta Psiquiátrica y Psicológica De América Latina*, 21(1), 56-63.
- Lewis, R. (1999). Effective behavior support: A systems approach to proactive schoolwide management. *Focus on Exceptional Children*, 31(6), 1-24.
- Lincoln, Y. S., & Denzin, N. K. (2000). *The handbook of qualitative research* (2nd ed.). London: SAGE.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. London: Sage Publications.
- Lohaus, A., & Klein-Hebling, J. (2000). Coping in childhood: A comparative evaluation of different relaxation techniques. *Anxiety, Stress and Coping*, 13, 187-211.
- Lorardo, R., Giordano, P., Longmore, M., & Manning, W. (2009). Parents, friends, and romantic partners: Enmeshment in deviant networks and adolescent delinquency involvement. *Journal of Youth and Adolescence*, 38, 367-383.
- Love, R. (2006). Fear of yoga. Columbia Journalism Review, 45(6), 80-90.
- Lyons, N. (2010). *Handbook of reflection and reflective inquiry: Rapping a way of knowing for Professional Reflective Inquiry*. New York: Springer.
- Mack, M. (2009). A concentration training approach for the movement professional. *Strategies:* A Journal for Physical and Sport Educators, 23(2), 22-24.



- Mackenzie, S. (2010). Review of yoga therapy for every special child. *Educational Psychology in Practice*, 26(4), 421-422.
- MacNaughton, G., & Hughes, P. (2009). Doing action research in early childhood research in early childhood studies: A step by step guide.
- Macleod, G. (2010). Identifying obstacles to a multidisciplinary understanding of 'disruptive' behavior. *Emotional & Behavioral Difficulties*, 15(2), 95-109.
- Manocha, R., Noyce, J., Rohowyj, A., & Turek, G. (2005). Sahaja yoga. *Australian Journal of Clinical Hypnotherapy and Hypnosis*, 26(1-2), 22-36.
- Maree, K. (2007). First steps in research. Van Schaik Publishers.
- Mario, M., & Claremont, C. A. (1998). Montessori and the deeper freedom. *NAMTA Journal*, 23(2), 65-80.
- Mason, J. (1996). Qualitative researching. London: Sage Publications.
- Matlin, M. W. (2009). *Cognitive psychology* (7th ed). NY: Wiley.
- Mawdsley, R. D., Cumming, J. J., & De Waal, E. (2008). Building a nation: Religion and values in public schools of the USA, Australia and South Africa. *Education and Law*, 20(2), 83-106.
- Mayan, M. J. (2009). Essentials of qualitative inquiry. Walnut Creek, CA: Left Coast Press.
- McGregor, J. H. (1999). Implementing flexible scheduling in elementary libraries. *International Association of School Librarianship*. Retrieved Aug 2013 from http://files.eric.ed.gov/fulltext/ED437053.pdf.
- McLean, P. (2001). Perceptions of the impact of meditation on learning. *Pastoral Care in Education*, 19(1), 31.
- McMillan, J. H., & Schumacher, S. (1993). *Research in education: A conceptual introduction* (3rd ed.). New York: HarperCollins College Publishers.
- McNiff, S. (1998). *Art-based research*. Jessica Kingsley Publishers.



- McNiff, J., & Whitehead, J. (2011). *All you need to know about action research*. Sage Publications.
- Mehta, P., & Sharma, M. (2010). Yoga as a complementary therapy for clinical depression. *Complementary Health Practice Review*, 15(3), 156-170.
- Memory, D. M., & Yoder, C. Y. (1988). Improving concentration in content classrooms. *Journal of Reading*, 31(5), 426-435.
- Mendelson, T., Greenberg, M. T., Dariotis, J. K., Gould, L. F., Rhoades, B. L., & Leaf, P. J. (2010). Feasibility and preliminary outcomes of a school-based mindfulness intervention for urban youth. *Journal of Abnormal Child Psychology*, 38(7), 985-994.
- Mercer, N. (2004). Sociocultural discourse analysis: Analysing classroom talk as a social Mode of Thinking. *Journal of Applied Linguistics*, 1(2), 137-168.
- Merriam, S. B. (1998). *Qualitative Research and Case Study Applications in Education* (2nd ed.). San Francisco: Jossey-Bass Publishers.
- Merriam, W. (2008). Merriam-Webster's collegiate dictionary (11th ed.). New York: Penguin.
- Metzger, D. (2004). Rethinking classroom management: Teaching and learning with students. *Social Studies and the Young Learner*, 17(2), 13-15.
- Miles, M. B., & Huberman, M. A. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Beverly Hills, Sage.
- Miles, M. B., & Huberman, A. (2014). *Qualitative data analysis: An expanded sourcebook* (3rd ed.). London: SAGE.
- Miller, G., Anderson, F., Fleming, W., Peele, T., & Chen, M. (1999). Teacher stress: A case study. Retrieved March 2012 from http://www.eric.ed.gov/contentdelivery/servlet/ERICServlet?accno=ED467833
- Miller, G. E. (1988). *The meaning of general education: The emergence of a curriculum paradigm.* Columbia: Teachers College Press.



- Miller, L., Linda, P., & Pound, P. (2011). *Theories and approaches to learning in the early years.*Los Angeles: SAGE.
- Milligan, C. K. (2006). Yoga for stress management program as a complementary alternative counseling resource in a university counseling center. *Journal of College Counseling*, 9(2), 181.
- Ming Chou, P. T. (2010). Attention drainage effect: How background music affects concentration in Taiwanese college students. *Journal of the Scholarship of Teaching and Learning*, 10(1), 36-46.
- Mo, Y., & Singh, K. (2008). Parents' Relationship and Involvement: Effects on Students' School and Engagement Performance. *Research in Middle Level Education*, 31(10), 1-11.
- Monnazzi, P., Leri, O., Guizzardi, L., Mattioli, D., & Patacchiolo, F. R. (2002). Anti-stress effect of yoga-type breathing: Modification of salivary cortisol, heart rate and blood pressure following a step-climbing exercise. *Stress and Health*, 18, 195-200.
- Monro, R. (1997). Yoga therapy. *Journal of Bodywork and Movement Therapies*, 1(4), 215-218.
- Montessori, M. (1962). *The secret of childhood*. (Carter, B., trans.). New Delhi: Orient Black Swan.
- Montessori, M. (1965). Dr. Montessori's own handbook. New York: Schocken Books.
- Montessori, M. (1984). *The absorbent mind*. (Claremont, C., trans.) New York: Dell Publishing Company.
- Montessori, M., & Oswald, P. S. (1997). *Basic ideas of montessori's educational theory: Extracts from Maria Montessori's writings and teachings*. Oxford: Clio Press.
- Moodley, R., & West, W. (2005). *Integrating traditional healing practices into counseling and psychotherapy*. Thousand Oaks, CA: SAGE.
- Mooney, C. G. (2000). *Theories in childhood*. St. Paul, MN: Readleaf Press.
- Morgan, D. (1996). Focus groups. *Annual Review of Sociology*, 22, 129-152.



- Morgan, L. (2011). Harmonious learning: yoga in the English language classroom. *English Teaching Forum.* 4, 2-13.
- Morganett, L. (2001). Good teacher-student relationships: Ak in classroom motivation and management. *Education*, 112(2), 260-264.
- Murphy, M., & Fleming, T. (eds.). (2010). *Habermas, critical theory and education*. New York: Routledge.
- Murray, L. (2002). Self-control training in young children. Doctoral Thesis, Western Michigan University, UMI). Dissertations Database. (Record No. 3057845).
- Napoli, M., Krech, P. R., & Holley, L. C. (2005). Mindfulness training for elementary school students. *Journal of Applied School Psychology*, 21(1), 99-125.
- Neisser, U. (1967a). *Century psychology series: cognitive psychology*. USA: Appleton-Century-Crofts Educational Division.
- Neisser, U. (1967b). Cognitive psychology. Englewood Cliffs, NJ: Prentice Hall.
- Nelson, C. (2003). Yoga for elementary students. *Strategies: A Journal for Physical and Sport Educators*, 17(2), 26-28.
- Noddings, N. (1992). *The challenge to care in schools: An alternative approach to education*. New York: Teachers College Press.
- Noll, J. (2008). *Taking sides: Clashing views on wducational issues*. Dubque, IW: McGraw Hill Press.
- Nord, A. (1999). Science, religion and education. *Phi Delta Kappan*, 81(1), 1-28.
- Norman, G. (2009). When will learning style go out of style? *Advances in Health Sciences Education*, 14(1), 1-4.
- Nundy, S., Dillon, J., & Dowd, P. (2009). Improving and encouraging teacher confidence in out-of-classroom learning: The impact of the Hampshire trailblazer project on 3-13 curriculum practitioners. *International Journal of Primary, Elementary and Early years Education*, 37(1), 67-73.



- O'Connor, J., French, R., & Henderson, H. (2000). Use of physical activity to improve behavior of children with autism–two-for-one benefits. *Palaestra*, Summer, 22-29.
- O'Donnel, M., McCarthy, T., & Lambert, R. (2008). School poverty status, time of year and elementary teachers' perceptions of stress. *The Journal of Educational Research*, 102(2). 152-159.
- Olson, M. H., & Hergenhahn, B. R. (2009). *An introduction to theories of learning* (8th ed.). Upper Saddle River, NJ: Pearson/Prentice Hall.
- Palta, A. (2009). Sahajayoga and quality of life: An empirical study. *Journal of Indian Psychology,* 27(1-2), 21-34.
- Papier, J. (2010). From policy to curriculum in South African vocational teacher education: A comparative study. *Journal of Vocational Education and Training*, 62(2), 153-162.
- Park, J., & Zeanah, A. E. (2005). An evaluation of voice recognition software use in interview-based research. *Qualitative Research*, 5(2), 245-251.
- Passage, M., Tincani, M., & Hantula, D. (2012). Teaching self-control with qualitatively different reinforces. *Journal of Applied Behavior Analysis*, 45(4), 853-857.
- Passe, J., & Willox, L. (2009). *Teaching religion in America's public schools: A necessary disruption*. Philadelphia: Heldref Publications.
- Patton, M. Q. (1990/2002). Qualitative evaluation and research methods. London: SAGE.
- Peck, H. L., Kehle, T. J., Bray, M. A., & Theodore, L. A. (2005). Yoga as an intervention for children with attention problems. *School Psychology Review*, 34(3), 415-424.
- Pelco, L., & Read-Victor, E. (2007). Self-regulation and learning-related social skills: Intervention ideas for elementary school students. *Preventing School Failure*, 51(3), 36-42.
- Perry, R. B. (1996). *The thought and character of William James*. Nashville: Vanderbilt University Press.



- Peters, M., Lankshear, C., & Olsen, M. (Eds.). (2003). *Critical theory and the human condition:* Founders and Praxis. New York: Peter Lang.
- Peterson, K., Wahlquist, C., Brown, J., & Mukjopadhyay, S. (2003). Parent surveys for teacher tvaluation. *Journal of Personal Evaluation of Education*, 17, 317-330.
- Piaget, J., & Cook, M. (1976). *The child's construction of reality*. London: Routledge and Kegan Paul.
- Pintrich, P. R. (2004). A conceptual framework for assessing motivation and self-regulated learning in college students. *Educational Psychology Review*, 16(4), 385-407.
- Platania-Solazzo, A., Field, T., Blank, J., Seligman, F., Kuhn, C., Schanberg, S., & Saab, P. (1992). Relaxation therapy reduces anxiety in child and adolescent psychiatric patients. *Acta Paedopsychiatrica*, 55, 115-120.
- Ponder, L. M. (2012). An explorative study of the potential impacts of yoga on self and community: Creating mindfulness, self-actualization and social capital. (Unpublished doctoral thesis), Graduate School of Clemson University.
- Pool, M. M., Koolstra, C. M., & Van, D. V. (2003). Distraction effects of background soap operas on homework performance: An experimental study enriched with observational data. *Educational Psychology*, 23(4), 361-380.
- Popp, J. A. (1998). *Naturalizing philosophy of education. John Dewey in the post-analytic period.* Illinois: Southern Illinois University Press.
- Potter, S. (2007). Rock hopping, yoga and student empowerment: A case study of a sustainable school. *Australian Journal of Environmental Education*, 23, 13-21.
- Powell, L., Gilchrist, M., & Stapley, J. (2008). A journey of self-discovery: An intervention involving massage, yoga and relaxation for children with emotional and behavioral difficulties attending primary schools. *European Journal of Special Needs Education*, 23(4), 403-412.
- Powell, L. A., Barlow, J. H., & Bagh, J. (2005). The self-discovery programme for children with special educational needs in mainstream primary and secondary schools: An exploratory study. *Emotional and Behavioural Difficulties*, 10(3), 189-201.



- Powell, L. A., & Potter, L. (2010). Report on an intervention involving massage and yoga for male adolescents attending a school for disadvantaged male adolescents in the UK. *International Journal of Special Education*, 25(2), 47-54.
- Powers, M. S., & Robert, S. (1962/1970). *A practical guide to better concentration*. Hollywood, California: Wilshire Book Co.
- Prestly, M. (2011). Schools, teachers, and curriculum change: A balancing act? *Journal of Educational Change*, 12(1), 1-23.
- Pritchard, A. (2009). Ways of learning: Learning theories and learning styles in the classroom (2nd ed.). London: Routledge.
- Proeger, C., & Myrick, R. D. (1980). *Teaching children to relax*. Springfield, IL: C.C. Thomas.
- Purperhart, H. (2007). *The yoga adventure for children: Playing, dancing, moving, breathing, relaxing*. Alameda, CA: Hunter House / Berkeley, CA: Publishers Group West.
- Quilty, M., Saper, B., Goldstien, R., & Khalsa, S. (2013). Yoga in the real world: Perceptions, motivators, barriers and patters of use. *Global Advances in Health and Medicine*, 2(1), 44-49.
- Rapp, D. R. (2006). The value of aware systems in educational setting. *Computing in Human Behavior*, 22, 603-614.
- Ravitch, S., & Riggan, M. (2011). *Reason and rigor.* Los Angeles: Sage.
- Renninger, K. A., & Hidi, S. A. (1992). *The role of interest in learning and development*. Hillsdale, NJ: L Erlbaum Associates.
- Richards, J. (2012). Teacher stress and coping strategies: A national snapshot. *The Educational Forum*, 76, 299-316.
- Rieg, S., Paquette, K., & Chen, Y. (2007). Coping with stress: An investigation of novice teachers' stressors in the elementary classroom. *Education*, 128(2), 211-226.



- Rinke, C. R., & Mawhinney, L. (2014). Reconsidering rapport with urban teachers: negotiating shifting boundaries and legitimizing support. *International Journal of Research and Method in Education*, 37(1), 3-16.
- Rinne, C. H. (1997). *Excellent classroom management*. Belmont, CA: Wadsworth Publishing Company.
- Rinne, C. H., & Evans, E. D. (1984). *Attention: The fundamentals of classroom control*. Columbus, OH: C. E. Merrill.
- Rizzolo, D., Zipp, G. P., Stiskal, D., & Simpkins, S. (2009). Stress management strategies for students: The immediate effects of yoga, humor, and reading on stress. *Journal of College Teaching & Learning*, 6(8), 79-88.
- Rodia, B. (2004). Write around the clock. *Teaching K-8*, March, 46-49.
- Roeser, R.W., & Eccles, J. S. (1998). Adolescents' perceptions of middle school: Relation to longitudinal change in academic and psychological adjustment. *Journal of Research on Adolescence*, 88, 123-158.
- Rojas, N. L., & Chan, E. (2005). Old and new controversies in the alternative treatment of attention-deficit hyperactivity disorder. *Mental Retardation and Developmental Disabilities Research Reviews*, 11(2), 116-130.
- Romano, K. (2004). A wish and a prayer. *Teaching Pre K-8*, 34(8), 46-49.
- Roofe, C., & Miller, P. (2013). "Miss, I am not being fully prepared": Student-teachers' concerns about their preparation at a teacher training institution in Jamaica. *Australian Journal of Teacher Education*, 38(5), 1-13.
- Rowe, E. W., Kim, S., Baker, J., Kamphaus, R. W., & Horne, A. M. (2010). Student personal perception of classroom climate: Exploratory and confirmatory factor analysis. *Educational and Psychological Measurement*, 70(5), 858-879.
- Rowe, M. M. (2006). Four-year longitudinal study of behavioral changes in coping with stress. *American Journal of Healthy Behavior*, 30(6), 602-612.
- Rozman, D., & Hills, J. (1976). Meditation for children. Millbrae, CA: Celestial Arts.



- Ruddle, M. P. (2011). Love and logic: Influence on teacher-student relationships and classroom climate. (Unpublished doctoral dissertation), University of West Georgia.
- Ruff, H. A., & Rothbart, M. K. (1996). *Attention in early development: Themes and variations*. New York: Oxford University Press.
- Rutherford, S. A. R. (1978). Medical student concentration during lectures. *The Lancet*, 2, 514-516.
- Rutter, M. (2006). Implications of resilience concepts for scientific understanding. *Annals of New York Academy of Sciences*, 1094(1), 1-94.
- Rybak, C., & Deuskar, M. (2010). Enriching group counseling through integrating yoga concepts and practices. *Journal of Creativity in Mental Health*, 5(1), 3-14.
- Sahin, Y. G., & Cimen, F. M. (2011). An interactive attention board: Improving the attention of individuals with autism and mental retardation. *Turkish Online Journal of Educational Technology TOJET*, 10(1), 24-35.
- Salmon, P., Lush, E., Jablonski, M., & Sephton, S. E. (2009). Yoga and mindfulness: Clinical aspects of an ancient mind/body practice. *Cognitive and Behavioral Practice*, 16(1), 59-72.
- Sandelowski, M., & Barroso, J. (2003). Classifying the findings in qualitative studies. *Qualitative Health Research*, 13(7), 905-923.
- Sagor, R. D. (2010). *The action research guidebook: A four-stage process for educators and school teams*. Corwin Press.
- Santa, A. (2007). The Playground as Classroom. Educational Leadership, 64, 78-79.
- Santangelo-White, L. (2009). Yoga for children. *Pediatric Nursing*, 35(5), 277-287.
- Santangelo White, L. (2012). Reducing stress in school-age girls through mindful yoga. *Journal of Pediatric Healthcare*. 26(1), 45-56.



- SAPA. (2014). ACDP: Keep Christian teaching in schools. Retrieved February 2013 from http://www.news24.com/SouthAfrica/News/ACDP-Keep-Christian-teaching-in-schools-20140902
- Saraswati, S. N. (2009). *Prana and pranayama*. Munger, India: Yoga Publications Trust.
- Saraswati, S. S. (1984). Yoga nidra. Munger, India: Yoga Publications Trust.
- Saraswati, S. S. (1990). *Yoga education for children wolume one*. Munger, India: Yoga Publications Trust.
- Saraswati, S. S. (2008). *Asana pranayama mudra bandha*. Munger, India: Yoga Publications Trust.
- Sass, D., Seal, A., & Martin, N. (2011). Predicting teacher retention using stress and support. *Journal of Educational Administration*, 49(2), 200-215.
- Schaaf, R., Benevides, T., Mailloux, A., Faller, P., Hunt, J., Van Hooydonk, E., Freeman, R., Leiby, B., Sendecki, J., & Kelly, D. (2013). An intervention for sensory difficulties in children with autism: Randomized trial. *Journal of Autism and Developmental Disorders*, 10 (Nov).
- Schlichte, J., Yssel, N., & Merbler, J. (2005). Pathways to burnout: Case studies in teacher isolation and alienation. *Preventing School Failure*, 50(1), 35-40.
- Schunk, D. (2012). Learning theories: An educational perspective (6th ed.). Boston: Pearson.
- Schunk, D. H. (2005). Self-regulated Learning: The educational legacy of Paul R. Pintrich. *Educational Psychologist*, 40(2), 85-94.
- Scoffham S., & Barnes, J. (2011). Happiness matters: Towards a pedagogy of happiness and well-being. *The Curriculum Journal*, 22(4), 535-548.
- Seale, C. (2007). *Qualitative research practice*. London: Sage.
- Seligman, M., Ernst, R., Gillhan, J., Rievich, K., & Linkins, M. (2009). Positive education: Positive psychology and classroom interventions. *Oxford Review of Education*, 35(3), 293-311.



- Sessa, S. A. (2007). Meditation, breath work, and focus training for teachers and students the five minutes a day that can really make a difference. *Journal of College Teaching & Learning*, 4(10), 57-62.
- Shapiro, S. (1993). Strategies that create a positive classroom climate. *The Clearing House*, 67(2), 91-97.
- Shenton, A. K., & Hayter, S. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*, 22(2), 63-75.
- Silverman, D., & Marvasti, A. (2008). *Doing qualitative research: A comprehensive guide*. London: Sage Publications.
- Singh, N., Singh, A., Lanciom, G., Singh, J., Winton, A., & Adkins, A. (2010). Mindfulness training for parents and their children with ADHD increases the children's compliance. *Journal of Child and Family Studies*, 19, 157-166.
- Sirven, J. I. (2003). Complementary/alternative medicine for epilepsy in Arizona. *Neurology*, 61, 567-577.
- Slabbert, J., De Kock, D., & Hattingh, A. (2009). *The brave "new" world of education: Creating a unique professionalism.* Cape Town: Juta and Company.
- Slovacke, S., Tucker, S., & Pantaja, L. (2003). A study of the yoga ed program at the accelerated school. Retrieved May 2011from http://www.a.m.ronkin.com/yogaed_research_article.pdf
- Smeed, J., & Bourke, T. (2012). Teachers' perceptions of the use of an external agent in School Curriculum Change. *Australian Association for Research in Education*, 39, 207-220.
- Smilkstein, R. P. (1993). The natural human learning process. *Journal of Developmental Education*, 17(2), 2-10.
- Smith, B. R. (2007). Body, mind and spirit? Towards an analysis of the practice of yoga. *Body & Society*, 13(2), 25-46.
- Smith, J. A., Greer, T., Sheets, T., & Watson, S. (2011). Is there more to yoga than exercise? *Alternative Therapies in Health and Medicine*, 17(3), 22-29.



- Smith, M., & Bourke, S. (1992). Teacher stress: Examining a model based on context, workload, and satisfaction. *Teaching and Teacher Education*, 8, 31-46.
- Snoeck, I., & Struyf, E. (2012). The in-service-teacher-training in Flemish schools: Does practice make a (more) perfect teacher? A perspective on coaching and evaluating. *Journal of Workplace Learning*, 24(4), 286-298.
- Spoerl, H. D. (1938). Review of yoga: A scientific evaluation. *The Journal of Abnormal and Social Psychology*, 33(2), 286-287.
- Stake, R. E. (1995). *The art of case study: Perspectives on practice*. Thousand Oaks, CA / London: Sage.
- Stanec, A. D. S., Forneris, T., & Theuerkauf, B. (2010). Yoga in schools. *Strategies: A Journal for Physical and Sport Educators*, 23(3), 17-19.
- Stavley, S., & Brasell, H. (2006). Using stress balls to focus the attention of sixth-grade learners. *The Journal of At Risk Issues*, 12(2), 7-16.
- Steiner, N., Sidhu, T., Pop, P., Frenette, E., & Perrin, E. (2012). Yoga in an urban school for children with emotional and behavioral disorders: A feasibility study. *Journal of Child Family Studies*. July, DOI: 10.1007/s10826-012-963696-7
- Stephanou, G. (2011). Students' classroom emotions: Socio-cognitive antecedents and school performance. *Electronic Journal of Research in Educational Psychology*, 9(1), 5-48.
- Sterrett, W., Fiddner, P., & Gilman, C. (2010). A reflective look at formative assessment: Using math exit slips to check for understanding. Consortium for Research on Educational Accountability and Teacher Evaluation, Outreach Alliances, Watson School of Education, University of North Carolina Wilmington.
- Stringer, E., Guhathakurta, M., Masaigana, M., & Waddell, S. (2008). Guest editors' commentary Action research and development. *Action Research*, *6*(2), 123-127.
- Street, C., & Stang, K. (2009). In what ways do teacher education courses change teachers' self-confidence as writers? *Teacher Education Quarterly*, 36(3), 75-94.



- Streeter, C. C., Jensen, J. E., Perlmutter, R. M., Cabral, H. J., Tian, H., Terhune, D. B., & Renshaw, P. F. (2007). Yoga aana sessions increase brain GABA levels: A pilot study. *The Journal of Alternative and Complementary Medicine*, 13(4), 419-426.
- Streeter, C. C., Whitfield, T. H., Owen, L., Rein, T., Karri, S. K., Yakhkind, A., & Jensen, J. E. (2010). Effects of yoga versus walking on mood, anxiety, and brain GABA Levels: A randomized controlled MRS study. *The Journal of Alternative and Complementary Medicine*, 16(11), 1145-1152.
- Strydom, H., Fouché, C. B., & Delport, C. S. L. (2005). *Research at grass roots: For the social sciences and human services professions* (3rd ed.). Pretoria: Van Schaik Publishers.
- Stueck, M., & Gloeckner, N. (2005). Yoga for children in the mirror of the science: Working spectrum and practice felds of the training of relaxation for elements of yoga for children. *Early Child Development and Care*, 175(4), 371-377.
- Styles, E. A. (2006). *The psychology of attention* (2nd ed.). New York: Psychology Press.
- Sumar, S. (1998). Yoga for the special child: A therapeutic approach for infants and children with down syndrome, cerebral palsy, and learning disabilities. Buckingham: Special Yoga Publications.
- Telles, S., Hanumanthaiah, B., Nagarathna, R., & Nagendra H. R. (1993). Improvement in static motor performance following yogic training of school children. *Perceptual and Motor Skills*, 76, 1264-1266.
- Telles, S., Gaur, V., & Balkrishna, A. (2009). Effect of a yoga practice session and a yoga theory session on state anxiety. *Perceptual and Motor Skills*, 109(3), 924-930.
- Telles, S., Raghuraj, P., Maharana, S., & Nagendra, H. R. (2007). Immediate effect of three yoga breathing techniques on performance on a letter-cancellation task. *Perceptual and Motor Skills*, 104(3), 1289-1296.
- Telles, S., & Srinivas, R. (1998). Autonomic and respiratory measure in children with impaired vision following yoga and physic activity program. *International Journal of Rehabilitation and Health*, 4(2), 117-122.
- Terre Blanche, M., & Durrheim, K. (2002). Histories of the present in research and practice.



- Thelwell, E. (2014). ACDP: Does God belong in schools? Retrieved June 2013 from http://www.news24.com/SouthAfrica/News/Does-God-belong-in-schools-20140905
- Thomas, L. (2008). Being present: Mindfulness and yoga at Westminster center school. *Horace*, 24(2), 1-5.
- Thomas, N., Clarke, V., & Lavery, J. (2003). Self-reported work and family stress of female primary teachers. *Australian Journal of Education*, 47(1), 73-87.
- Tignor, B. (2007). Attention games for classroom: Strategies to enhance attention and executive functions. New York: Childwork/Childplay.
- Tilley, S. A. (2003). "Challenging" research practices: Turning a critical lens on the work of transcription. *Qualitative Inquiry*, 9(5), 750-773.
- Tomlinson, C. (2003). Deciding to teach them all. Educational Leadership, 3, 6-11.
- Toscano, L., & Clemente, F. (2008). Dogs, cats and kids: Integrating yoga into elementary physical education. *Strategies: A Journal for Physical and Sport Educators*, 21(4), 15.
- Tower, G. G., & Tower, J. M. (1996). An elementary school principal's experience with implementing an outcomes-based curriculum. *Contemporary Education*, 68(1), 67-72.
- Trotman, H. (2010). Wild children. Primary Science, 113, 15-18.
- Tummers, N. (2004). Yoga for your students. *Strategies: A Journal for Physical and Sport Educators*, 19(2), 35-37.
- Turkington, C., & Harris, J. (2003). *Understanding learning disabilities*. New York: Checkmark Books.
- Uebelacker, L. A., Tremont, G., Epstein-Lubow, G., Gaudiano, B. A., Gillette, T., Kalibatseva, Z., & Miller, I. W. (2010). Open trial of vinyasa yoga for persistently depressed individuals: evidence of feasibility and acceptability. *Behavior Modification*, 34(3), 247-264.
- Ulrich, J. (2008). Engaging the iPod generation. *Choral Journal*, 48(8), 34-42.



- Uma, K., Negendra, R., Nagerathan. S, Vaidehi, S., & Seethalakshmi, R. (1989). The integrated approach of yoga: A therapeutic tool for mentally retarded children: A one-year controlled study. *Journal of Mental Deficiency Research*, 33, 415-421.
- Urdan, T., & Schoenfelder, E. (2006). Classroom effects on student motivation: Goal structures, social relationships, and competence beliefs. *Journal of School Psychology*, 44, 331-349.
- Vaghela, S., & Pandya, M. (2010). Impact of yoga on mental health. *Indian Journal of Community Psychology*, 6(2), 310-312.
- Vermunt, J. D., & Vermetten, Y. J. (2004). Patterns in student learning: Relationships between learning strategies, concepts of learning and learning orientations. *Educational Psychology Review*, 16(4), 359-384.
- Vermunt, J. D. (2005). Relations between student learning patterns and person and contextual factors and academic performance. *Higher Education*, 49(3), 205-234.
- Vesley, P. J., & Gryder N. L. (2009). Word of the day improves and redirects student attention while supporting vocabulary development. *Intervention in School and Clinic*, 44(5), 282-287.
- Viarengo, T., & Lang, P. (1998). Multicultural education through meditation. *Pastoral Care in Education*, 16(2), 4.
- Vygotsky, L. (1962). *Thought and language*. (Hanfmann, E. and Vakar, G., trans.) Cambridge, MA: MIT Press.
- Walker, C. M., Sockman, B. R., & Koehn, S. (2011). An exploratory study of cyberbullying with undergraduate university students. *Tech Trends: Linking Research and Practice to Improve Learning*, 55(2), 31-38.
- Wall, K., Higgins, S., & Smith, H. (2005). "The visual helps me understand the complicated things": Pupil views of teaching and learning with interactive whiteboards. *British Journal of Educational Technology*, 36(5), 851-867.
- Walsham, G. (1995). Interpretive case studies in IS research. Nature and method. *European Journal of Information Systems*, 4, 74-81.



- Watkins, P. (2005). The principal's roll in attracting, retaining, and developing new teachers: Three strategies for collaboration and support. *Principals and New Teachers*, 79(2), 83-87.
- Weber, W., & Newmark, S. (2007). Complementary and alternative medical therapies for attention-deficit/hyperactivity disorder and autism. *Pediatric Clinics of North America*, 54, 983-1006.
- Wertz, F., Charmaz, K., McMullen, L., Josselsm, R., Anderason, R., & McSpadden, E. (2011). Five ways of doing qualitative analysis: Phenomenological psychology, grounded theory, discourse analysis, narrative research and intuitive inquiry. New York: The Guilford Press.
- Whitehead, J. (1998, November). Developing research-based professionalism through living educational theories. In *Keynote presentation to the 'Action Research and the Politics of Educational Knowledge Conference, Trinity College, Dublin* (Vol. 27).
- Whyte, W. F. E. (1991). *Participatory action research*. Sage Publications, Inc.
- Williams, N. (2010). Yoga therapy for every special child: Meeting needs in a natural setting. Philadelphia, PA: Singing Dragon.
- Williamson, L. (2012). Yoga in public schools. *Teaching Tolerance*, Spring, 27-28. Retrievedhud March 2013 from http://www.tolerance.org/magazine/number-42-fall-2012/feature/yoga-public-schools.
- Willig, C. (2001). *Introducing qualitative research in psychology: Adventures in theory and method*. Buckingham: Open University Press.
- Willis, L. (2007-2008). Why a Christian alternative to yoga? Retrieved Aug 2013 from http://www.praisemoves.com/calt.pdf
- Wilson, H. (2009). ADD and ADHD. Johannesburg: Macmillian.
- Wilson, J. (1995). Attention and concentration. Educational Research, 37(1), 33-38.
- Winkler, K. J. (1992). Researchers leave labs, flock to schools for a new look at how students learn. *Chronicle of Higher Education*, 39(8), 6-7.



- Wisner, B., Jones, B., & Gwin, D. (2010). School-based meditation practices for adolescents: A resource for strengthening self-regulation, emotional coping, and self-esteem. *Children and Schools*, 32(3), 150-159.
- Wood, L., & Kroger, R. (2000). *Doing discourse analysis: Methods for studying action in talk and text*. Thousand Oaks, CA: Sage Publications.
- Wulf, G. (2007). Attention and motor skill learning. Champaign, IL: Human Kinetics.
- Yin, R. K. (2003). *Case study research: Design and dethods* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Yin, R. K. (2004). Case study methods. *Complementary Methods for Research in Education* (3rd ed.). COSMOS Corporation. Retrieved MY 2010 from http://www.cosmoscorp.com/Docs/AERAdraft.pdf
- Yong, Z., & Yue, Y. (2008). Causes for burnout among secondary and elementary school teachers and preventative strategies. *Chinese Education and Society*, 40(5) 78-85.
- Young, M. S., Robinson, S., & Alberts, P. (2009). Students pay attention! Combating the vigilance decrement to improve learning during lectures. *Active Learning in Higher Education*, 10(1), 41-55.
- Zambolin, K., Fabrizio, M., Ferris, K., Barclay, S., & Carrier, D. (2007). Tracking teachers' behavior to concurrently decrease punishment use with and problem behavior in a child with autism while decreasing the child's frequency of negative statements. *Journal of Precision Teaching and Celebration*, 23, 27-29.
- Zedan, R. (2010). New dimensions in the classroom climate. *Learning Environment Research*, 13, 75-88.
- Zhang, J., & Griffin, A. (2008). Including children with autism in general physical education: Eight possible solutions; To successfully include students with Autism, you must first believe that it can be done. *The Journal of Physical Education, Recreation & Dance*, 78(3), 33-38.





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Addendum A

16.1 Interview Questions

16.1.1 Students

How do you feel about the exercises we have done?

How did you feel before doing the exercises?

How did you feel afterwards?

Explain how you feel about your class work? Before the exercises? After?

If you could change something about school what would you change?

What makes it difficult for you to finish work?

Describe how you focus your attention on class work?

How do you feel when have to sit still?

When is the best time for getting class work done?

When is it hardest for you to work?

What do you like about the exercises?

What don't you like about the exercises?

What poses did you like the best? Least?

How did you feel about the breathing exercises?

16.1.2 Teachers

Have you noticed a difference in students' work?

Does student behaviour change on days when exercises are done?

How would you feel if you were going to teach these exercises yourself?

What have you observed about your students' ability to focus in class?

When do your students struggle to focus?

When is the best time for students to focus on completing work?

How do the exercises influence student behaviour?

Can you give examples?

Are focus and attention a problem in class? How? Please give an example.



What poses did you like best for the students? Least?
What poses would you feel most comfortable teaching? Least?
Did you feel the breathing exercises were helpful? Why?

16.2 Survey Questions

16.2.1 Students

I like the exercises. Y/N

The exercises help me with class work. 1 2 3 4 5

Days when I do the exercises I get more finished in class. 1 2 3 4 5

I feel no difference in my day and class work if I do the exercises. 1 2 3 4 5 $\,$

The exercises make it harder for me to complete my work. 1 2 3 4 5

Did you enjoy the breathing exercises Y/N

Name your favourite part of the exercises _____

Name your least favourite _____

Draw a picture of your feelings after the exercises.

These surveys will be made child-friendly with smiley faces and pictures. Also, I will alternate questions so 2-3 questions will be asked at a time. Otherwise I am afraid students will lose interest and not take the time to carefully select an answer.

16.2.2 Teachers

Do you like the exercises for your class? Please explain.

Do you feel the exercises help your students with class work?

On days when we do the exercises, are there any changes in class work?

Would you feel comfortable teaching the exercises to a class?

16.3 Exit Slips

Before the exercises I felt ...

After the exercises I felt ...



The exercises make me feel ...

I like doing the exercises because ...

I do not like doing the exercises because \dots

The more I do the exercises ...



Exit Slip 1

Before the exercises I felt ...

After the exercises I felt ...

The exercises make me feel ...





Exit Slip 2

Before the exercises I felt ...

After the exercises I felt ...

I like doing the exercises because ...

I do not like doing the exercises because \dots





Exit Slip 3

Before the exercises I felt ...

After the exercises I felt ...

The more I do the exercises ...



Survey Students

I like the exercises.

YES NO



The exercises help me with class work.

1 2 3 4 5



Days when I do the exercises I get more finished in class.

1 2 3 4 5



I feel no difference in my day and class work if I do the exercises.

1 2 3 4 5



The exercises make it harder for me to complete my work.

1 2 3 4 5



Did you enjoy the breathing exercises?

YES NO





Name your favourite part of the exercises					
Name your least favourite					
Draw a picture of your feelings after the exercises.					



Addendum B: Field Notes

June 4th 2012 Monday

Arrive at 10:30, students have a break at 11:00, Exams start on the 6th

We will start "yoga" on the 6th after the break after the exam

32 students in class, 10 girls 22 boys 15 black 1 coloured 16 white

20 students participating in yoga

6 girls 14 boys 1 coloured 9 white 11 black

Observations after coming back from break

Students lined up in 4 rows (2 girl rows and 2 boy rows) outside the class and were excited to come inside. J waited for a good 10 minutes while the students settled themselves. They were told to study for their upcoming exam. Students did not calm down easily or quickly.

Movement from desks to other desks, to bathroom, to door. Lots of reasons to move and 'avoid' getting work done. Conversations were usually about recess or what they were planning to do after school.

I did check at 15 minute intervals to look for on task behaviour. The first check almost no one was on task. Teacher started walking around and on task behavior improved, but she was unable to work one on one with students. Whenever teacher stood up or spoke, the class went quiet and focused. Certain students were always on task, others always off, most were on and off. Throughout the time students were never very focused and never very much on task.

	15	30	45	60	75	90
On task	1	5	10	4	5	4
Focused but	3	1	4	4	5	4
off task						
Moving	7	5	3	2	0	2
Chatting	9	9	3	10	10	10



During direct instruction on the carpet in small group work, students were much more focused and on task. Only one or two students were off task and they were easily brought back to the lesson. The rest of the class's focus improved when the small group was on the carpet but they were not necessarily on task.

It was when students had to work independently that they were off task. Constant reminders were needed. Often when teachers would remind students to work on concentrating this would distract the students who were working, but it would bring the class under control for a little while.

Surprised by how few students were actually on task even if they were focused. But they did not have work only to study for exams; some would read or draw and not study, but were not disruptive.

Students were focused during the application of the small group work.

Looking around the room I do not see that there is space to practise yoga while sitting. Too many tables and chairs would need to be moved.

June 5th 2012 Tuesday

After break, took 10 minutes to settle, but needed T to insist on quiet and work.

Student are writing a mock test.

Start of the practice test, more focused than when given time to prepare. They actually had a specific task instead of an abstract idea of study.

T said they do Maths first thing in the morning when concentration is best.

J says concentration is worst afternoon – T agrees.

During the test students were quiet and relatively focused, but T was talking and giving them a verbal test so they had to pay attention or would miss it.

No yelling or loud voices used to maintain student focus, students are brought back to attention with continual and often gentle reminders.

As the marking of the test continued, fewer and fewer students were paying attention.



30 minutes to prepare for tests, majority of students were chatting and off task; only 6 were actually on task, and it went down as the time continued, but once the test started they were on task.

	15	30	45	60	75	90
On task	6	2	20	20	20	8
Focused but	2	8	0	0	0	10
off task						
Moving	2	5	0	0	0	0
Chatting	10	5	0	0	0	2

⁴⁵⁻⁷⁵ min was during the test, they were all on task; 90 was during marking.

Tomorrow I will give the students their assent forms and start. I want to talk about the importance of breathing and posture and concentrating.

June 6th 2012 Wednesday

T is not here – she does not work on Wednesdays. This could affect students' behaviour.

Came in from break – did assent form – then yoga. Students were very excited about yoga. I think they were excited because it was something different from coming in from break and just having to study. It got them out of studying at least for a little while. They were a little different with T gone.

They were subdued after yoga practice; 'calm' would be the best description. They listened to directions J gave and were compliant. The feeling was just more relaxed and calm; they were not energised and were happy to sit and study without whining about being bored.

To practise I had the students push in their chairs and find their 'yoga bubble' (meaning they could stretch their arms and legs and not touch anyone else.) The students who did not have permission went straight upstairs to study and revise work; only 20 participated. (Since they are only studying for exams the two groups are easily split.)

Started with breathing hands up/hands down. I wanted to get them calm and focused on their breathing, I also thought standing poses would be a good start as I was worried about space if we needed to sit. This worked very well. No furniture needed to be moved, so less space was



needed and I could see the students better. Also they do not need mats. I will stick with standing poses as suggested in reading.

Cross arms breathing

Palm tree

Swaying palm tree

Back stretching

Wind releasing

Tree

Mountain

Breathe

In between each pose we went back to breathing to try to keep the focus. This was essential as they were giggling with poses, but calmed down with deep breathing.

Students were very quiet and calm, although yoga took 15 minutes. When done, they sat and worked without needing to be prompted. The past two days it took at least 15 min to get them to settle so it seems to be about the same amount of time. They seemed to be more on task but it only lasted 15-30 min then they needed to be reminded again.

	15	30	45	60
On task	15	15	14	10
Focused but	0	2	3	4
off task				
Moving	4	1	1	5
Chatting	1	2	2	1

After yoga the students did not share; my own students would always share but they know me better.

Students were very calm after practice.

Teachers include me and have no issues with me being in their space. They are curious about my research and supportive. The school seems to be very accepting of me.



The students were very proud of their signatures. They wanted to show me and make sure they signed correctly. It was a big deal to them that they were giving permission.

Those who struggled to stay on task were still off task after 15-30 minutes. The main difference was it took less time to start working and was less management to get the students quiet and situated.

Many factors to consider: Exams

Arrangement of desks

Time of day

T vs. J in the room

Work given vs. just study

Some of the students focus on school work, some are very focused on work (not school-related), some just don't want to do anything but play.

I was left alone with the students in the afternoon, which may affect their focus. A new teacher, they test their boundaries and try to get away things that they would not normally do. So many factors!

It is telling that many students do concentrate but only when they want to.

The yoga seems to have a calming effect on the students.

It is so difficult to "judge" – there are so many factors that could influence.

June 7th 2012 Thursday

Today during yoga a small group of boys were a bit silly (laughing and joking). I need to keep an eye on them. The students do really calm down when they are 'forced' to breathe deeply and they focus very intently for about 15 min afterwards. I do think that if they had work to do as opposed to just studying and revising for exams they might be more focused. We will see in the last week. The students calm down. It really calms them down and quickly.

The boys have gotten really into paper guns. They fold them and make as many as they can. There are a few boys where this is their focus. So I would say the students are definitely able to focus more but that does not mean they are focusing on what they should be; it does not mean they are on task.



J is much stricter with the kids today. Today the students are more focused, moving and chatting much less.

It seems that now that we are practising yoga, the students are less rowdy, they are on task, but more than that they are behaved as in doing what they are asked to do.

	15	30	45	60	75	90
On task	20	18	17	10	19	18
Focused but	0	0	0	3	0	0
off task						
Moving	0	0	1	2	1	2
Chatting	0	2	2	5	0	0

At 75 min the students were allowed to work in groups

I am consistent in that I observe at the same time until the same time each day.

The waves of focus definitely come and go. The students will work for 15-20 maybe 30 minutes, and then they start to chat or wander. At this point they need to be brought back to work. Again they are expected to sit and study for an hour and a half, which is a long time. I take 15 min of the time to practise yoga with them after break. Afterwards the energy is more subdued.

These focuses are not always on work but as these kids are studying for exams; at times they read or draw but are quite intent on what they are doing.

I do wonder if, since Mont kids are used to having more independence, they are used to focusing more than at a traditional school.

J observed that today the kids were much quieter. She wondered if yoga was having an effect on them. She remarked that they were calmer and more on task.

The students really do calm down when they are 'forced' to breathe deeply.

Today the students were much more on task compared to all the other days. When they got up it was to use the toilet, get a tissue or sharpen a pencil. They were not wandering around the classroom aimlessly. They rarely chatted and were quite focused on the work at their desks. Now maybe they were really worried about the exam tomorrow. Also I wasn't alone with them



during their work time. Not all studied, some read and some drew, but they were all pretty much busy, calm and focused.

As the time came closer to the afternoon break, students' focus waned.

After an hour students were allowed to study in pairs; before this they were supposed to be studying alone. I wonder how this will affect things. As I walked around I heard conversations, mainly about their work.

	15	30	45	60	75	90
On task	12	16	17	10	9	4
Focused but	3	3	2	1	6	6
off task						
Moving	2	1	1	3	2	4
Chatting	4	0	0	6	3	6

June 8th 2012 Friday

It was a VERY windy day today – I wonder if weather affects students' focus?

The kids were hyper! Of course, it is Friday and the wind was intense. They were crazy when lining up after break outside.

They did calm down immediately when we started yoga. They were allowed to work in groups to study and were much calmer than outside. Again the yoga calmed them down; it did not change anything that wasn't already there; it just managed to calm them. The energy was still there but they seemed able to release it and work. The group of boys was much more serious now; only two of them like to be silly; and I just move them away from their buddies.

The students love the wind-releasing pose – we call it the woosh. A few said that was their favourite. They get a little silly when we do the whoosh so I need to be prepared with deep breathing to calm them back down. But they say it helps them relax and let go.

Teachers say it feels like they have known me for years, they can say anything and feel comfortable with me.



It seems like before break the students are looking for any reason not to work; there is a tense feeling, maybe just because they know break is coming. But now after break and yoga, they appear to me more relaxed and trying to stay on task.

After yoga T took a small group and did a lesson on the carpet with them. The rest of the class was on task. This only lasted about 10 min. However, both T and J agreed that the students were much calmer than before or during break. It seemed to just be one of those days. T said that they were wild all morning and that after yoga they calmed right down. She was surprised because of how crazy they had been all day.

What I have found so far is that the students can be very focused but not doing what they should be doing. So far yoga has saved time waiting for the kids to calm down and be ready to learn. They will work immediately after but only for 30 min max and only if they have a specific task. After about 30 min they want to do something that interests them.

The fact that it is Friday also plays into the students' concentration. They know they get to go home early and have the weekend, so why study?

By using standing poses I think time has been saved; there is no need to move furniture and the poses are simpler to explain. Also the students can all see me better than if I was on the floor.

	15	30	45	60
On task	11	16	15	15
Focused but	6	4	4	5
off task				
Moving	5	0	0	2
Chatting	0	0	1	3

June 11th 2012 Monday

J's birthday students had a party at break. Hmmmmmm how will this affect things?

They closed their eyes and were silently breathing for 3-4 minutes at the end of a practice – this MUCH longer than they have in the past. Immediately after, they sat to complete their task and were calm and super focused. When the task was completed they were less focused until T gave them another specific task to work on. I was impressed.



	15	30	45	60
On task	19	19	17	2
Focused but	0	1	2	3
off task				
Moving	1	0	1	6
Chatting	0	0	0	9

Art at the end of the day.

If they are given a task immediately after yoga they are very focused, but when they have to sit and wait they lose the calm and focus much quicker.

The students are at a point now where they request certain poses and at least they look to forward to yoga. I asked why; they said it makes me calm and relaxed. Another student said the class is quiet after, so it is easier to get work done. The group all seemed to agree on these points.

This week I am interviewing T; she is SUPER nervous and does not want to be recorded, so it will be shorter. She would prefer to write out her answers. I will interview J later.

One student turned in his permission I slip today; his parents had given permission orally to T and J previously, but I told him he needed the permission slip to continue. He is very serious about yoga and excited to join his classmates. I asked why he wanted to join, and he said he thinks it will help me. If they are given a task immediately after, they are very focused. They focus on their studies and work throughout the period, as opposed to when they come straight in from recess and have to calm down.

I have noticed that it is very easy for students to appear on task by reading or drawing. The students are allowed to draw or read, so in a way they are on task but they are supposed to be studying for exams. T and J just want them quiet and calm.

The students were really only able to concentrate for 30 min today.

T and J also said today, they love having me in their class. I understand the "craziness".

The students had coke and chips and sugar at break. I suspect this may have an effect on their focus today.



These paper guns are still everywhere. Really after the first 30 min students just seem unable to be quiet. I wonder of deep breathing again might have helped, but since it is not my class I cannot make that call.

Yoga helped to rein them in and calm them down. The silly boys were still a little silly today. I feel like the yoga helps to calm them down quickly and efficiently, but the effects don't last past 30 min.

J and T say that sugar has made the kids a bit out of control.

When I asked a student if yoga helped her with her studies, she explained, "well I don't have to work so hard, it would feel easier, I think it has been a while. I mean if my brain is smooth then the work comes easy and it just works."

June 12th 2012 Tuesday

The kids had cupcakes at break. Hmmm a lot of sweets and things the past few days.

Some of the kids say getting their work finished is easy; however, their teachers say they do not complete their work.

Not all the kids answered all the Q's – some did not realise there were Q's on both sides of the exit slips, so it was left blank. They are kids and just want to finish.

The teachers were agitated today because they found out they have to come in 4 days over the holiday. They were NOT happy about this. I wonder if the students pick up on this?

During the practice the kids were very calm and focused; most closed their eyes and we had another 3-4 minutes of breathing at the end.

The problem is when we finished I gave them the exit slips and they were silent and calm and focused. However, T and J were out of the room and the students were not given any work to do or instructions, so they didn't have anything to do, so they lost all the focus and calmness. They were pretty calm, all things considered. Other classes might have gone a bit nuts. For the most part they sat at their desks, read, drew or quietly chatted with friends. There was very little running around. They behaved even though they had nothing to do. However, the effect or the calmness was gone by the time they had to work.



After T and J came back they worked for the first 15 min but then had to be brought back to attention and from there on were not really in the working mood.

I noticed that some of the kids who used to be silly during yoga are much more serious, closing their eyes and concentrating. I asked them about it and they said they think it helps them. It makes them feel better and calm, but only if they take it seriously.

I can feel the effects of the yoga we do on me.

I still don't feel like the kids are very focused today. They are sitting quietly but not necessarily studying; then again they *are* focused.

I have found yoga calms the students and if they are given a task to accomplish immediately after, then they focus, but if they have nothing to do they goof off a bit.

T remarked that she noticed how the students really focused during yoga. She was surprised by how serious they were taking it and how quiet they were.

When J forced them to sit at their desks and talked to them they calmed down.

	15	30	45
On task	14	0	2
Focused but	0	3	6
off task			
Moving	2	8	0
Chatting	4	9	12

They weren't given any work to do and were given a sort of free time, so I stopped counting on task.

June 13th 2012 Wednesday

SUPER COLD today.

The kids had a shorter break today and were less focused during yoga. I am not sure why. But a few who used to goof off are taking it much more seriously, and told me their favourite poses. This surprised me because a few days ago they laughed and made it difficult. Now they are requesting poses.



They were all on task, answering the exit slips after yoga. However, then they had to wait for J to give them their work (I can see how it would be MUCH easier to have this done in my own class. I would have control over things like making sure they have work to do or lessons to do after yoga. There would not be this waste of time, or at least I would like to think, that is how it would be.) During the waiting time they lost some of their focus. They need to keep the momentum rolling.

I can also say the kids took their time coming from break and getting settled. They were a bit rowdy today. However, after yoga they were calmer and nowhere near as rowdy. They were ready to sit and work and not goof off.

Instead of studying, J had a lesson for the students (I wish she could have started the lesson immediately after yoga). I noticed this week that the students are calmer after recess; well I should say after recess. Last week they came in, it took 15-20 minutes to get them settled and working. Now they come in and prepare for yoga, then get to work after.

A lot of the kids received 0's on part of their test because they didn't do the homework. So they needed to do their homework now. During the lecture they were very attentive.

They were given the option to improve their marks.

Some of the kids did not bring their workbooks so they didn't work. Some worked very hard. They really are just about 100% on task once they are given an actual task.

I actually wonder if the cold weather has an effect on the kids' ability to concentrate. There are just SO many infinite factors.

They really focused for 45 minutes today. Which I think was impressive. T is gone, it is much calmer than last Wed.

They were really focused during yoga; we got almost 5 min of deep breathing at the end.

	15	30	45	60	75	90
On task	20	18	20	16	14	6
Focused but	0	2	0	2	2	4
off task						
Moving	0	0	0	0	2	4
Chatting	0	0	0	2	2	6



June 14th 2012 Thursday

We practised for closer to 30 minutes today because for the first 15 minutes the kids were not focused at all; they were quite silly. The classroom door kept opening from the wind, which distracted them a lot and made them laugh. They have never been like that before. I did a few minutes of deep breathing and then they were able to focus. Next time I will start with deep breathing and see if that helps. I found that I need to add a new pose every few days to prevent them getting bored. The deep breathing seems to be the key. The breathing calms them down and helps them focus. However, I do not think they would be willing to just breathe; they need the poses to keep their interest up. Also a lot of the students say that the stretching helps them be able to sit for longer.

T commented on how she totally sees improved concentration in a few of the students who had really poor concentration. She was very impressed. She said she was surprised how quickly she noticed a difference in the students.

There are two kids who don't take it seriously at all, so they are getting no benefit. According to T.

A few girls tried to "sneak" upstairs because they thought it would be more fun; they wanted to play. They thought the kids upstairs had free time the entire time. Once it was explained that the kids upstairs were studying, they were happy to stay.

It was impressive to see how getting the kids to focus on their breathing gets them to calm down almost immediately. They were so very focused. When we finished T and J were again not here.

Tomorrow is the last exam and it is comprehension, so they don't need to study today. The students said they are super excited to be done with exams. They were calm today after yoga. A few kids asked if I would come forever, because they really like yoga. This makes me feel good and make me believe even stronger that yoga in the classroom is important. The kids keep asking for it. The kids say it helps them.

T said she has noticed improvements with the kids and she wants to keep doing the exercises after I go, and that I must make a video for them.



They were noisy when they were making cards but it was an activity where they worked together. When I walked around I could see that most of the kids were making cards or reading. It is just a few that were really being silly, making noise and distracting the class. One student said the noisy kids are the ones who don't do yoga with us.

It is impressive; most of the students are working and the ones who aren't making cards are still doing academic work as in writing or reading.

However, at 15 to one, when they get their last break, the boys were starting to run around a bit.

	15	30	45	60	75	90
On task	4	15	15	10	7	5
Focused but	6	0	0	1	2	4
off task						
Moving	3	3	4	7	2	7
Chatting	7	2	1	2	9	4

June 15th 2012 Friday

Windy windy day and the last day of exams, as well as the last day before the break and a short day. I was expecting craziness; however, the kids were very focused during yoga. I thought since the winter break was starting, it would be an insane day, but the kids were focused and calm and did 5-7 min of deep breathing.

T and J said they have both noticed the kids being much calmer and concentrating more.

After the exercises, they cleaned the class and then played outside.

A few of the kids came up today to tell me the exercises help them study for exams and they really enjoy them. They said they felt okay about their exams because they were better able to study because of yoga. A group of 5 girls and then 3 boys nearby agreed.

T did the practice with us today and she said she felt great and calm and focused afterwards.

I did not tally on and off task work, since they had no work.

July 24th 2012 Tuesday

T was absent – her tooth split.



More responsible, as they grow up (J said).

You can truly see how the students who take this seriously are getting something out of it (J), and I agree. Some of the students used to be silly during yoga, but now they focus and really look forward to it. I was worried that it would take too long to see the effects of yoga, but after one or two days T and J and I started to notice improvements and changes.

There are two students who simply goof off and don't take it seriously. "They tend to infect the others," (J) "I can see with some of the students how they calm down." This is how teaching is, you never get 100% to behave.

J taught geography right after yoga, and they were super focused on the lesson, I would say 90% – it was really impressive. She even commented that usually after break the lessons don't go so well, because they are riled up from break, but since a majority of the class practises yoga after break, the class is calm and ready to focus (those who don't practise read a book and come down when we are done).

We talked and can see how some students have really taken to yoga. J wants to see about continuing it when I am not here. She said the kids see me and think yoga! They get very excited and happy about it.

I can see that some kids are very focused, but this does not mean they are focused on their school work.

The students sat quietly listening to the lecture on natural resources for 30+ minutes. It was impressive to see how focused their attention was. Now, some, maybe 5, are not really paying close attention, it could be that the lesson got a little long. There is a big difference between on task and focused; a student can be focused and not on task, or on task but not focused. I do not see that the two are related. What I would like to see if using yoga, and then have the students immediately sit down to work.

Emotions seem to be running high: today a few kids fought and there were tears.

The weather is nice but the kids are a bit cranky.

There was a disruption during the break (holiday) – a few students moved out of SA unexpectedly (none in my yoga group), but the class felt a little sad they didn't get to say goodbye.



I think yoga really helps to calm the class down, but I might be best used as a transition tool

	15	30	45	60	75	90
On task	20	20	16	15	12	9
Focused but	0	0	2	2	0	1
off task						
Moving	0	0	1	1	2	2
Chatting	0	0	1	2	6	8

July 25th 2012 Wednesday

They were much more serious and focused today during yoga practice, and afterwards they were calm and listened very well.

T explained how she was surprised to see such a difference in the students. She was even more surprised by which students took it [yoga] so seriously.

There was an art lesson today after yoga, which makes tallying on and off task difficult as in art they are free to move and chat and wander around. So I just made observations and talked with the art teacher about the lesson.

The kids were working on art for the most part. A few would get silly and run around or make paper guns, but they were easily brought back on task.

What I have really found is that I wish I had at least 3 months or more, that I had more control over what is happening in the classroom. I mean we make plans for the interviews, but T has been sick or J is busy and I feel the pressure. Or I would like to make sure they had lessons or work directly after yoga.

Art is a noisy lesson and it's difficult to see who is off task or unfocused.

The kids were so calm after yoga and during. I was surprised how many of them really took great care with their art. The students listened carefully to the art teacher about the lesson; she said, often they are just worried about getting to the art part and are not interested in learning the art. She asked if they had practised yoga today, and I said yes. She said maybe that was why they listened better. Several students have remarked they like yoga because they



feel better; they say this in such a way as to show they are surprised by it. I asked why they seemed surprised and they just said don't know

July 26th 2012 Thursday

T is back, which I think helps the kids, as things are back to normal. The kids are super focused during yoga. It was impressive to see it. I forget how focused they can be. They were all so thrilled to be participating. As soon as they saw me they wanted to end break sooner, so we could practise yoga. Made me feel good.

I am amazed at how much the students enjoy yoga. J has said how she sees a real difference with the students, and a few of the students even use the breathing on their own when they are struggling. Last week when I was not here they asked about yoga, and practise on their own during break, and some tried to lead the class in yoga. I think this shows how much they enjoy it and that they really see it as helping them. The students said they needed yoga to help them calm down after break, and that without it they did not study as well.

The kids are so calm and focused. It saves about 15 minutes of time. When the kids don't do yoga it takes about 30 minutes to actually settle down and focus. The yoga takes about 15 minutes and then they are settled.

After about 40 minutes the kids lost some focus during the lecture. They actually listened quite well. I think anyone would lose focus after 40 minutes. They did pretty well for about an hour. I am wondering how they will work when released from the lecture, as it seems they need to be active for a bit. J even said they have stayed pretty focused and she was proud of them concentrating for so long.

We did over 5 minutes of deep breathing today.

	15	30	45	60	75	90
On task	20	20	18	14	12	8
Focused but off task	0	0	0	2	2	2
Moving	0	0	0	1	3	4
Chatting	0	0	2	3	3	6



July 27th 2012 Friday

I came but things were so hectic; J said we would have to postpone. They had some drama with teachers being out, classes getting combined, so I just had to leave. It was a short day anyway.

July 30th 2012 Monday

WOW. The kids were SO focused during yoga they could have practised for twice as long. Well, the same two still don't take it seriously, but 18 out 20 isn't bad. It is amazing to see how far they have come since day one. They were amazing with yoga. Usually Mondays are a bit rough for them, but they jumped in and startled me with how serious they were.

J gave a short presentation afterwards and the students were calm and focused.

Some students do have blank stares, but they are very calm, and when they are sent to work they are focused.

T is so funny; she gets very nervous but J just does it, so my interview with T was super short, but with J it was fine. T preferred to answer questions on pen and paper.

It is sad to leave. The kids have accepted me into their classroom, as have the teachers. It is amazing to feel the sense of belonging.

I found that since J is like me in the sense that she is super organised and needs to get things done, that she is more dependable in a way. But I had to 'prove' to her that I would not add to her stress, that I would work with and around what she needs to do.

A few students came to talk to me saying they wouldn't miss yoga, because after they practised they could do the work easier. "My brain can work more." I asked why, and most said IDK but one said she just felt better, calmer and the answers came easier.

The kids were very sad to see me go they were most concerned about being able to keep practising yoga. I am still surprised by how much they seemed to have gotten out of it. They love it and THEY are the ones who keep saying how it helps them calm down and study, how they feel better after they practise. I was careful to not lead them in anyway.



T stressed when asked 'formally' about anything, so most info from her I had to get informally and rush back to take notes.

T said "their concentration definitely improved, I see, especially when I teach directly after."

T really explains how she was surprised to see such a difference in the students. She was even more surprised by which students took it so seriously.

Last day – the students really shone. They were very calm and very focused.

	15	30	45	60	75	90
On task	20	19	17	19	14	15
Focused but	0	0	0	0	2	2
off task						
Moving	0	1	1	0	2	1
Chatting	0	0	2	1	2	2

March 4th 2013

Arrived and immediately heard students saying she's back, oh yes, we get to do yoga again.

T and J accepted me back as if I had been coming in each day.

Talked with T for a while outside. She still gets way too nervous to be recorded, so we just talked as I made notes.

She said she still does deep breathing with the students before tests and after break, if they are struggling to settle down and work. She said it really does calm them down. The students really miss yoga after break. They often ask for it. "The breathing was the part that stuck with me." I could see and can see how the children calm down and settle into getting their work done when they take time to breathe and focus. "The students change a bit when they practise yoga; with you they are so much calmer."

We practised a little yoga with the kids; they fell right back into the routine.

I chatted with some of the students about yoga and what they thought, and asked for clarification on some of their interviews. I did not record on task behaviour.

"Brain work more" - what does that mean?

"Well, it is just that, well I can get the work done and it seems easier."



"I don't feel stuck in my chair, I feel okay and my brain just does the work."

"Well hmmm, uhhhh, I don't think kids are supposed to sit still and we don't like it, so when we get to run we don't want to stop, but when we breathe our bodies are okay with sitting."

"I mean my brain can find the answers for me."

"Feel open."

"I just feel free and calm."

"Laugh."

"Laughing makes me happy and when I am happy I feel good. The whoosh makes me laugh and then I get happy and I feel like I can do it and then I do it."

"Rid of all tension and bad things that stop you from focusing."

"If there are bad things then I cannot think, I think of the bad things, but breathing make the bad things go away and I feel okay again."

Quoted as close as possible to what students actually said.

Students were eager to talk about their thoughts and feelings about yoga; they liked to share with me what they thought. They were quite eager to practise more.

March 5th 2013

Was able to talk with J today. She said that having the kids take deep breaths is something they have been able to keep doing on their own. At first the kids asked for yoga each day, but now they don't.

Wishes they did continue with it, because it really did make a difference, need to find a way to make it part of each day, but difficult.

Amazing how students are calmer.



Addendum C: Exit Slip Chart

Exit Slip #1 Before the	I was	Bored 2	Нарру	Awesome	Sced (scared)	Energetic and	My tummy felt painful	I thought	Good and it	I felt sore and	Sad nurues	Like I wouldn't
exercises I felt					and excited	hyper	1	that it was	cool rest	unexercised	and sceard	like it
	werid	Stiff	Excited 2	sleepy	Okay 2		Bored and tired	great	good			
After the exercises	I felt relaxed	Pain	Good 4	Fine	Calm and relaxed	Relaxed and awake	Stretched and happy	Tired 2	I felt happy and	I felt good healthy and not sad	I thought that you	More comfortable
I felt		Okay	awesome	sleepy	Better and relaxed				exercised	anymore	are good at teaching us yoga	
The exercises made	asom	Exercised 2	Happy and relaxed	Fit	Happy and stretched	Ready for bed	Like spuerman (superman)	Happy so happy	Happy but a little but	Happy and healthy	Like I was flying	Calm refreshed and chilled
me feel	Stronger and healthy	Relaxed 4		good				Happy 3	sore			



Exit Slip #2													
Before the exercises I	Tired 3	Stressed	okay	Sleepy	Нарру	bad	uncalm	Tense	Good 4	weird	ZZZZZZZ	Like I am	Cool
felt			pained							aweso me		angry	
After the exercises I felt	Relaxe d 6	No so stressed as before	Good 2	Sleepy 2	Calm and nice	filacst	exercis ed	mad	well	revitali zed	ZZZZZZZ	better	super
I like doing the exercises because	I feel good 2/ It good	It keeps me happy	It makes me relaxed 3	I like filling the papers out	It makes me feel better	It is fun 2	It made me calm/ It is calming	Is smooth en my muscles	They help me	It is cool	I get thin and it is fun	1	It is super
I do not like doing the exercises because	?	I like all the exercises	1	I don't know 2	Of the laughing	It is tiring							



Exit Slip #3 Before the exercise I felt	Tired 5	Okay relaxed	Bored fit	Sosososso good	Eecsuetien (Exhuation) stif	Okay and tired	Hyper	good So relaxed	That is was excellent	well happy		
After the	Awake	Good 3	revitalized	fresh Tired 2	Better and calm	Relaxed 2	I was more tired but I	awesome	My leg was little pain	bored		
exercises I felt							liked the whoosh exercise					
The	The	The	I get	The better	Don't	It	The more I	I get	The more	The	impossible	I
more I	more I	more I	relaxed 2	I feel 3	know	becomes	consantrot	fitter and	achievements	more I		gonna
do the	feel	feel		I feel	I feel good	easy	(concentrate)	calmer	I can get in	get	happy	loss
exercises	relaxed	happy		strong					rock	more		wait
				and I feel cool					climbing	energy		



Exit slips

What pages	The noise	I like the	The best	The	The leave	Breathing	Everythina	I liked the	I liked the wh,
What poses					The leg up	U	Everything		· · · · · · · · · · · · · · · · · · ·
did you like	(whoosh)	whoosh. I	breathing	whoosh one	and hands	exercises		tree an	whoosh, the
the best?		didn't like	and being	the tree	up. None.			disliked	most. I didn't like
Least?	The leg	the palm	calm,	Best is	The palm	The tree	hooow	the	the palm tree and
		tree and	worst the	swaying	tree © 2			whoosh	the forward bend.
		the	whoosh	palm tree					
		forward	and touch						
		bend	your toes						
How did you	awesome	It was	It was the	Great	I had a	I feel	I felt well	I feel good	I felt strong.
feel about the		boring	bestest it		headache	relaxed			
breathing			was calm		and it				
exercises?	I feel good and	revitalizing	Cool	I feel	helped	Нарру	It helped		
	happy			comfortable	ease the		me focus		
	111				pain a little				
What do you	A lot of fun	Yes I do	Relaxed 2	"I like it	All of it	stuff	They are		
like about the				because it's			exercise		
exercises?	fun	The	everything	fun and it	The tree	Everything	A lot		
	Tun	whoosh 2	everytimig	helps me to	The tree	3	Alot		
		WIIOOSII 2		constarat in		3			
				class. 2					
What don't	Getting sore 2	Nothing	Left side	I like	I like all	stuff			
you like about	C	for me	of the	everything	the				
the exercises?			eagle	of the	exercises it				
-	The palm tree 3	Everything	I like it all	exercise.	helps me	Nothing 5			
	1	2			relax.				
How do you	Calm 4	Relaxed 2	I felt so so	Relaxed	Very good	happy	Greater		
feel	Cuiii i	1014/104 2	good,	and happy	751, 5000		than ever		
afterwards?	Happy and a	revitalized	thank you	better	funny	Good 3	tired		
uitti wai us.	little bit tired	TOVITALIZED	mank you	octici	Tullily	3	tireu		
Explain how	Fine 2	Funny and	Not	I felt that I	Class work	Hmmmmm?	I like the	Scared,	exhausted
you feel about		tired	important	was going	is fine,		work	Tried, so	



your class work? Before exercises? After?	I feel very good. I feel relaxed	cool	then important Good bad	to fayel Uncalm then calm	before the exercises I felt stressed after I felt relaxed and happy	Good	Stupid, stupid still stupid	so good Happy and learnful	
If you could change something about school what would you change?	Nothing 3 Nothing but noise	No I won't change. School 2	No homework The homework 3	No school on Fridays	To get a extra hour sleep in the morning	More break	School itself 2	My work and make ti harder	We get free food
When is it hardest for you to work?	When it is morning 2 After break 2	Home 3 Homework	On break time	When it is cold 2 When it is	Talking 2 When	I descaused in my work At after care	On break time		
				noisy	people talk				
How do you feel when you	Good 4	8-10 o'clock	Bored 2	I feel still 2	Calm 2	Weird	Restless		
have to sit still?	tired	relaxed	Okay	In class	Normal	Нарру	Bored and unplayful		
When is the best time for getting class	At home	The best	After breathing	After break	The day you get it	Mornings	At school		
work done?	Calm	I feel great	2 days 2	Free time 2	After first break	Every time	At home		



How do you feel about the exercises we have done?	Good 4 I feel happy 2	I feel relaxed Okay	Okay 2 Feel new 2	They were fun	Relaxed	I feel better Tired			
How did you feel before doing the exercises?	Bad Tired 2	Excited Awesome	Tired from playing Bored	It was nues	Happy © ZZZZZ bored	Calm Normal	Cool Happy 2	Drowsy	
What makes it difficult for you to finish work?	Nothing 2 Talking 2	My work is easy always Homework I do not like the is I am restless	I get distract By briving in and out	The noise my fellow classmates create coldness	Noises 2 When people are talking	My work is easy always.			
Describe how you focus your attention on class work?	By listening 4	Try to relax and do it I block out the noise	By briving in and out breathing	Sometimes I date dream, but now I focus clacsen	I always pay attention on my class work and homework	It felt awesome	I stay calm		



Addendum D: Interview with H

- J: How is the school year ending, so far?
- H: It's going well.
- J: Its end of the year.
- H: It's busy, so it's reports.
- J: I don't know what's worse, the end of the year or the beginning of the year.
- H: No the end of the year!
- J: The end of the year.
- H: Because it's consolidating everything you've done, from the beginning to the end.

 The beginning, its just starting and that's ... that's, you know, the fun part.
- J: Yeah, I guess I always feel like parents are very nervous at the beginning of the year,
 I guess the younger the kids are the more nervous the parents are.
- H: Hmm. (nodding)
- J: But once they hit high school and middle school, it's like, been their, done that.
- H: (Chuckle) And they are also more involved at the lower end.
- J: YES! It's funny how you see that their, I don't want to say that there, interest, that their involvement wanes. And I think they are weaning their kids off of them as well.
- H: Hmmhmm. (nodding)
- J: So I just wanted to, I had a couple questions. I wanted to ask you cuz when I came to talk to you about bringing yoga into the classroom, you didn't balk; you were like, oh great idea. So I kinda wanted to know why you didn't have any issues with it, cuz sometimes headmasters, headmistresses in South Africa are like, oh my goodness no. So what's your background on that?
- H: Cuz yoga is from the East. It must be bad.
- H and J: Yes, it seems a religion.
- H: No I don't know, I've always done yoga my whole life. So perhaps because it's something I'm interested in, you know, and I enjoy.
- J: Hmmmm
- H: And I see the benefits of it.
- J: Which for you are?
- H: Ummmm its relaxing, it helps you focus, it keeps you fit and supple, it's, i'ts fun.



- J: So for you ...
- H: Makes you feel good.
- J: Yeah, you did see a big jump for children getting the same benefits, or ... or ... I don't want to put words in your mouth.
- H: Well, I just think if it's something that benefited me, and I did it as a young child, you know, through my childhood, into my adolescence, as an adult, I mean I've done it all the way along my life.
- J: Yeah.
- H: I saw the benefits it had for me and I was grateful as an adult that I had done it from a young age. Because it's kept me ... fit and psychologically focused. And, well not that I am like that, all the time but ... (laughs) ...
- J: Yeah, I can tell when I haven't been practising yoga and how my brain is not, it's not as sharp, to be honest.
- H: Yeah.
- J: What do you think are, and again this is what do you think, you obviously haven't talked to every teacher in the world, but about teachers' attitudes towards bringing yoga into the classroom?
- H: Uh uh, again, I think it depends on the teacher.
- J: Hmmmmm.
- H: Her background, so where you are going to have a more conservative mindset, you are probably going to have less ... I don't know, inverted commas, tolerance towards it. Umm, but I think if ... if they had experienced it.
- J: Hnmnhh.
- H: I think with a bit of direction and guidance from the person offering it to say this is why we are doing it, these are the benefits, and your research would probably help, you know.
- J: Hmmhmm.
- H: Principals who want to do it, convince their staff that it's a good idea. Umm yeah, I think, I think in general a lot of teachers today are frustrated and they are tired and they want to do something to help the children and they, well, a lot of the strategies that they had in the past are not working anymore. You know?
- J: Why do you think that is?



- H: Well, you are not allowed to hit them anymore, so now you have taken away the element of fear. The children are no longer fearful of what's going to happen to them, because the consequences are: sitting in detentions, I'm going to tell your mom, you know, and the parents are also busy, so the mom often doesn't do ... you know, follow through on the consequences, so, a lot of the punitive measures that the teachers were using are, you know, they just don't work anymore. It's a different kind of child and on top of that, we have more children with ADD and all sorts of learning difficulties and special needs that were not diagnosed in the past, that now have names.
- J: Yeah.
- H: And it's challenging for teachers. If there is anything that can make it a little better, which I am sure, I am convinced yoga can do, then they should be embracing it.
- J: So do you think those teachers that are resistant you could relatively easily convince? Maybe not you personally, but one.
- H: I think you could convince them if you could show them evidence.
- J: Okay.
- H: That it's going to work. AND if you could weigh that along with the fact that yoga is not a religion, that it's got, you know, that anybody can practise yoga and still be Christian or Muslim or a Buddhist.
- J: Do you think that's one of the major concerns that would be ...
- H: For a lot of, for a lot of South African people I would say yes, particularly the Christian community. In MY experience.
- J: Hmmhmmm well, yeah.
- H: And in my experience particularly Afrikaans conservative people who've been brought up thinking that anything from the East is obviously, you know, evil and bad um and don't really know anything about the physical benefits or psychological benefits.
- J: Yeah, well, they probably don't have much experience with it. So do you think that's the major barrier to bringing yoga into the classroom? Is that whole idea of people that it's a religion, or do you think that it's anything else?
- H: No, I think that the biggest barrier would be not understanding how it's actually going to help their children and how it's not going to influence their children's



morals and values and ethics, and that's that's what I think would be um worrying to parents.

- J: So how do you think ...
- H: And financial implications maybe ...
- J: If it's going to cost more ...
- H: If it's going to cost them something, you know, so if it was a cost and it's something I am not familiar with, you know, you've got two negatives. Whereas if it's going to be for free they might be willing to, you know, look at it with a little more openmindedness.
- J: Makes sense ... So how do you think you'd get around that? With the teachers, we talked about with the evidence, showing them research. Do you think with the parents the same idea like a parent night informational thing ... something like that?
- H: Yeah, the more you communicate with the parents, the better. And the more that you bring the specialist person in to do it and not just Heidi the principal and Jacqueline the teacher.
- J: Do you mean, doing the parent thing or doing the yoga?
- H: No, well for the parents evening the specialist person should be present.
- J: Right.
- H: To speak to the parents from their perspective because if it's just the same old faces saying we really think this is going to work, that's fine, but without the evidence of, you know, the real person. You know the person who's done the research, the person who's trained to provide that and give reasons why it's a good idea it just, it gives it more clout, and it makes it more believable.
- J: I guess we would all feel that way to be honest if ...
- H: Hmmmm.
- J: You know, someone off the street tells me green apples are better than red, I am going to be like, well okay ...
- H: Yes, maybe not.
- J: Yeah, give me some proof. So, you think teachers would feel comfortable teaching yoga throughout the day?
- H: Well, if they had been trained, so to speak, if they knew what to do and when and how long.



- J: What time of day? Or having time?
- H: Well, yes, time of day and time. I do know that a lot of teachers feel pressure to get through what they need to teach. Our parents expect a certain quality of education and for certain things to be covered each year. It does add up.
- J: So what do think would be the best time for students to be practising yoga in the classroom?
- H: (Pause) I would say ... ideally ... and I can only speak from my own experience, cuz I haven't had experience of those children specifically in the class that you worked with, but for me, first thing in the morning?
- J: Yeah.
- H: You know, when they are coming in and they need to settle for the day and so on.
- J: It's been a tough call, cuz when we looked at it, we looked at first thing in the morning, but then it's also the prime learning time. So then in the end we actually decided, Jacqueline, Thersia and I, to go with right after break, umm.
- H: I can see that would be a reasonable time as well.
- J: Those were the two times that I kinda thought about to re-focus and everything.
- H: I was just wondering, I wondered about that just in the back of my mind, cuz straight after break, they've now had their white bread sandwich and their juice full of sugar
- J: And they run around.
- H: So they are a little bit physically hyped, yeah, emotionally hyped from all the sugar, playing and games, um the yoga I can see can physic- ... ah, emotionally, intellectually, psychologically, can focus them, but physically their bodies are not processing all that junk food and you can do your best to fix or help remedy the one aspect, but now they've got something else.
- J: It's a tough thing, you know, like I said, we talked about it and we decided on this time, because they felt that that was the hardest time to get the kids back on track.
- H: Yeah.
- J: ... and um it's, it's interesting because I also felt that bringing yoga into the classroom I didn't want it to detract from your actual learning time. You know, it doesn't do any good to take a half an hour out of every day when teachers want to teach; I wanted it to be something that could be done IN the classroom, not as an



extra before school or an extra after school. Cuz that's even better and it's tricky, because you have all that teaching time. And I would think that possibly parents and teachers and even principals would be like, oh I don't know, you're taking away from the teaching time.

- H: How long is the session that you work through?
- J: I told them about 20 minutes but that was including getting the kids in and then getting the kids back. The kids also filled out exit slips for me. So that includes that whole time so I ...
- H: So if it happened on a daily basis or however often you were going to do it, how long would it take?
- J: I think you could probably, if the kids are ready and you've got it organised, I am averaging 10 minutes. But they have got to be used to it. They already know about their yoga space or their yoga bubble.
- H: So if they came in 15 minutes before school started?
- J: Yeah, if you started school a little bit early, exactly.
- H: That would be easy.
- J: Yeah.
- H: Or added 15 minutes at the end of the day.
- J: Cuz that was my thing; I didn't want it to be a whole hour long ...
- H: No.
- J: ... with mediation ...
- H: No.
- J: That's not gonna ...
- H: No.
- J: But, you know, 10-15 minutes. And again, as with anything you start, it takes longer in the beginning.
- H: Of course, yeah, you need to streamline it as you're going.
- J: Ummm, I'm trying to think. I think that is pretty much all my questions. I just wanted to talk about what you thought. I guess here, what do you think would be the ideal circumstances for implementing yoga in a classroom? Like you had your dream ... dream ... hard to think, huh?



- H: Oh gosh, I don't know. I mean, ideally for me, if it was my dream and my class, you know, the yoga teacher would be there before me. She would have brought them in, done her yoga, and I would waft in at 8 o'clock to a calm ... you know, receptive environment (laughs), and then my job would just flow from there.
- J: Wouldn't that be lovely?
- H: Wouldn't that be great?
- J: It would be so wonderful. What do you think of the idea, I mean theoretically, way in the future, if I managed to have this, you know, 10-15 min sequence, and teachers taught it, it was necessarily always a yoga instructor. I am a yoga instructor, but the idea I was trying to go with was that this is something teachers could do on their own and not necessarily have a strong yogic background.
- H: Yes, yes.
- J: So they are not going to be doing scary twists and balancing things.
- H: Yes.
- J: But, you know, more basic stuff.
- H: I am sure they could do it with a little bit of training. Yoga is not difficult. There is nothing difficult about it. And if you just understand the basic principles behind it there are not many, you know, postures and positions that are not easily doable, that are, that opening everything up ...
- J: ... and the breathing ...
- H: The breathing can be, yeah, with really a little bit of training I am sure you could get a lot of reward.
- J: Hmmhh ... going back, sorry I just thought of this, to the whole parents' and some teachers' resistance, I also thought about, I mean it is yoga and yogic stuff, but I also thought about calling them morning exercises or stretching exercises.
- H: Yes.
- J: And I think sometimes renaming it ... and you can also say these exercises come from yoga, but maybe not calling it yoga might be a way to get over that, I don't know.
- H: That would be a clever way of going around it.
- J: Cuz ...
- H: Or you could make out like it's your exercises, and go do, you know, they do this in yoga, our exercises they do in yoga. (laughs)



- J: That would be very amusing. Yeah something, something like that basically.
- H: I think that there are other disciplines that involve breathing and stretching and postures, Pilates is pretty ...
- J: Mmmmm.
- H: ... Yoga-orientated, so ... uh yeah, it is not that you want to detract from the yoga aspect of it, but possibly a rename might help.
- J: And again, like you were saying, I think the culture depends a bit culturally. You might have very different feelings. I haven't tried it in a township school. So I have no idea what kind of resistance, if any, I would meet there.
- H: I would imagine, and again I am not ... off the top of my head, but I would imagine in township schools they probably wouldn't have heard of yoga as a discipline, and the connotations of the word might be, oh, those breathing exercises.
- J: Yeah.
- H: I am just ...
- J: Yeah I know, in South Africa there are so many different cultures.
- H: Little pockets.
- J: So what works in one area may not work in another. Well, thank you very much. Is there anything else?
- H: No. Um how did you find the children from when you were starting your programme, to when you were finishing it off? Was there a large difference?
- J: I wish I had been able to have more time. What I noticed is that normally, well in the beginning, I came and just observed for a while, and then, well let's say it took them really about 15-20 minutes to really settle down. Umm, it just there ... kids ... and you know, yoga took about that 10-15 minutes, and then they were calm. So I can't say timing-wise it saved time. But they were calmer and they were more focused. In the beginning they would goof around during yoga and then toward the end they were really upset if I missed a day.
- H: Yes, yes.
- J: And they were like, we're not doing yoga! And I had students tell me how it really helps them feel better and how they taught their parents. You know, just coming up to me when they would, cuz I am the yoga person, so they would come up to me and be like, oh she's here. Cuz I always usually came right before break to ... I had break



kinda of with them, and I would get those little comments like, oh I tried it the other day. So I think, I think it helped them calm down. And I think a lot of them began to realise it.

- H: I must say that, as you said, that I think that the effect of having the yoga lady come in possibly gives it a little more weight and effect, than as I've said when talking to parents you know, if the yoga lady could be there every day you know, just for 15 minutes ideally. You know that would be the dream.
- J: Yeah.
- H: It would, I think, carry more weight and be more effective than if the teacher did it. I am not saying the teacher is not going to make a difference.
- J: No.
- H: But I think that the engagement of the children is going to be so much more ... umm, they will be more dedicated.
- J: That is what I noticed in a way again; in the beginning it is different because they don't know me, they've got to test my boundaries, they don't really know what's going on. Umm, but they ... towards the end they knew this is the yoga time, I am getting in my yoga space or my yoga bubble. I am doing this, and they would get very annoyed with their classmates if they were goofing off. And they would actually be like STOP IT, don't do that, whereas in the beginning I would come over and you know shshshshs. That sort of thing, so it was interesting to see the progression.
- H: Oh that's nice.
- J: Wish I could do it longer. Thanks.



Addendum E: Interview with J and T

M: So I just wanted to talk to you guys more about teachers' attitudes towards yoga in the classroom, and I don't want to get my ideas, I want to get your ideas, especially from a South African perspective, cuz mine might be a little tainted, being American. So my first question was, what do you think or what are your attitudes towards bringing yoga into the classroom? So first, what are your attitudes, I know I already kind of know this, since I was in the classroom. But how do you feel about it?

T: Positive.

M: Positive, okay, why?

J: I had a talk with a, a, a friend the other day, she's a coach, she's known almost internationally, she's got her international qualifications and she said to me that yoga just brings the child back, calms him down, lets him focus and brings him back to whatever he does. So I, I've not seen that it worked but she said that, you know, that it's a good thing because it really calms you down and you focus, and then you focus on one thing and not many things around you, so you can focus on what you need to do. Let's say you are writing an exam, so you ... that moment of where you know ... or bring yourself to where you ... to focus, and I said I, I can, you know, I can understand, you know, that because sometimes when you write exams or study, sometimes you just need a break, because you can't take anything in anymore, you know, really in your brain. What do we do? Go make a cup of tea; well, that's what I did, I sat down in my chair and just getting myself together and focus on what I need. So it could have its advantages.

M: Did you want to add anything?

T: She said everything. (big laugh)

M: What do you think, like the average teacher, cuz I know you guys are both very open to having yoga in the classroom. Do you think most teachers would feel that way? I mean, I know its hard to make generalisations.

J: You see the problem comes in where parents think that this is, because they are not very well educated, they think it's something to do with religion. So it can become a problem; you see, they don't understand. Maybe, it doesn't need to be yoga or said that it's yoga. But just the mere fact, and they connect it maybe to a religion just out



- of pure aaa ... knowledge. And, and the same can be true for principals, or something like that.
- T: I think, if, if its uhhh aaaa happening, if there's a set time for it and it doesn't interfere with the classes. Then, then, I, I, I think you'll get a positive feedback from the parents and from the teachers.
- M: Teachers?
- T: Yeah, I thinks so, and, and if it's, it's, if someone else is doing it, I don't think, yeah.
- M: You think it has more strength if someone comes in to do it, rather than you as teachers doing it? Is that what you're saying?
- J: Well, you, you need to know what you need to do, when to breathe in and, when to breathe out. How your body needs to be in what position. You know you have to sit straight legs together or because you have the energy flow through your body you know, so you need to know, you need to know yoga. I think.
- M: So you either need to have it very simple and explained to your trained how to do this specifically for the classroom, or you need to be some sort of yoga instructor, is that what I am hearing you say?

J and T: Yeah. Yeah, exactly.

- J: You need to have a form of doing it the correct way.
- M: Okay, yeah. So the problems that I'm hearing with bringing yoga into the classroom are J, you seem to say, are more the parents?
- J: Well, some, some, remember last year when we, we, we sent out the, the forms?
- M: Mmhmmm.
- J: And then parents said, but, you know, it's ... they think it's something connected to religion. So there can be this misconception.
- M: So, how, I mean you said educating the parents. I mean is that the best way you think to get over that or ... not using the word *yoga*? Just calling it exercises? What do you think can be done?
- T: I think you must educate the parents.
- J: Yeah, definitely, because one can do that with a parent evening. Say we are going to talk about yoga and this is it and, you know, educate the parents.
- T: That sounds brilliant. Tell the parents, and that way you include them.



- M: Yeah, have like a parent evening, have them all come, and explain it all to them, because then they are more educated. So you don't think there'd be much resistance from teachers? Or do you think there would be any resistance from teachers?
- T: No, I don't think there would be resistance from teachers. We actually found that you get used to it and that it's going to happen and help at this time.
- M: There was a set time.
- T: Yes, there was a set time. I think that if they know it's going to happen and when, just so long as it does not interrupt the class.
- J: Yes, because otherwise it would never happen. We have too much to teach and too much to do. If it is not built into the day it won't happen. To be honest, even if I have a set time, if I feel really busy or really, like, we need to get done or through something, I would not do yoga with the kids; I would just do what needs to get done.
- M: So what would be the ideal conditions, perfect scenario for bringing yoga into the classroom? In your mind, in your dream teacher-land.
- J: Well, actually in the morning the children are, they pay attention, you know, they just woke up and their attention span is not all over the place, so maybe after break, you know, to have it more after a first break, to re-focus the kids. I don't know, that's how I feel.
- T: A set time every day after break.
- M: That is when we did it right, was after break?
- J: Yes.
- M: Yeah, we practised after break to try to bring that focus back in.
- J: Yes, exactly.
- M: Did you guys think that made much of a difference or ...?
- T: It made a difference. But it was not as much as I thought.
- J: It wasn't ... to be truly honest, I cannot say ... umm ...
- T: At first it did not make a difference.
- M: Right.
- J: Yes.
- T: But later on I could see the kids took it seriously and I could see a change.



- M: I think if I could have done it longer, like continued for another couple of months, we might have seen more of a difference. I think.
- J: Yeah, I think so.
- T: Yes, you could see a better concentration span but not major, but you could see.

 And I think for longer would have made more of a difference.
- J: Yes, the, the thing is, many children made a joke out of it. The one exercise they thought was funny and waited for that one, so the focus was more on that and making fun rather than focusing on the moment. But it did change over time. And that kind of upset me, because they were making fun, but with your guidance and being strict and what you said, and how you handled it, they did take it more seriously and started to get benefit from it. This made them more focused on what they were doing. Because some were doing yoga but others were having free time, and so it became a choice of free time or yoga, and children will be children, so it was a struggle.
- M: I did notice towards the end that some of the ones doing free time brought in their permission slips and wanted to do yoga, which made me like, YEAH!
- J: Yes. Yes.
- M: But that is why I wonder, if you as the teacher were doing it, would we need the permission slips, because you as teacher could just say we are doing these exercises which are based on yoga, present it at an evening, but it would not have to be choice.
- T: It can work.
- J: I think still we have to have the parents' permission. Because it is just to inform them what we are doing and is it okay? So you would have to inform them and get permission.
- M: Do you think there would a difference, you know, this is a Montessori school, so with you Hennops Park or one of the township schools or the more traditional schools?
- T, J: Yes.
- M: How so? I mean, again, I am American and I do not want to jump to conclusions from my American background.
- J: They are more conservative and they will think if it intrudes or might intrude on teaching time, it would not be seen as a good thing. And the religious beliefs are a



- concern and would be an issue for most ... well, aaaa ... many. You know, it is that thing they don't know.
- M: So you think it would much harder at a more traditional school?
- J: Yes, that is my opinion.
- T: I agree with J.
- J: Because the people, especially the Afrikaner people, are more conservative and they are very rigid; in our country the English are more liberal, they would do things we would frown upon they are more liberal. But it has changed some among Afrikaans, but yoga can be linked to religion because they haven't got the knowledge, like with many other things, if you haven't got the knowledge you link where you can and you don't like the unknown. And you rather not investigate, you rather say yes or no. It is like this fear of being intruded into your personal space. Fear of the unknown.
- M: So it seems the key is education. You have got to find one of those traditional schools that is willing to let you educate. So I guess it is a lot of just trying and trying and trying.
- J: So they may not maybe see the benefit of it, they might just think my children are being influenced.
- M: It might be easier to start as an after school activity. And you might have less people, but they, it is not put on by the school. I am wondering if that may be a way to start in in that sort of school.
- J: You know we have a yoga teacher come in here for the 6 to 9s and the older kids.

 And, and there were children participating and it dwindled out, and I don't know what the reason is. Remember that lady with the blond hair?
- M: The kids mentioned there was a yoga instructor here.
- J: Yes, so it's not that parents aren't open to it.
- M: I guess it is also because what is important to spend your money on, if it is an extra expense.
- J: See, in the Afrikaans community there is discipline, where under the English community not so much. They are more liberal, they allow their kids to do things at a younger age, where Afrikaans people would not. It is part of their culture.
- M: What do you think of the township schools? I have no idea.



- T: That I can only guess.
- J: Again, there is a cultural and maybe religious barrier, and that I cannot give you any information on.
- T: I think that the sizes of the classes are also going to be a major problem. Like 40 in a class, and the traditional school as well, you will struggle to have all the attention.
- M: As a whole, do you think bringing yoga into the classroom is a worthwhile idea, a good idea, or maybe should it be an after school activity? Like an extra.
- T: No, I think it's wonderful if you can bring it into the classroom, that is good. But then you must know someone who can do it.
- M: Yeah, it sounds like at the beginning you would need to have someone who knows it and then work on a teacher training. Because I mean we did 10 minutes here, so it is not much time away.
- J: As a teacher you might forget and then it is not really done in practice, because you have to keep checking what to do.
- T: You need someone who really believes in it, they have to sell it to the kids as well.
- J: It needs to be done with a purpose, not just presenting, because it must be done.
- M: Which sometimes as teacher, we do.
- T: It also depends on how you present.
- M: Anything else you want to add?
- J: You have been wonderful, thanks.
- M: Thank you.



Addendum F: Focus Group A

- J: Okay. So first of all I just wanna know what your understanding of yoga is. If you have none, that's fine.
- C: I can only do a gesture. It's the first picture in my head, it's someone making a gesture, um, and you are busy with you um, mind, let your mind focus on something, um, nothing else than that.
- K: My idea of what I think is also meditation while exercising. And exercises are usually, uh, for your core muscles and that's what I've thought about yoga –
- C: Yeah.
- K: and what I understand about it.
- L: Yeah, I think the same, um, for me as far as yoga goes.
- J: So yoga's really every-, like there's so many things, I'm not gonna how, how, when I talk about bringing yoga into the classroom I don't' talk about meditation because I just feel like that's not really the place in school and –
- K: It's a personal matter.
- J: it's a personal thing, exactly, so I, I want to bring more in breathing exercises and stretching exercises that come from yoga that have been shown to calm and relax ,and obviously stretch. So that's where I, I look at it. Five, ten minutes of, of those sort of things —
- C: Mm hmm.
- J: that's just so you understand when I talk about yoga what it is, 'cause obviously you could also be talking about a 90-minute class which is a bit —
- K: Not going to work.
- J: yeah, that's not going to work. So what do you think might be pros and cons to having yoga and cor-, using yoga in your classroom.
- L: Well just there, it's just parents immediately pop up in my head.
- J: What about parents?
- L: I don't know. I think there's a different, um, belief systems, and even though he's saying there won't be any meditation in there, I think there's definitely a, a, a stigma. Yeah, a stigma, um, connected to that, so I think especially I think, um, in Afrikaans



societies it's still very, you do get a lot of, um, conservative thinking still, and you do get a lot of, a, a strong Christian, um, moral value and I think a lot of people are just scared to, to, you know, think of something like that without really knowing – that you are not bringing the meditation thing into it. So I think, well for me, that's the first thing that popped up in my head, so yeah.

- C: I think it's unknown to people.
- K: Exactly, yeah.
- C: In our community.
- K: Mm hmm.
- C: Um, if you will tell them and use the term, you're going to do yoga, they'll perhaps be a bit reserved about it –
- K: You will have to explain it very well.
- C: They will think what's this all about it, but, uh, one thing, um, if you will just tell them what it's all about, I think it'll, it will go –
- K: Yeah.
- C: plus they've got also this mind with moves in mind that they might want to do, and I think it's almost the same thing. Um, it's more on a, on a, um, cognitive or a fear of the unknown um –
- L: And yeah, and, and not that, focus on the exercising that the inner core or the exercising itself.
- K: Mm hmm.
- C: But if you could get kids to focus and do that for ... for ten minutes in the morning, I think, yes. It'd be very beneficial.
- L: Mm hmm. Very beneficial.
- K: I think your, um, very active children will benefit from it.
- L, C: Mm hmm. Mm hmm.
- C: Um, like the hyperactive children.
- K: Yeah. Yeah, 'cause I think the children don't move so much but they need and want to; the focus on time, time you said that, um, um, because I think the, um, children so much they may not know how to focus, anyways, how they think, um, the way that they focus is sitting in front of the TV or sitting and playing games, so I think that's a different way of –



- L: It's a passive way.
- K: So this can, and, and I think help, I think it relaxes the children.
- L: Starts them off the day right.
- K: Yeah.
- C: Or ending as well.
- K: So I do like it. I think it will, you know –
- J: So you've mentioned parents as a big concern. How do you think you'll get over that? I mean you did mention possibly educating them. Would they come if you had like a parent night?
- L: I think they will. Most parents usually come –
- K: I think in this community maybe...
- L: Hey R, we're just having a meeting and we can't hear. No, it's too hot inside here.

 Um, the, the first, uh, what's the ****?
- K: Obstacle.
- L: Obstacle we'll have to cross is our headmaster.
- K, C: Mm hmm.
- L: He's very conservative. He's very conservative in his ways. If that wasn't a, a reason or a thing, uh, a thing there I would've done it.
- K: Oh definitely.
- L: Because then I could make the decisions.
- C: The decision makers in our school are conservative.
- J: So first you got, you have to sort of say yes, and then he has to say yes –
- L: Mm hmm.
- J: and then you have to get the parents on board, is that right?
- L: Mm hmm.
- K: We have to go to the **** and then **** and they all have to say yes. Um, because of this, uh, difference of, not the beliefs but, but, but, um, moral systems, and I think it's just because, um, they don't know about it. It's something strange, something different, it's like a karate as well. They think that it's from the devil himself.
- C: Mm hmm.
- K: That they don't know anything about.
- C: And perceptions. Its wrong perceptions.



- J: So the teachers before you, they were saying maybe not use the word yoga, and I asked you know, just to call it breathing exercise, stretching exercises.
- L: Yeah.
- J: Which makes sense because then you've taken away that unknown.
- L: Yeah.
- J: But I asked what if you do that and, again, these are breathing and stretching exercises. We're not talking about, you know, Sheva and Lord Sheva's pose or anything like that. No meditation, none of that, but what if, you know, you get into tree pose and one of your parents realises that that same pose is used in yoga.
- C: Yeah, which she's doing at gym.
- J: Yeah. So, I mean, I'm, I'm just trying to ask in, you know see all those things 'cause it seems like an easy way to get around that is to it's not yoga or, um –
- C: Even us, we don't really know what, what you mean with the yoga.
- J: Mm hmm.
- C: If you can explain it more or show us more.
- J: So what, what I do with my kids is I start out by having, I have them stand, I have them stand, they have to have straight posture, straight backs. I have them put their hands on their belly and practise breathing in and out and, the right way, and then we do deep breaths, in and out. I have them use their arms because it helps them concentrate on their breathing – and we do like deep breathing. And this takes a while to get down, and then the other sorts of things that I do with them, the deep breathing is a huge part of it and I will, and that's the only breathing I do is deep breathing with them. I don't do any of that funny breathing 'cause they're little kids, and then I have them do like this is palm tree, where they come up and they come down and they do that a few times. I mean, I lead them, um, we do swaying palm tree, which is to the side, the other side, and we do that a few times. We do tree, which is where the little kids need help with balance so they just, you can put a foot here, you can put a foot here, and you can be crazy and put a foot here, and then they just bring their arms up and they're a tree, and then you get on the other side. Those are the things that I do with them. So, I mean, there's, there's more. I, I can email H cards and things. But that's the type of stuff that I'm talking about. Does that help?



C: Yeah.

K: Yeah.

J: It's a clearer picture?

C, K, L: Yeah, yeah, yeah.

J: So when I talk about the breathing, it really is this sort of thing. As the year progresses, I don't always have them use their arms, we just take deep breaths, and at the end I'll have them close their eyes and I tell them to think of a positive thought, like I'm gonna listen today, um, because then they're breathing and they're focusing on that positive thought. Um, and that's kind of how I end it and, again, it's five to ten minutes.

K: Are your kids disciplined –

J: In the beginning –

K: – at this stage?

J: — I say, I had to really persevere. Um, because I tell them, see I don't mind, I can use the word *yoga*, it's not an issue, but otherwise I would just say find your bubble space, and I say find your yoga space, which means they're not gonna be distracted by anything around them, but it took me a month to get them to that point. I mean, it got better each day, but in the beginning it's silly and — like if, you know, if they're standing like a tree and they have to balance on one leg, it's hard at this age. But it's good for them, so in the beginning it was, it was tight, but now they really like it and they ask for it, and now, even at 6 and 7, they can say —

C: It's part of their routine.

J: Mm hmm, and they can ask for a certain pose that they like.

K: Can I just ask how many kids?

J: I have 18 and I have eight, um, high-needs kids.

K: Eight?

J: Eight high-needs kids so, I am not supposed to have that many, just got lucky this year.

C: So then 26 altogether then?

J: No, no, 18 total. We're – we're lucky, we're capped at 18. Just eight of them are high needs.

K: That is wonderful.



- J: It is, yeah. I've taught, I taught a class of eight once, and that was actually miserable, eight was much too small. And, and last year I only had 13, which also wasn't very nice.
- C: And the same needs?
- J: Um, I have a couple ADHD kids, I have an autistic kid, and I have a boy with dwarfism. I have two that are, the term is *talented* and *gifted*, but I don't like that term. But they're really, like they're 6, and they can probably read high school textbooks. Um, so those, those are what we consider high-needs kids. Um, I have a mentally challenged child in my class. I have students that don't speak English.
- K: How do they participate with?
- J: Um, they're fine, to be honest. I mean, again, it takes time and sometimes I have to go over and, but they can follow what everybody else is doing. So they get it and they like it after a while, and these aren't the sorts of poses you're gonna hurt yourself with, like you're not twisting yourself or yanking yourself here. Um, 'cause that, kids this age are very supple. So they actually can't injure themselves if they stretch too much. So, you know, bending over's fine, you know, those sorts of things but a lot of the stuff's more balancing, 'cause that's what they need.
- L: And have you found that you know for ADHD children that it calms them throughout the day or a few minutes and hours?
- J: Ummm I think it depends very much on the child, unfortunately. I can't really necessarily say throughout the day, but I can tell if the kid's needing to go breathe, and then they'll calm down again.
- L: So you use it, you can use it throughout the day? To calm them down.
- J: So, I mean, to me, I mean, as a teacher, if you have to, if something's gonna take a long time to do it, you're never gonna do it. So it needs to be a simple thing.
- C: Yeah, of course.
- K: I'm all for it. If there is enough time in the day.
- L: Yes I never know how to get to everything, so this would have to be quick and easy, and even then I wonder if I would get to it.
- J: Well, I have, I told them that I do have these like yoga cards and they have a picture and it shows the pose and they have like what it's good for and I'll, you know, I'll email that to her. Um, 'cause that's I think the easiest way. But it sounds then that



the big issue is getting administration and parents on board. Other than that, you guys would feel, well, obviously getting, like you said, knowing what exactly what it is you should or could be doing, maybe a teacher training course.

- L: Yeah. Exactly.
- K: Yeah, maybe, or different events, um, go through all the channels and that's what we're gonna do. Do you come in then or, um, afterward?
- J: Well, that's really, I mean, it kinda depends on how, what you guys want, 'cause, I mean, I've had some, I had one woman say, like it'd be ideal to have like the yoga lady come in and do it, but it's also not very realistic to have one person come in. So my thought is like come in, pass along the information –
- L: Right. To teach us.
- C: exactly, because, yeah.
- L: Okay.
- J: To me it makes sense; as teachers you need lots of tools in your, in your tool kit, so to speak.
- K: Yeah.
- L: Mm hmm.
- C: Yeah, that sounds great.
- J: Anything else for now?
- K: I would just love to have the cards, for my own personal ...
- J: I'll, I'll email them. Yeah, they are there, this side is real big. But you can always shrink them. Yeah, but I'll be able to email them on Monday when I have internet.
- L: All right. Thanks.
- J: Thank you so much. I really appreciate it.



Addendum G: Interview with M

- J: Thanks for agreeing to let me interview you, I really appreciate it. To start off with, what is your understanding of yoga?
- M: Ummmm. I know it as just sitting in one position for a long time, like this (showed a sitting position with hands in mudra). I don't do yoga and I don't know much about it.
- J: How would you feel about yoga at school or in the classroom?
- M: Well, I heard many times that you, that yoga makes the brain relaxed and it is refreshing that it helps to concentrate, so why not. If yoga can help students I prefer to put it in as part of the daily schedule.
- J: What would make you as a teacher comfortable with bringing yoga into your classroom? Teaching yoga in your classroom?
- M: Well, I would need to be trained and taught about yoga, since I do not know anything about it. I think all teachers would need to be trained.
- J: But teachers would be accepting of yoga in the classroom?
- M: I think you would have to find the teachers, ah, like it or like the idea. The teachers need to convince the students that it is good, and if they don't get it or don't like it, then it won't work. So many, not all, teachers maybe just the ones who are interested and it can go further or umm spread from there.
- J: Do you think parents would be okay with yoga in the classroom?
- M: From my culture perspective, I believe this is new and will be misunderstood and difficult to apply it, especially with parents. They will feel that this time might be wasted and is not part of the curriculum and not good enough to help students.
- J: How might administrators feel?
- M: I never thought of that or them. I don't know.
- J: How might the students feel?
- M: I think it depends on if the teachers are excited and passionate, then the students will like it.
- J: Who might have the most concerns?
- M: The parents definitely.



- J: What issues or concerns might there be with bringing yoga into the classroom, if any?
- M: I think the issue is that parents will feel that is it not important and a waste of time; it is not a part of the curriculum.
- J: How can we overcome this issue or concern the parents have?
- M: Well, just as you have to train the teachers, you must teach the parents. You need the parents to understand why yoga, and if they believe in it they will support you, and have the kids practising maybe at home even. There must be a school and home connection the two must work together; this is why parents are so important.
- J: Can you think of any other issues? Religion? Time of day?
- M: I had not thought about religion. For us, I do not see how religion would be an issue. Even the prophet Mohammed (Arabic) said we must be encouraged, exercise ... people are supposed to do any kind of exercise; swimming, running, darts, any kind. It is not a religious thing in my mind.
- J: So you think that to have yoga in the classroom you must get the support of the parents, must educate them and you must train the teachers and gain support.
- M: Yes, perfect.
- J: Do you think yoga could be used to help you create your ideal classroom environment? In what way? How could you use yoga to create you ideal classroom environment?
- M: Well, I do not know about yoga to really answer, but I do not see why not. Oh wait, you had asked about time of day. I do not see this as a problem; I think that the kids should only do yoga for 10 minutes or so each day, or 30 minutes 2-3 times a week, but not more.
- J: Why is that?
- M: Because then it would take away from the curriculum and maybe you would need a longer school day.
- J: Okay.
- M: Sorry I have to get going, was that okay?
- J: Yes, thank you for your time, I appreciate it.



Addendum H: Interview with L

- J: Well so um, so I want your take because, you know, your South African Afrikaans, slightly more conservative background um, would give me insight. So I wanna know what, again, your opinion. What do you think teachers' attitudes are towards bringing yoga into the classroom?
- L: I honestly don't know.
- J: You don't have an idea?
- L: Because I've never been exposed to yoga as much.
- J: But do you think the average, I mean again, I know it's hard to say, but like the average South African teacher?
- L: They probably wouldn't because of our religion, the religious background.
- J: You mean be exposed to it or be –
- L: Both.
- J: or even with the idea?
- L: Both.
- J: So, do you think they would just have no opinion, or do you think they'd be like no way?
- L: Either no opinion or completely lock it out of the thinking.
- J: Do you think it's the word *yoga*?
- L: What do you mean?
- J: Like if you were to use a different word to describe it?
- L: No, yeah, uh, it's the word and the principle behind it.
- J: Meaning?
- L: Meaning the background of it, where it comes from.
- J: So because it's like Asian or Indian or outside of here, okay.
- L: Yes, yes, and the focus is on lots of elements that our religion wouldn't appreciate or accept, share, like.
- J: Um, what do you mean our religion wouldn't, like, what elements our religion wouldn't appreciate? Explain, please.



- L: Explain, okay. So with us, like in yoga, you would use different names. For instance for, uh, I don't know what the names are, but you use different names, and we wouldn't appreciate it in our religion because it is, um, it refers to another religion and it refers to another religion.
- J: Okay.
- L: like a chakra or something like that.
- J: Yeah, okay.
- L: And, and the, that background isn't good for us, that we shouldn't be exposed to that
- J: Right.
- L: nor should our children, nor should our family members, so that's why a teacher, especially with the Afrikaans community with our background being so strong in religion, we wouldn't even think about it.
- J: Did you think it would be possible to find a way to con, to convince them, or is it like, 'cause it's –
- L: You probably could because times are moving to people being more open-minded and, and our religion not being as rigid in, in, imbedded in our lives, in our homes. I think that the prob, prob, probability of it being exposed; exposure might help. And explaining where it comes from and a bit more of the background.
- J: But you think, first you've gotta then, it sounds like to me tell me if I'm putting words in your mouth but you've gotta convince like the teachers or the headmistresses that it's a good idea, that you're not corrupting them with religion?

 That would be like your first barrier?
- L: Yes sir.
- J: And the big thing, um, there is education?
- L: Yes.
- J: So it's basically, somehow you've got to get them to come to your seminar, if you want to call it that.
- L: Yeah, you're gonna have to meet them on their ground. You've gotta meet them on their ground, their terms, which would be religion first, and the education second.
- J: Okay, and then I'm wondering if you have parent issues?



- L: Big time, especially if it's a very staunch Afrikaans community; they won't, they, they won't appreciate there being any, any exposure to yoga, whether it be on the playground or it be at a friend's house, they won't be happy about it.
- J: So again, if you were gonna overcome that, I'm guessing there'd be a lot of kind of education?
- L: That's gonna be a **lot** of education.
- J: But it sounds like it would take a very long time.
- L: It might be longer for the parents than it would be for the teachers.
- J: Why do you think?
- L: Because teachers are more exposed to different cultures and ... different religions, than parents are.
- J: Mm hmm. Okay. So if you're gonna do this, it, it still, I still wonder if, if you could find a way to not call it yoga and just talk about exercises and deep breathing, that's gonna help the kids. Uh –
- L: They're gonna ask you what's deep breathing? Why would you want to do that?

 They'll, if you talk about relaxation, they'll be happy about it, but it depends how your posture is and what you represent by it. So –
- J: So if you bring up like stretching and good posture and breathing to help relax –
- L: Normal words that they know, you'd probably be okay? But then if they found out that it is a yoga position, they might not be happy because they knew of —
- J: Because you sort of led them on.
- L: Exactly.
- J: Yeah, that's, that's the concern I have. It's the back and forth sort of thing. What are you, your personal thoughts about yoga in the classroom? Again, I'm not talking about the meditation; I'm talking about deep breathing and, like, stretching to kind of help kids calm down in class, not a whole hour-long session.
- L: I'm, open to it because I'm a lot more open-minded, 'cause I came from the very rigid religious background, so I'm a lot more open to it than anybody else would be in my family, and because I am more open and exposed, because I'm willing to explore yoga itself. Um, my views are in the classroom it would be good.
- J: Why do you think this?



- L: Because of exercising and, coming from a psychology background, the relaxation part of it, I think is great and would be beneficial.
- J: Yeah. Do you have a thought for, like, in the ideal world, if you were to implement yoga in the classroom, things like time of day, who leads it, you know, before or after what activity, you know, that sort of thing? I mean I know it's hard to say, 'cause you're not an expert, but ...
- L: I'd say, I think that it will have an impact on certain times of the day and after certain activities, yes, only from my class. (laughs) Yeah, I think it will have an impact.
- J: So do you think morning's best? Evening's best? Evening we wouldn't be at school at evening, would we?
- L: I'd say at mid-day, closer to the middle, a bit more exhausted and overwhelmed, I'd say, so for us from this part you might say probably mid-day to closer to the end of the day.
- J: So do you think it would change versus the age of the kids?
- L: Yes. Yes.
- J: How so?
- L: Because of stimulation and developmental levels.
- J: Do you think, like, you, per se we'll start with you personally would theoretically if, if someone gave you, here's three stretches and two deep breathing activities and, and, would you be comfortable bringing it into your classroom?
- L: Yes, if I was trained properly.
- J: If you were trained. So how, what would you need to be trained completely?
- L: Mm, the background on it and as to why it is good and what, what its benefits and, um, the exact position so that I don't mess it up. Um, and, um, I think and also the environment, knowing, should you be doing it outside or inside the class, in a noisy class, in a noisy background.
- J: So again it stems back to the education. To me that seems to be the over-arching theme, is a lot of just education, education, education.
- L: Yes.
- J: Okay. Anything else? Any other thoughts on?
- L: Um, no.



- J: But it sounds to me like the, the biggest barrier and again, this is more South

 African, specifically Afrikaans context –
- L: Religion and education.
- J: is religion and the way to overcome that is, is educating people and a lot of patience, it sounds like, a lot of patience. Do you have and I know this probably isn't your area of expertise but do you have any thoughts on in a township school? It might be the same or similar or?
- L: It might be similar because, um, them not being exposed to Westernised things or –
- J: Mm hmm.
- L: I'm not sure that's Westernised but -
- J: Oh, yeah.
- L: outside of their, they, they're very boxed and they're very tunnel-visioned.

 So they, they also don't know about, like for example, um, a hyp, a hypnist.
- J: Hypnotherapy?
- L: Hypnotherapy and psychology, things like that, which also contribute to different re, relaxation methods and they, they, they don't know about it.
- J: So I mean theoretically, your, you go to a, let, let's start with like a formal model of the Afrikaans school.
- L: Yeah.
- J: And you send out information to the parents.
- L: Yes.
- J: And, um, you say I'm, I'm doing this informational meeting about yoga in the classroom, and it should help your student, like very brief but sort of flier. What do you think, and, and I know that you wouldn't know, but the response would be average, Model C Afrikaans, but would you get parents? Like what percentage of parents? I mean, I know it's really hard to say.
- L: I guess you're gonna have a low turnout. Very low, especially Afrikaans.
- J: So then maybe you've gotta get that low turnout and get them really amped up; do another one and kinda of –
- L: You might have to.
- J: take a lot, lot of time.



- L: And a lot of extra information about all sorts of and benefit to their child. I think they definitely are for the benefits of the child –
- J: Right.
- L: however, and the respect for the religion is a big thing, so if you could give a pamphlet or any education as to not be affecting your religion —
- J: You think they're more likely to, if you give 'em a pamphlet with the information, read that or come to an informational meeting?
- L: Shaaaaw, with busy times and, uh, reading ... probably not, but their time schedules are also very busy.
- J: Yeah, 'cause they've got to also want to care about this, you know? Not that they don't care about their kids; that came across wrong, but –
- L: I think if you could target certain students in the classroom who might have trouble at, like problem, like, I don't wanna use the wrong term but problem children, and you, um, target those parents and say please come to a parent meeting because we want to discuss a method that might help your stu, the, the, your child in the problem area that might be a different way to get in. Because they might be, oh this could help.
- J: 'Cause it seems to me like, like we've said, like, the biggest barrier is the religion and, and, and, you know, not understanding it, so the way to overcome that is, is the education. I keep repeating that, but then finding a way to educate people is also another barrier, 'cause we've got Problem 1. Here's a solution, but now it's not like they're just gonna come in 'cause if they're not into it and they are kind of like afraid of it, why would they come to an informational meeting?
- L: Exactly. And especially in Afrikaans communities, depending on if it's middle, low or high-class areas, especially low class, um, um, schooling areas. The, the parents won't usually come in. So –
- J: Because then it's a timing issue. So it's like almost that you need to try to have something you know they'll be there for, and have –
- L: Specifically like a parent/teacher conference –
- J: Yeah.
- L: for that student, for this.



- J: Mm hmm. Or if there's like a community field day and you can wrangle, I don't know, wrangle people in.
- L: You could, you could try.
- J: But it sounds like, um, the same issues in the Afrikaans communities might actually also be in the townships, like not the exact same thing –
- L: Well. Yeah.
- J: but just from what you're saying ...
- L: That could be because I, we're both very tunnel-visioned.
- J: Do you think the English would be more accepting?
- L: The English are more open, I think, but again, here in South Africa, yeah.
- J: Yeah. Yeah. Okay. All right. Any other thoughts?
- L: Good luck.
- J: Mm, thanks. You said your dad would be –
- L: My dad would be furious because of him being a pastor.
- J: Mm hmm.
- L: Just like he would be furious if, number one, you said oh, we're just doing these movements in the classroom, but it's nothing –
- J: And then he found out.
- L: and then he found out what type of movements it is –
- J: Mm hmm.
- L: because, uh, as I say, I don't know much about yoga, but I, it's somewhat out of my dad. It's something different to what I should be doing.
- J: But I think you'd be able to, if you were able to sit down not you, one would be able to convince your dad if you sat down and said it's not religion; we're just using this based on this to help ...
- L: No, because it comes from a yoga background, which comes from where, China?
- J: India.
- L: India. No, because it's all about, uh, meditation and –
- J: Mm hmm.
- L: and, and kind of leaving your body and, we don't believe in that. We believe in complete control and the only guide to relaxation is God. So it's gonna be **very** hard.
- J: Interesting. No, no, no; it's, it's good to know. It's very interesting.



- L: And he, for example, um, like he wouldn't even allow me, they, nothing could help for my headaches, for example. He wouldn't even allow me to put those, put in those needles.
- J: Oh, the acupuncture.
- L: Acupuncture, because of its background, and because of <u>its religious</u> background, he wouldn't either. He won't.
- J: Interesting, 'cause your dad's a very bright guy.
- L: Very, he's very bright and he really believes is what he believes, and the Afrikaans people, they, they're very staunch in their if they believe this, this is what they'll stick for. You can give them pretty much, a lot of education, but it's gonna take a long time or –
- J: Interesting.
- L: It's gonna be very hard. They are very hard with what they believe.
- J: Hm. Thank you.
- L: Okay.



Addendum I: Student Survey Chart

I like the exercises	Yes	No				
	18	1				
The exercises help me	1	2	3	4		5
with class work	0	4	6	2		6
Days when I do the	1	2	3	4		5
exercises I get more	0	4	5	5		4
finished in class						
I feel no difference in	1	2	3	4		5
my day and class	4	4	5	3		6
work if I do the						
exercises						
The exercises make it	1	2	3	4	5	
harder for me to	7	3	2	1 3		3
complete my work						
Did you enjoy the	Yes	No	Blank			
breathing exercises?	16	2	1			
Name your favourite	2	None 2	The whoosh 6	Breathing 3	When we are quiet	
part of the exercises	All I enjoy	The balance	Inhale up	Touch in over toes	Brith	
Name your least	2	Breathing 2	The bending	Nothing 3	Swaying palm tree	
favourite			one 3			
	Tree palm 4	Tree	Cratch	Whoosh	None are my least	
		Localitation and		1.11	favo	orite

There were five surveys which gave contradictory answers to the questions – telling me they did not take the questions seriously and most likely did not read them. There is a possibility they did not understand the questions; however, before handing out the survey I went into great detail about the questions. The table above shows the result if I remove these five surveys.



I like the exercises	Yes	No				
I IIII GAGI GIGGS						
	13	1		-		
The exercises help	1	2	3	4		5
me with class work	0	4	4	2		3
Days when I do the	1	2	3	4		5
exercises I get more	0	4	3	5		1
finished in class						
I feel no difference in	1	2	3	4		5
my day and class	4	4	4	2		3
work if I do the						
exercises						
The exercises make it	1	2	3	4 5		5
harder for me to	7	3	1	1		0
complete my work						
Did you enjoy the	Yes	No	Blank			
breathing exercises?	14	2	1			
Name your favourite	2	None 2	The whoosh 6	Breathing 3	When we are quiet	
part of the exercises	All I enjoy	The balance	Inhale up	Touch in over	Brith	
				toes		
Name your least	2	Breathing 2	The bending one	Nothing 3	Swaying palm tree	
favourite			3			
	Tree palm 4	Tree	Cratch	Whoosh	Noi	ne are my least
					fav	ourite



Addendum J: Intervention Table

	Actions	Intervention	
May 21 st	Observe	None	
May 22 nd	Observe	None	
May 23 rd	Observe	None	
May 24 th	Observe	None	
May 25 th	Observe	Discussed yoga bubble and practised some breathing	
May 28 th	Observe/Yoga	Start with breathing hands up and down Palm Tree Swaying Palm Tree Breathing Forward Bend Breathing	
May 29 th	Observe/Yoga	Start with breathing hands up and down Palm Tree Swaying Palm Tree Breathing Forward Bend Breathing	
May 30 th	Observe/Yoga	Start with breathing hands up and down Palm Tree Swaying Palm Tree Breathing hand up cross, hands down, re-cross Forward Bend Breathing Tree Breathing	
May 31 st	Observe/Yoga	Start with breathing hands up and down Palm Tree Swaying Palm Tree Breathing hand up cross, hands down, re-cross Forward Bend Breathing Tree Breathing Warrior Breathing Deep Breathing	
June 1 st	Observe/Yoga	Start with breathing hands up and down Palm Tree Swaying Palm Tree Breathing hand up cross, hands down, re-cross Forward Bend	



a th		Breathing Tree Breathing Warrior Breathing Deep Breathing
June 4 th	Observe/Yoga	Start with breathing hands up and down Palm Tree Swaying Palm Tree Breathing hand up cross, hands down, re-cross Whoosh Breathing Forward Bend Breathing Tree Breathing
June 5 th	Observe/Yoga/Exit Slip	Start with breathing hands up and down Palm Tree Swaying Palm Tree Breathing hand up cross, hands down, re-cross Whoosh Breathing Forward Bend Breathing Tree Breathing
June 6 th	Observe/Yoga	Start with breathing hands up and down Palm Tree Swaying Palm Tree Breathing hand up cross, hands down, re-cross Whoosh Breathing Forward Bend Breathing Tree Breathing
June 7 th	Observe/Yoga/Exit Slip	Start with breathing hands up and down Palm Tree Swaying Palm Tree Breathing hand up cross, hands down, re-cross Whoosh Breathing Forward Bend Breathing Tree Breathing Eagle



		Breathing
June 8 th	Observe/Yoga	Start with breathing hands up and down Palm Tree Swaying Palm Tree Breathing hand up cross, hands down, re-cross Whoosh Breathing Forward Bend Breathing Tree Breathing Warrior Breathing Deep Breathing
June 11 th	Observe/Yoga/Exit Slip	Start with breathing hands up and down Palm Tree Swaying Palm Tree Breathing hand up cross, hands down, re-cross Whoosh Breathing Forward Bend Breathing Tree Breathing Warrior Breathing Triangle Breathing Deep Breathing
June 12 th	Observe/Yoga	Start with breathing hands up and down Palm Tree Swaying Palm Tree Breathing hand up cross, hands down, re-cross Whoosh Breathing Forward Bend Breathing Tree Breathing Warrior Breathing Triangle Breathing Deep Breathing
June 13 th	Observe/Yoga/Exit Slip	Start with breathing hands up and down Palm Tree Swaying Palm Tree



		Breathing hand up cross, hands down, re-cross
		Whoosh
		Breathing
		Forward Bend
		Breathing
		Tree
		Breathing
		Warrior
		Breathing
		Triangle
		Breathing
		Deep Breathing
June 14 th	Observe/Yoga	Start with breathing hands up and down
		Palm Tree
		Swaying Palm Tree
		Breathing hand up cross, hands down, re-cross
		Whoosh
		Breathing
		Forward Bend
		Breathing
		Tree
		Breathing
		Warrior
		Breathing
		Triangle
		Breathing
		Deep Breathing
June 15 th	Observe/Yoga/Exit Slip	Start with breathing hands up and down
		Palm Tree
		Swaying Palm Tree
		Breathing hand up cross, hands down, re-cross
		Whoosh
		Breathing
		Forward Bend
		Breathing
		Tree
		Breathing
		Warrior
		Breathing
		Deep Breathing
School holidays		
July 24 th	Observe/Yoga/Teacher	Start with breathing hands up and down
	Interview/Teacher	Palm Tree
	Survey	Swaying Palm Tree
	·	Breathing hand up cross, hands down, re-cross
		Whoosh
		Breathing



		Forward Bend
		Breathing
		Tree
		Breathing
		Warrior
		Breathing
		Triangle
		Breathing
		Deep Breathing
July 25 th	Observe/Yoga/Exit Slip	Start with breathing hands up and down
		Palm Tree
		Swaying Palm Tree
		Breathing hand up cross, hands down, re-cross
		Whoosh
		Breathing
		Forward Bend
		Breathing
		Tree
		Breathing
		Warrior
		Breathing
July 26 th	Obcorvo/Voga/Student	
July 20	Observe/Yoga/Student	Start with breathing hands up and down Palm Tree
	Survey/Student	
	Interviews	Swaying Palm Tree
		Breathing hand up cross, hands down, re-cross Whoosh
		Breathing
		Forward Bend
		Breathing
		Tree
		Breathing
		Warrior
		Breathing
July 30 th	Observe/Yoga/Teacher	Start with breathing hands up and down
	Interview	Palm Tree
		Swaying Palm Tree
		Breathing hand up cross, hands down, re-cross
		Whoosh
		Breathing
		Forward Bend
		Breathing
		Tree
		Breathing
		Warrior
		Breathing
		Triangle
		Breathing
		- · - · · · · · · · · · · · · · · · · ·



Deep Breathing



Addendum K: Focus Group Questions

Understanding of Yoga

What is your understanding of yoga?

Why do people practise yoga?

What are the benefits of yoga?

What do you think of when you hear yoga in the classroom?

Practicalities of yoga in the classroom

What would make you as a teacher comfortable with bringing yoga into your classroom?

Teaching yoga in your classroom – what would make you uncomfortable?

When would you think yoga would be best in the classroom? What time of day? During

which subject? Does it change, depending on the students?

Would the age of the child matter? Please elaborate.

Feelings towards yoga

How might administrators feel?

How might parents feel?

How might the students feel?

Do you think the feelings towards yoga and yoga in the classroom are similar across demographics in SA? For example: Afrikaans, English, in Township schools, in private schools, public schools and so forth. Please elaborate. Why? How so?

Possible challenges to yoga in the classroom

Who might have the most concerns? Please elaborate.

Who would be the most accepting? Please elaborate.

What issues or concerns might there be with bringing yoga into the classroom, if any?

Possible solutions

How can we overcome these issues or concerns? Elaborate.

Classroom climate

What is an ideal classroom environment for you to work in? Please elaborate.

Do you think yoga could be used to help you create your ideal classroom environment? In what way? How could you use yoga to create you ideal classroom environment?

Paraphrasing

So the main issues are ...?



Please	cla	rify	·
	0.0	,	• • • •

Can you give an example?

What I hear you saying is ...

So the main concerns are $\dots\,$ and ways to overcome are $\dots\,$



Addendum L: Interviews with Students

STUDENT #1

- J: Are you ready?
- S: Yes
- J: Okay, so my first very important guestion ...
- S: Mmhhmm.
- J: How do you feel about the exercises so far that we've done?
- S: It's really calming.
- J: It's calming?
- S: Mmm.
- J: Cool, How did you feel before doing the exercises, because I know that you've done yoga before. So what did you think when we were just starting?
- S: (*looking around a little*) Uhh, uhh, I don't know that, err ... uhhh, I actually felt happy cuz my mom really wants me to do yoga, but then our yoga teacher left to somewhere else.
- J: Oh no, that's too bad. So that worked out well for you. So you were excited about it.
- S: Yes, yes, very much.
- J: So after we practise with, with yoga each day, does it uhh, do you think it helps you or do you think it doesn't make a difference? How do you feel?
- S: It definitely helps me.
- J: How does it help you?
- S: It helps me to in my work, I umm ... It helps me to concentrate on my work. And uh the class feels better, better behaved.

PAUSE

- J: Do you like the time of day we have been doing it? Or would you prefer to do it in the morning, or later? Or is it a good time?
- S: I think it's a good time after break.
- J: Why?
- S: Well, uhh, because we are tired and were outside, so it calms us down.
- J: Cool.



PAUSE

- J: If you could change something about your school, what would it be?
- S: Uhhhhh, nothing.
- J: Nothing? Everything is perfect.
- S: Yes.
- J: Well that's great. What do you think makes it difficult to finish your class work?
- S: Ah, umm, sometimes uh, when we finish our work, the teacher gives us more homework and then we can't finish it. So, but, the, it has to like that, but then sometimes they give us homework papers (J: Hmmm) that doesn't feel right to all, some of us level twos.
- J: Ahhh, oh, okay I see. What about during class time? Is there anything like when T or J give you, let's say math and you're sitting and trying to get it done, and you don't finish in time? Is there anything in particular that makes it hard for you to finish sometimes or not?
- S: Nope, nothing.
- J: How do you focus on your school work? What helps you to focus?
- S: Pills.
- J: Pills?
- S: Hmmmmm (Yes).
- S: I have to drink pills?
- J: And those help?
- S: Hmmmm (Yes).
- J: Well that's good. How do you feel when you have to sit still?
- S: Hmm-Mmm (No).
- J: You don't like it?
- S: Shakes her head
- J: Why not?
- S: Cuz it's like, children are meant to have fun and then afterward they have to just sit still and um ...
- J: Yeah, but in school you do have to sit still a lot, huh?
- S: Hmmmmm (Yes).
- J: So how do you deal with that?



- S: Uhhh uuhhh, we just, sometimes we just sit in groups with friends and then we talk and then sometimes we move around. And then as J goes out we ... some of us start to play around.
- J: Yeah, so you kinda need breaks?
- S: Yes (big sigh and shake of the head).
- J: What is the best time of day for you getting your class work done?
- S: I say in the morning.
- J: Ya, that makes sense.
- S: Cuz, cuz, when we go home it's all ... you're tired of school, you don't want to go home, you don't wanna do your homework.
- J: Yeah, so the hardest time is after school? Or in the afternoon? When is the hardest time?
- S: Aaaa, in the afternoon, no, nothing.
- J: So there's no hardest time to get your work done?
- S: Yup.
- J: What do you like about the yoga exercises we've been doing?
- S: The tree.
- J: The tree, is the tree your favourite?
- S: Yeah.
- J: Is there anything you don't like?
- S: Nope, nothing.
- J: How did you like the breathing?
- S: I like the breathing cuz it makes a lot of us calm. (it makes you calm? J) But the boys keep on jumping around.
- J: Yeah, I see some of the boys do, some people just aren't going to take it seriously.
 But do you think it helps you?
- S: Hmmm (yes).
- J: Awesome. Anything else you want to say?
- S: Nope.
- J: You should keep practising afterwards, even if I can't come every day.



- S: I ... I do my sister still takes yoga by this other teacher, and then every time at home when she ... she, ummmm, when she gets like angry at us, we just say to take nine deep breaths and then on the tenth one she has to take a deeper one.
- J: Does that help?
- S: Mmm. It helps a lot.
- J: Cool, well thank you very much.
- S: My pleasure.

STUDENT #2

- J: Alright. We are recording. Tell me, do you like sitting still in class?
- S: Yes.
- J: You don't have a problem with sitting still?
- S: Nope.
- J: You're lucky. (Whispering) I hate sitting still. (Normal volume) What do you think is the best time for you getting your classwork done?
- S: Long pause ... well er, concentrating.
- J: Concentrating?
- S: Yes
- J: Is there a time of day that's easiest for you, to concentrate?
- S: ... yes.
- J: What time of day?
- S: When children are be quiet.
- J: Oh when everyone is quiet. Yeah. Do you think they are quieter in the morning or afternoon?
- S: Nope, never.
- J: Never quiet?
- S: Nods his head.
- J: Mmmm. So it's hard to get work done then?
- S: Yup.
- J: Hm, do you ... what do you think of the yoga exercises we've been doing?
- S: They're nice.
- J: They're nice? What do you like about them?



- S: ... Well ... yoh ... They're nice and exercising and they keep you calm.
- J: They keep you calm?
- S: Yup.
- J: So how do you feel after we practise? After we do our yoga?
- S: Good.
- J: You feel good? Does it help you study or does it not make a difference?
- S: It helps me study.(looking around, I felt a need to talk about something more light)
- J: That's good. Ummmm, if you could change anything about your school what would it be?
- S: School.
- J: School, what about it?
- S: Children being quiet.
- J: Children that have to be quiet more often.
- S: (Nods vigorously)
- J: Let's see ... so, what is your favourite part about school?
- S: Uhh, playing.
- J: Playing? (Nod) Do you want to keep practising yoga, even when I can't come every day?
- S: Yes.
- J: Are you going to do it at home or at recess? When do you think you'd do it?
- S: Recess.
- J: Recess? Why do you want to keep practising?
- S: I dunno. It's fun ... to keep me away from home for a bit, to keep me busy ... (J: to keep you busy?), to calm me down.
- J: Thank you so much, that is all I need.
- S: Pleasure.

STUDENT #3

- J: So, I want to know what you think about the exercises that we've been doing.
- S: I think it's really improved on my skills.
- J: How so?
- S: Err, it helped me to ummm relax more ...



- J: Uhmm. (nodding in agreement)
- S: And breathe in more easily.
- J: Yeah. (smiling and nodding)
- S: Thank I used to.
- J: Mmhmmm. (nodding)
- S: And ummm it also helps on my, with my brain.
- J: Yeah, how does it help your brain?
- S: Helps it to ... go smoothly.
- J: Yeah.
- S: ... and not hard.
- J: So we ... you say we should have done it in the morning, or do you like that we do it after break?
- S: I like it umm after break.
- J: Yeah, why so, why so? (funny voice and face) How come?
- S: Umm cuz ummm, mostly umm I first play and then we take a break, so just before the other break, I would like to umm get my breathing okay and to keep track.
- J: Yeah, is it something you think you can do on your own, even if I don't come every day?
- S: Uhhh, yes.
- J: Yeah? (Questioning tone) Well that's good. What's your favorite uh exercise that we do?
- S: The whoosh.
- J: The whoosh? Why do you like the whoosh the best?
- S: Cuz its fun going up and then going down fast ...
- J: Yeah (nodding), it's nice huh?
- S: Yes.
- J: What's your least favorite?
- S: Uh um the sideways palm tree.
- J: The sideways palm tree? How come?
- S: Because I don't like much bending over.
- J: mmmm (in agreement). Well, I can understand that. How do you feel after we practise?



- S: I feel more comfortable.
- J: More comfortable?
- S: Yes.
- J: So anything else you want to add?
- S: Uhh no.
- J: Okay, thank you for talking to me.

STUDENT #4

- J: Okay, so tell me, how do YOU feel about our yoga exercises?
- S: It's nice.
- J: It's nice. What's nice about it?
- S: Oh, it just relaxes you.
- J: It relaxes you?
- S: Yeah.
- J: That's good. Do you think that we do it at a good time of day, or would it be better at a different time?
- S: A good ... this is a good time.
- J: A good time? So after break is a good time?
- S: Mmmhmmm. (nodding)
- J: How do you feel after we practise yoga?
- S: Relaxed. (open arms to show and big smiles and relaxed shoulders)
- J: Relaxed. Are you ready to study or do you want to go to sleep?
- S: Sleep. (laughs)
- J: Sleep. (giggles) So you feel different on the days we practise yoga than the days we don't practise yoga?
- S: Yeah.
- J: Yeah. Do you think you would keep practising yoga on your own if you could?
- S: I think so. (Big smile and serious face)
- J: So what's your favourite exercise?
- S: Mmmmm. I don't know. (hand gesture and smile)
- J: You're not sure? Do you have a least favourite?
- S: Nope.



- J: No, you just like everything?
- S: Yes. (proud smile nod of the head)
- J: Mmmm. (contemplative) Had you, have you, had you practised yoga before you came here?
- S: Uhh ... no.
- J: No? So you gonna teach your parents how to do it?
- S: Yes. (big nod and huge smile)
- J: Well, that's a good idea, I like that. If you could change something about school, what do you think you'd change?
- S: Mmmmm ... NO HOMEWORK. (giggles)
- J: No homework?! Oh I like that idea. That's a very good idea? What makes it hard for you to finish your school work?
- S: When it's noisy.
- J: When it's noisy?
- S: Uhhu. (nodding)
- J: Yeah. I think that's the hardest time for me to finish any of my work. How do you think we can get kids to be more quiet?
- S: (deep breath) Oooo ... maybe they ALL need to do yoga.
- J: They all do yoga? Do you think that would help?
- S: Yeah.
- J: Yeah. Do you think the kids that practise yoga are quieter than the kids who don't?
- S: Yes. (vigorous head shake)
- J: Yeah, mmmm? We should try, maybe we can get everybody to do it sometime, that'd be a nice idea. So what's your favourite subject in school?
- S: Mmmmm ... science.
- J: Science? What part of science? What do you like about it?
- S: Everything (arms spread wide) it's so nice.
- J: Really? What's your least favourite subject?
- S: Rrrr ... ummm ... I don't know really.
- J: You don't have a least favourite subject?! (Surprised tone)
- S: It's between history and geography, because they're a little bit hard.



- J: Mmmm, yeah, they're not really my favourite either. But sometimes math I struggle with.
- S: Math I like.
- J: Math you like? Oh see, English is my favourite. I like reading and writing.
- J: How did you feel about breathing exercise in yoga?
- S: It was nice.
- J: It was nice? What's nice about it?
- S: Ummm ... err... it just relaxes me. (Happy smile)
- J: It relaxes you?
- S: You breathe, quietly and, yeah.
- J: Mmm. (nodding) Does it help you with your studies or not at all?
- S: Yeah, it does.
- J: How does it help you with your studies?
- S: I just feel relaxed and that I can DO the work.
- J: Oh, that's good. So you could try it on your own, I suppose? But you'd need the kids to be quiet, huh?
- S: Mmhmm. (nodding) Yeah.
- J: Yes, quiet is the key part. Is there anything else you want to say?
- S: Nope.
- J: Thank you so much, I appreciate it.

- J: There we go ... So, had you practised yoga before we did here?
- S: Once with my mum.
- J: And what did you think of it.
- S: It was fun.
- J: It was fun? How do you feel about it at school?
- S: Still fun.
- J: Still fun? What's fun about it?
- S: I think the whoosh is the best part.
- J: The whoosh is the best part (happy voice) ... why is the whoosh the best part?
- S: It relaxes you so much. It relaxes your muscles.



- J: Really? (Surprised)
- S: Yeah.
- J: So we should do the whoosh a whole bunch tomorrow.
- S: Yes. (big smile and nodding)
- J: Okay, I try to, I try to make that work. How does it relax you?
- S: It relaxes your muscles ...
- J: Mmhmmm. (nodding)
- S: It makes your brain work more ...
- J: Mmhmmm. (nodding)
- S: And just makes you laugh. (very serious and arms open)
- J: Yeah, which is nice, huh?
- S: Yes, and if you laugh it just makes you focus more.
- J: Yeah.
- S: You get rid of all the tension and the bad things that stop you from focusing.
- J: Yeah, yeah ... So what's your least favorite thing we've done in yoga?
- S: The palm tree.
- J: The palm tree, (little giggle) why?
- S: It's so hard. (small wine).
- J: What's hard about it?
- S: It's like keeping your hand like this. (shows the part of palm tree).
- J: Oh, yeah.
- S: The whole time.
- J: Mmhmmm. (nodding)
- S: It hurts.
- J: Oh goodness, has it gotten easier or is it still the same hardness?
- S: It's easier. (hesitant voice)
- J: Well, that's good. So you're getting better at it then?
- S: Yes.
- J: Well, that's good. Do you like the time of day that we practise yoga, or would you do it at different time?
- S: I'd rather do it in the mornings.
- J: Really, how come? (Surprised)



- S: Cuz it's so hot now, and in the mornings it's cooler.
- J: Yeah, it is a lot warmer now. That's true. So how do you feel after we practise yoga?
- S: I feel relaxed.
- J: Relaxed? Does it help you with your studies or not?
- S: It does help with my studies.
- J: How does it help with your studies?
- S: It makes me focus more ... gets rid of the tension and ...
- J: Makes you feel better?
- S: Yes.
- J: Well. that's good. Hhhhhhmmmmmm. If you could change something about school, what would you change?
- S: The amount of homework.
- J: The amount of homework. (small laugh) So you should have NO homework?
- S: No, you should have a BIT.
- J: A bit but not too much?
- S: Yes.
- J: What makes it difficult for you to finish your school work?
- S: I'm usually so distracted from things.
- J: Like what?
- S: Last year I couldn't do anything cuz I was bullied.
- J: Mmmmm. And this year?
- S: This year I moved schools, it's much better here than last year.
- J: So are you ... are you having it easier getting your work done?
- S: Yes.
- J: So you feel better?
- S: Yes.
- J: Well, that's good ... Yeah, bullying always causes problems. I'm glad it's much better here. You don't get bullied here?
- S: No.
- J: That's good. I'm glad. So do you think focusing on yoga helps you, focusing with your school work, or just makes you feel better?
- S: It helps me with both.



- J: Well, that's good. I'm glad. Are you going to keep doing it on your own?
- S: YES. (big nod)
- J: You're going to keep the whoosh on your own? (smiles)
- S: Yes. (HUGE smile)
- J: Okay. (chuckles) Is there anything else you want to tell me?
- S: That's it.
- J: Thank you so much.

- J: Alright, you are live. So I want to know what you think about the yoga exercises.
- S: It's niiice.
- J: What's nice about it?
- S: Umm. Everything!
- J: Everything?! You got to be more specific everything is a huge thing.
- S: The, the balancing is kind of difficult.
- J: The balancing is kind of difficult. Has it gotten easier or is it still the same?
- S: No, it's not still the same, it's gotten easier.
- J: It's gotten easier. Yeah, balancing takes a lot of practice. So, how do you feel after we practise yoga?
- S: I feel comfortable.
- J: Comfortable? That's good. Do you like the time of day that we practise yoga? Or would you do it at a different time?
- S: Na ... I don't know.
- J: Not sure? Cuz we do it after break and we could do it in the morning. I don't know which is better.
- S: After break is better, because of it gets you relaxed instead of playing.
- J: Yeah? So is it nice to come in after break and practise yoga?
- S: Mmhmmm. (nodding)
- J: And afterward ... you said you feel comfortable; what do you mean by comfortable?
- S: Like I feel better than before.
- J: Well, that's good. Does it help you with your studies?
- S: Yes.



- J: How so?
- S: Very much.
- J: What does it help you, you ... like do?
- S: When I get home I study more mostly, than, than the times I don't do yoga.
- J: Mmhmm. (nodding)
- S: And I stay up to work.
- J: Yeah, I see, so when you don't do yoga you have more work at home.
- S: Yes.
- J: Oh, okay. So you get more work done at school on the days we do yoga?
- S: Yes.
- J: That's nice. So what's your favourite exercise?
- S: The whoosh.
- J: The whoosh, what about the whoosh is your favourite?
- S: The sound.
- J: The sound? How does it make you feel after we do it?
- S: Happy.
- J: Happy? Good, what's your least favourite?
- S: The balancing.
- J: The balancing? How come you don't like it? Cuz it's hard?
- S: Yes.
- J: Yeah? What about it is hard?
- S: Like you balance, then you fall and people laugh.
- J: Yeah ... What makes it hard for you to get your work done at school?
- S: Nothing.
- J: Nothing? It's easy for you.
- S: (NOD)
- J: Good, I'm glad. Is there anything else you want to tell me about yoga?
- S: It's fun.
- J: Oh, I'm so glad. Are you going to keep doing it on your own?
- S: Yes.
- J: Great, anything else?
- S: No.



J: Thanks.

- J: So have you practised yoga before this, or is this your first time?
- S: (nodding)
- J: You practised yoga before this?
- S: Yes, I have.
- J: You've practised yoga before.
- S: Well, first I started teaching myself cuz I've seen it on TV before (mmhmmm nodding), so I started by stretching and doing some splits.
- J: Mmhmmm. (nodding) How did you like that?
- S: It was really comfortable.
- J: Comfortable? Good.
- S: Yes.
- J: How do you like practising yoga at school?
- S: It's really amazing, it gets me actually really like smooth and relaxed.
- J: Mmmmm, that's good. Do you like the time of day that we do it, after break?
- S: Yes.
- J: Why do you like that?
- S: Because then when I do work after it, it's easier for me, cuz I'm relaxed and fresh.
- J: Mmmmm. So do you feel right after we practised yoga?
- S: Umm, I feel good.
- J: You feel good? What ... what, like what do you mean by good?
- S: I mean like ... I'm not that stretch any more cuz I had like back sores (00000) but now it's okay and good, yeah.
- J: Great. So do you think it helps you with your studies?
- S: Yeah, it helps me a lot.
- J: How?
- S: Cuz then when like, when I'm studying for exams, every time when I felt like ... um like when I not that properly I'm stiff, I used to just get up and do a little bit of yoga.
- J: Mmmmm. So you're going to keep practising even if I don't come every day?
- S: Yeah. I will keep practising.



- J: Oh good. What's your favourite exercise?
- S: Well, that mostly the stretching.
- J: Mmmmm.
- S: Cuz then it helps with all the stiff parts in the body.
- J: What's your least favourite?
- S: Well, least favourite is actually nothing I like all of them.
- J: Nothing?
- S: Yeah.
- J: That's good. How do you feel about the breathing?
- S: Well, the breathing is good; actually it gets me to breathe properly, sometimes I do not breathe properly.
- J: Yeah, it's amazing to think that we breathe all of the time, but some of us don't breathe properly.
- S: Yeah.
- J: It's funny, cuz I mean we're breathing right now, but then when you actually sit and focus on it, it makes a big difference. Huh?
- S: Yeah.
- J: How do you feel after we do our breathing?
- S: Well, it actually sometimes it ... before we start I actually don't breathe very properly. I get caught somewhere in my throat; it makes me not breathe properly, but then when I breathe slowly, it makes it very properly to breathe for me.
- J: Do you feel a difference on the days we practise yoga, compared to the days when we don't?
- S: Yeah, I feel a difference.
- J: And what's the difference?
- S: Well normally I'm like stiff and I can't actually ... sometimes I can't move cuz it's sore, but then after, it's very smooth.
- J: Well good. I'm glad. We'll have to make sure you keep doing it, huh?
- S: Yeah.
- J: Is there anything else you want to add?
- S: No.
- J: Thank you so much for talking to me.



- J: So, had you practised any yoga before we did this at school?
- S: No, not really.
- J: No? So what did you think when we were going to start practising yoga at school?
- S: I thought we were going to sit on the carpet and do something.
- J: So what did you ... how do you feel about it now?
- S: I feel good.
- J: Do you like it?
- S: Yes.
- J: So what do you like about it?
- S: It helps me with my work when I'm working, when I feel cold or something, I just start breathing or something, then it helps me.
- J: Yeah? How does it help you with your work?
- S: Like it makes me feel better when I write.
- J: How does it make you feel better?
- S: Ummm. By not sure.
- J: You're not sure?
- S: It just ...
- J: What is your favourite exercise that you do?
- S: The Tree. (Swaying palm tree)
- J: The tree. Why is the tree your favourite?
- S: Because we go left and right and it helps stretch me.
- J: Mmmmm, okay, and what is your least favourite?
- S: Not really sure; I just like them.
- J: You like them? How do you feel about our breathing when we do the deep breathing?
- S: I feel fine.
- J: How do you feel afterwards?
- S: I feel, I feel like exciteder.
- J: Okay. Do you like the time of day that we do yoga?
- S: Yes.



- J: After break? Or do you think it's better to do it in the morning?
- S: No, after break.
- J: Why is after break so good?
- S: Because that's when I tired feeling, after we played.
- J: Mmmmm. So do you feel a difference on the days we practised yoga versus the days we don't practise yoga?
- S: Yeah.
- J: What's the difference?
- S: On the days we don't do it, I'm tired and sit down and do work, and when we do them I feel better and not tired.
- J: Does it make a difference with your school work?
- S: Yes.
- J: How so?
- S: I become better and neater.
- J: Mmm. So you like doing yoga?
- S: Yes.
- J: Are you going to keep doing it, even if I don't come every day?
- S: Yes.
- J: Are you going to teach your parents?
- S: Yes. (smile)
- J: Are you going to teach them the palm tree?
- S: Yes, I'm going to teach them.
- J: Anything else you want to add?
- S: No, thank you.
- J: Thank you for talking to me.

- J: So, had you practised yoga before?
- S: Mmhmmmuhuh. (no)
- J: No experience.
- S: No.
- J: So, what did you think when we started doing yoga?



- S: Thought it was going to be fun.
- J: Thought it was going to be fun? And how do you think, what do you think now?
- S: Yeah, it's still fun.
- J: It's still fun. What's your favourite part?
- S: The whoosh.
- J: The whoosh? What's good about the whoosh?
- S: It stretches out my back.
- J: It stretches out your back. How do you feel after you do it?
- S: I feel good.
- J: You feel good. What do you mean by good?
- S: Relaxed.
- J: Relaxed. Do you think we do yoga at a good time during the day?
- S: Yeah.
- J: Or is there a better time we should do it?
- S: No, I think it's good.
- J: Why is it a good time?
- S: Cuz in the morning everybody's dressed up and stuff.
- J: Mmmm mhhh, I see. So would you want to keep practising on your own? Do you think? Even if I don't come.
- S: Yes.
- J: Yeah. And you said the whoosh is your favourite, right?
- S: Yes.
- J: So what's your least favourite?
- S: I think the swaying tree.
- J: How come?
- S: Stretches are not that good for me.
- J: Hmmmm. So it kind of feels weird.
- S: Has it gotten easier the more you've done the exercises?
- S: Yes.
- J: Well, that's good. So how do you feel after we finish all our exercises?
- S: Better.
- J: Better. How, what do you mean by better?



- S: I feel more relaxed.
- J: Okay. Anything else?
- S: (shakes head)
- J: Does it help you with your studies, or not make a difference?
- S: Help.
- J: How does it help?
- S: More relaxed, I can think properly.
- J: So, is being relaxed good for you with your studying?
- S: Yeah.
- J: That's good. So ... Oh I just forgot my thought. What was I going to say to you? That's what it was. If you could change anything about school what would you change?
- S: A lot of homework.
- J: So you'd have less homework?
- S: (Nod)
- J: Do you like having yoga at school?
- S: Yes.
- J: Aaaand you going to teach your parents how to do yoga now?
- S: Yeah.
- J: You think so, do you think they'll like it?
- S: Yeah.
- J: Is there anything else you wanted say?
- S: Mmhmm. (no)
- J: Oh, what did you think of the breathing exercises? Did you like the breathing, or not?
- S: I liked it.
- J: What about it did you like?
- S: I'm not really sure how to say.
- J: What do you think? No idea? (Head shake) How did you feel afterwards?
- S: Just feel relaxed.
- J: Just feel relaxed?
- S: Yeah.



- J: Okay, anything else you want tell me?
- S: (head shake)
- J: Okay, thank you.

- J: So, had you practised yoga before?
- S: Little bit.
- J: Little bit. What had you done?
- S: Uhhhhh, just like tried to do the lotus position.
- J: Uh huh, and what did you think about it?
- S: It was kinda hard.
- J: Kinda hard. So did you like the idea of have ... doing yoga at school?
- S: Yeah, cuz my mom got into yoga a couple weeks before.
- J: Oh, that was good timing.
- S: Mmhhh.
- J: So what did she think about it?
- S: She doesn't really tell me what she thinks.
- J: She doesn't really tell you what she thinks. (Chuckles) So how do you like what we do at school?
- S: It's fun.
- J: What's fun about it?
- S: Mmmm ... the whoosh and uhh ...
- J: The whoosh, what's good about the whoosh?
- S: It's just so fun.
- J: How do you feel after we do the whoosh?
- S: Uhhh happy.
- J: Happy. What's your least favourite then?
- S: Aaaaa. Swaying palm tree.
- J: Swaying palm tree. Why is it your least favourite?
- S: I have no clue.
- J: Okay, well that's fine. So how do you feel after we practise yoga?
- S: Calm.



- J: Calm. Does it help you with your school work or not make a difference?
- S: Uh helps a bit.
- J: Helps a bit.
- S: Concentrate more.
- J: You think so?
- S: Yeah.
- J: So do you notice a difference on days we do yoga versus days that we don't?
- S: Yeah.
- J: What difference?
- S: On the days that we don't, I'mmm more hyper ... don't concentrate as much.
- J: Mmmm. Are you going to teach your mom yoga moves that we've done?
- S: She already knows them.
- J: She already knows them. Are you going to keep practising on your own?
- S: Mmhmm. (nod)
- J: What are you going to do on your own?
- S: Uhhhhhhh.
- J: The whoosh?
- S: Yes.
- J: What else?
- S: The tree and
- J: How do you like the breathing exercises?
- S: Uhh yeah.
- J: Yeah, just okay? Not so great. How do you feel after we do it?
- S: Umm sometimes tired.
- J: Mmmmm. Do you like the time of day that we practise yoga? In the afternoon as opposed to the morning?
- S: It's good.
- J: What makes it good?
- S: Cuz after I play it makes us hyper and then you just calm down a bit and finish your work.
- J: So do you think it's good to have yoga at school?
- S: Mmmmm, (no) not really.



J: Thank you.

- J: So had you practised yoga before?
- S: Uh no, I haven't.
- S: No. I know you rock climb when did you start that?
- J: I started that two and a half years ago.
- S: And you like it?
- S: Mmm. (nodding)
- J: And do you think that stretching helps after you are sore from climbing.
- S: Yes.
- J: Yeah.
- S: A lot.
- J: So you'd never practised yoga before?
- S: No.
- J: So how did you feel when you started doing it at school?
- S: Uh, I felt excited.
- J: Excited. What do you think about yoga now that you've done some of it?
- S: Well, it really helps.
- J: How does it help ya?
- S: Well, stretching and ... it's fun.
- J: Fun. What's fun about it?
- S: The whoosh. (with arms and big voice)
- J: The whoosh. Is that your favourite?
- S: Yeah.
- J: How do you feel after the whoosh?
- S: The whoosh, yeah, my back muscles are smoothed out after the whoosh.
- J: Mmm that's good. So does it help you with your studies at all?
- S: Ah yes, it does.
- J: How so?
- S: Cuz normally if I sit in a chair for too long, I'll get irritated and start moving around (mmmmm), and with the yoga it helps me and I don't have to move around.



- J: That's good. Do you like the time of day that we practise yoga? After break?
- S: Yes.
- J: Why is that a good time?
- S: Because after break we're all tired and stiff (yeah) from all the running (yeah) and it loo, it loosens us up.
- J: How do you feel right after we practise?
- S: I feel I ... I don't know how to explain it. I feel open.
- J: That's a good word. I like that. Go on.
- S: Um yeah, um, it's like I said.
- J: Okay. Would you keep practising on your own, do you think?
- S: Yes.
- J: You going to teach your parents?
- S: Mmmm. (smile)
- J: Do you have a least favourite exercise?
- S: Ah no.
- J: No, you like it all.
- S: Mmm. (nods)
- J: Do you like doing it at school?
- S: Yes.
- J: And do you notice a difference on the days we don't do yoga versus the days we do, do yoga?
- S: Yes, I do.
- J: Can you explain?
- S: I can explain cuz normally when we do yoga as I explained before I feel open and my muscled are smooth. And when we don't do yoga then it's all hard and stiff.

 (mmhhh) Not nice.
- J: Cool. Thank you. Anything else you want to add?
- S: No.
- J: Thank you.



Addendum M: Focus Group B

- J: So, I gues, I guess, first, what do you guys know about yoga? You know a lot.
- M: I won't start then, okay? L**, you can start.
- G: Mm hmm. I've been to yoga classes. I have. I had to stop because of the running; couldn't do both. So. Okay, yeah. It's very good for you and it makes you feel fantastic.
- C: I do yoga every Saturday. Um, I enjoy it very much, very into it. Um, the kind of funny thing is, when you invited me to this, um, I was actually on a website looking at yoga in the classroom, and how I can introduce, um, stretching positions and certain poses for my pre-k kids. Like, for instance, just sitting crossed legs on the floor, that is a yoga position. That's why I guess, we get them to sit criss-cross applesauce at the schools, because it's a, they focus their bodies. So, but there are other things as well, like the warrior, and, uh, downward dog. You know, little kids love to tie themselves up in knots, and, um, get out of that again, and for pre-k, I think it's a wonderful tool to have as a relaxation, as a focus, um, that kind of thing.
- M: You go first, because I have a lot to say.
- L: I don't know too much about yoga, and I only know what my dad has told me from a religious point of view, so, it's, it's more, I know it's stretching and I know it's focusing your energy on something or refocusing your energy and controlling your body. That's what I think it is, and, and, uh, I know there's stretching involved.

 That's it.
- M: Um, so, yoga's a lot of things. It's, uh, first of all, it's our natural state. We're born in a yogic state, um, because it's all about really, uh, finding a union, whatever that union is; like bringing together, whether it's people or your connection to, um, you know, a higher being or God, or it could just be a connection to your body, but it's bringing union and bringing a sense of togetherness in, um, into your life, and it's much more than just physical practice. There's also the mental and emotional practice and breath and all of that as well.
- J: So, it seems like there's some understanding of yoga or some deeper than others.

 So, what would, how would you feel about bringing yoga into your classroom, and



you've already said that, you know, you've looked into it, but what is your, I guess, initial reaction to that? I mean, discuss.

G: Well, I mean, we've done Brain Gym. We've done all sorts of things, and we know that these things work. Um, it's to find the time, and when we do morning circle and stuff, it is the obvious time to do those things, and the children do so often use these things to help their, for, you know. Focus. Carol did Turtle, and it could just be a yoga pose that helps them refocus or feel better about themselves, so I see a place where, um, I've tried my, is it My Daddy's a Pretzel?

M: - Baron, Baron's Book.

C: Yeah, he's – yeah. I've tried –

G: —I have tried to look for different ways that, and I do believe, it does help. It just, I think it helps if everybody does it at the same time. If it's just, you know, a classroom it feels harder, so when they go to music and the music teacher doesn't get it, that makes it trickier. So, if we're involved with the same thing, I think it's easier.

J: So, do you mean, like all on board, like every classroom, or, like – kinda throughout the school, or? But, I mean, you just mentioned specialists. I was wondering, do you mean, like just all of kindergarten or, you know?

G: Uh, in, in pre-k and k on our playground. The teacher sees a child doing something, and we all say, "Oh, why don't you do?"

C: Yes.

G: And in our class we do Turtle liquid feeding. I, I'm sure there are many moves that could make a child relax and feel better, but it would be nice if we all had the same language, is what I'm saying – and if they were in music and behaving that way, and the music teacher goes up to say to the child, what, what's ... isolated doesn't work as well.

C: And in my case too, very much, we see sticking his head out in early childhood, and those kids' focus is so fragmented, and it's all over, and you can help them to, by certain moves, to, to concentrate, to kind of meditate, and that inner drive has been in a positive way. Um, I, I really think it'll be great in early childhood, so I can see it working there, but universal language has to be in the class, on the playground —



- M: Yeah, I mean, even if it's like a, like a discipline, I don't want to say discipline, but, a way to, um, redirect students. Like, if everyone was on the same page, then everyone could say, "Okay, we're gonna do," like, "Why don't you take five, you know, Kapalabati breaths, or something like, that could, yeah, bring, help bring, um, ADH, uh, ADD students' attention, into, like –
- G: I, we know we have to breathe, we breathe in the nose and hold it. I don't know what that's called, but we do it five times, and we breathe and we hold it, and then we breathe out through our mouth. I try different things and I do believe it works, but I don't have names for it, because –
- M: But that would be, I mean, but that's something like you said, if it was instilled in school um, and everyone kind of knew and it had these non-threatening names, of course, like it, if I go around saying Kapalabati, uh, like, it's a little too much.
- C: Well, we had, like, things like pre-pose, you know? Chair pose.
- M: Yeah.
- C: Warrior. Downward dog. You know, they love those names. It's, um Let's get into that. Let's get into this, and, um –
- M: Right. But, yeah, as far as, like, bre-, I think the breathing techniques, honestly, would be one of the most beneficial things for kids, actually.
- G: Hmm. But where does the time come from to get all of this in? I think it is great though. We are being bombarded by new curriculum, new things we have to teach and parents thinking we should be handling more of the teaching of emotions and social skills to their kids, and it just never ends. The pressure to get through the materials even in elementary is intense.
- M: Yes but if, if the school all had, like a, a universal, I want to say a universal truth, like, like a universal language, it sounds like you really need to get administrators on board, or higher ups on board, 'cause it's very difficult, I, I'm, I feel that it's very difficult as, like, even if a group of six teachers say, "Oh, we'll instigate," instigate sounds harsh, you know? But then we would be given time, I would hope.
- G: Well, I think, I think, um, uh, often it just has to be driven by one thing and we look at, um, um, Words Their Way. One person brought it in and if it's good, it can be brought in. It has to be modelled. Well, whatever it is, whichever programme, and it has to be good. Everybody has to eventually buy it, and that's happened. We have



too many things going on right now, and too many different rules, and too many teachers are, are, I think, are just full of new concepts coming at us, um – And, so, we've been through the whole Brain Gym. We used to go to assembly and rub our ears. I have been here a long time. We've done lots of different things and they all work in some way. I think they're all fantastic. I think it's great, and, but, it's hard to hold onto things that are important, because new people, new change, new ideas, which are great, but then we're just losing it. It's new. All the time.

- C: I can say, Lee, if this was a South African, purely South African, um, say Afrikaans school, it would be a no-no. Because, if it's considered a, a cult, in some countries –
- L: Mm hmm.
- C: uh, of, um, it's bowing down to a, a being, which is not necessarily the God that is in the Bible, so from that religious point of view, it will be seen as, uh, not, not happen.
- L: So, you would be able to get maybe the teachers on board, but not all the parents?

 Yes. And especially the Afrikaans teachers. That isn't gonna happen either.
- C: Yes.
- J: Do you see any way of pushing through that barrier?
- L: Because we are all so rigid, and because we also are closed minded, I don't think so.
- C: Mm hmm.
- L: Yet, it might be coming. I think it's starting to. I think that definitely, especially with the older school people, like especially with older people
- G: You know, you don't think yoga has become cooler?.
- L: That's what I'm saying. It's starting to the, the perception is changing, so it is becoming possible.
- C: But I think you'll, you'll get that in the private schools, the, the Bresha houses, St Stithians the, um, some students, they might latch on, but no, very narrow-minded Afrikaans Schools, I don't think so. Especially Afrikaans Christian Schools.
- L: Especially.
- C: They will be, they'll just not.
- J: So, you need to start with different schools and hope that it works its way.
- M: I mean, the same thing in the States, they're teaching about yoga and then they're teaching, um, meditation now in one of the most violent schools in San



Francisco, and it's making just a hum-, a humongous impact – discipline in that school. So, I think, but San Francisco's also a very liberal-minded, open-minded, um, you know, area.

L: See, we don't believe in meditation from a Christian point of view, though. We don't agree with that at all, because you are centring your thoughts and your, your spirituality to something that shouldn't be except for God. So, whether or not, you, you know, that's, uh, meditation, I think, could be good, but not from our point of view.

J: So, it's very hard to overcome that, in a way. Like, the same way you'd start with the more liberal, liberal schools –

G: – like this school.

M: But is there a way, I mean, like, medi-, 'cause meditation is basically just sitting quietly, chanting – and you don't, no, not even chanting. I mean, you don't have to chant. It could just be, like, I, I teach a meditation that's just like, let go. Like, with every inhale you say, "Let," every exhale you say, "Go," and it brings you, like, it calms you down. It makes you feel more grounded, but then there's also, like, sending blessings and love to people, like, it's almost like saying a prayer for every single person in your life who you want to send – blessings and love to, you know?

C: There is, um – there is a, um, an Afrikaans school of thought, which is, um, uh, a way of worship called Lictodavinia – where you actually do go and you quiet yourself, you, off, and you grow quiet and you, um, sing a repeating, or chant a repeating rhyme, whether it's a Bible verse or something, to actually calm your thoughts and to clear you and to meditate, um, so that, it does exist. People are doing it.

M: I'm just wondering if there was, like, a different name for it. You know? If it wasn't called meditation?

C: Yes.

M: If it was, like, a time-out. I mean, nothing that you want to pull the wool over anyone's eyes, but, I mean, it's like, the same thing, you know? Yeah, instead of using the word meditation or instead of using – the word yoga.

C: Right.

G: Focus.

M: Focus. I don't know how, how that would be.



- G: You know, I use, uh, meditation-type music, you know? There's a in my room, and that focuses my kids. Just, I think it's I mean, it's any, they've got very long days too, you know? And I just play the music and the, that works. Well, having just the music.
- M: Yeah. Yeah.
- J: So, who do you think would have the most concerns with yoga in the classroom?
- L: The parents.
- J: The parents. Just parents, as, like, Afrikaans parents?
- L: The community.
- J: Any parents? Community?
- L: Yeah. Afrikaans community of parents, I think.
- C: Or, even, um, other religions.
- L: Maybe.
- C: Um, not only just the Afrikaans. People, religious people and there are religious people, you know we have the Muslims. And then we have, we have, um, Hindu people. And they might have issues.
- J: So, I mean, you've done some yoga stuff in your classrooms, you know?
- C: But I didn't call it yoga.
- J: That's what I was just gonna ask. So, is, is it something that then you need to get permission from, uh, I don't know. Like, do you need to say, "We are going to be doing? um, Square Breathing, or Square Breath, or something like that, um, and, you know, this is why, this, do, I, I have no idea. Do we think we need to get parent permission?
- L: If I were a parent and I found out that you did that, I would be upset, because you never asked me my permission, 'cause I would say you could do it with my, your children, any child. Because I would be teaching that child something different, and my father would feel the same. So, it's –
- J: What about the, like, relax we did here?
- L: I wouldn't be happy with that if it were my child.
- J: No, I'm serious. I'm just asking. I mean, do you guys think –
- C: I, I just do simple exercises, and tell the kids, "Let's pose like a tree." And, "Let's stand down like a dog," but I don't tell them it's a yoga thing. I just do the –



- J: I don't know where that, that line is, exactly.
- G: See for me breathing. When a child's cross, they can't breathe properly. Uh, uh, so for me, deep breaths are just a way of, I mean, I would, I would –
- M: I mean, I mean a therapist would teach –
- G: Yeah, exactly.
- C: that, too. Yeah.
- G: It's just something that I feel children have to do. And, it's like, when you are doing sit-ups you can forget to breathe. Um, it hurts and you can't do as many. Same with learning. If you're not breathing properly, I don't believe you, you can focus. I, so, breathing and also finding a pose to relax, and we call it the Turtle.
- C: I think that downward where you go down and ... Mm hmm, and the, the rec-, recovery pose in yoga you know that one? Childs' pose?
- M: Child's pose.
- C: Yes. That's it, they love to do that pre-, pretend we are flowers growing and just gonna curl up in little balls and I call it relax and they know the word, tr-, relax, or we could say, "Now we have to chillax." And, and that's, that's how I do that. So. But in a small way. I don't call it yoga.
- G: Yeah, I've never thought about it where they're 'cause I've never thought of it as yoga.
- C: Me neither.
- G: I've never thought breathing with my kids was yoga.
- C: Right.
- G: Or, uh, we're doing a pose to feel less anxious. You know?
- J: Because, you, you three are relatively educated in yoga. I would say, you've done, you've practised and you've found a classroom. You're, you know, um, so I'm just wondering if maybe you, because of your experience, feel slightly more comfortable and don't think of it as yoga, or more comfortable bringing it into your classroom, than someone who would say isn't as experienced. Sorry. I didn't mean to single you out.
- L: No, no, no, that's fine.



- J: Um. I don't know. I mean, would you feel more comfortable bringing in more aspects of yoga if you had more education on it, or, I don't know. Again, I don't know if they'd want to.
- M: Well, I think it's, well, I think it's the time, too. I think also the other parents that would have a really major, a big issue with it are the ones who are very academically driven. I think the ones who are, uh, asking me, like, how does your programme tie into the IB programme, and how is this gonna get better, to a better university. I'm like, "They're 8. Let's let them be kids." Um –
- G: I mean, I can talk as a mom. Uh, last year I didn't hear anything about Spanish his whole life, and then you did a headstand.
- M: And then I did a headstand.
- G: And then Spanish was big suddenly. He didn't know he was in yoga. He wouldn't know.
- M: Yeah.
- G: He wouldn't connect that, uh, to yoga, I think. He, he never mentioned yoga.
- M: Yeah.
- G: He just said you could do a headstand.
- J: So, it seems like it's a very heated word in a way.
- C: It offends people.
- G: I've never thought of it as offensive.
- J: But we might be more, more liberal?
- L: Yes.
- G: I've never thought of it. It's so funny, this conversation.
- C: It's the same as Tai Chi, you know, that, that kind of Eastern practices –
- G: If I knew my kids were in a teacher's class who were doing this, I would be happy for it.
- C: Yes.
- J: Whereas you would feel differently.
- L: Um.
- J: So, sorry, no –
- L: If, if, no, no, no. If you, if you ask me being more open than my family, I, I, and you asked my permission for it, I'd, I'd probably okay it, and I'd explain it to my child from



a religious point of view. However, if you asked me from being brought up as a closed-minded Christian pastor's daughter, I would be furious. If, if my son came home and said, "I stood on my head," I would immediately know its yoga, and I would be like, wow. No.

- J: So, the big thing for you being told.
- L: Mm hmm.
- J: I'm, just, saying this right is, b-, being more open-minded, that side, is being educated, being told what's going on, and it having been explained to you, and not kind of thrown at you, so, you basically have that choice?
- L: Yes. I have the choice. That's the big thing. When my child doesn't have the choice in your class, for example, he waits and he says, "Oh, let's do the yoga, headstand," or whatever. I, I haven't, you haven't given my child the choice and he is not educated enough, maybe, for the choice, and obviously, he's only 8 or whatever –
- M: Right.
- L: the case may be. But, I would prefer that, maybe as a parent or, if it's someone in my family, to be able to say this and these are your options. "You can either do this because of this, or you don't have to," so they need that choice.
- G: So, what about religious holidays that might be brought up at assembly? Would that
 Like, I'm just trying to think of another example where I don't ask permission from parents to say, "Celebrate Diwali or or even Christmas.
- L: I don't like that at times. I know we sit at assembly, um –
- G: Halloween.
- L: On Halloween.
- C: That's another one.
- L: It, it really bugs me, and to be here, I'm really trying, uh, I do it for the kids now because I'm more open-minded. However, when I tell my father about it, from my family point, it is chaos. So I, that's also how I feel if my child were to be in the school. I'd also have to give the child the option.
- C: Which a lot of people do. They don't want their kids to participate in Halloween.
- J: So, how does that, what, I'm just saying, if, if, let's say, I talked to my parents at parent night, and I say, "In morning meeting, I would like to incorporate ... some, um



- C: Stretching.
- J: "stretching and some deep breathing," -
- G: Breathing.
- J: "which is founded in, in yoga, um, and I want to have you guys aware of that. If you have any questions or concerns, please come talk to me," maybe on a permission slip, because maybe that makes it too formal. I'm just talking out of my head here, and then let's say someone comes up to me and says, you know, "I really don't want my child a part of that," so then, as a teacher, I have two choices. That child sits outside during the morning meeting, or whatever —
- G: They would go do errands, or I mean, there are many different ways to deal with it.
- C: Be discreet.
- J: Because, what I'm, what I'm hearing to me with the, the big concerns, and I mean, that's not the right word, issues, whatever, negative things of bringing yoga into the classroom is time and learning more stuff, 'cause everybody's brains are chock full. Um, having the whole language –
- G: Consistent, consistency around it doesn't really help if it's just done one place, and basically getting parents on board.
- J: So, how do we overcome that?
- M: Well, well, I mean, I'm just wondering, like, 'cause in PE, they do stretches, and I know, like, in, and they'll do, like, some yoga, Asana, I mean, really, should be just called Asana Because that's really kind of what we're talking about.
- J: Yes.
- M: Um, 'cause here's eight different limbs of yoga, and, you know, it, it does stretch out your body. It does strengthen your body. It does build muscle. It does, you know, help focus the mind and, um –
- C: It relaxes.
- M: Yeah, I mean it does so many things, so, I'm just wondering, like, yeah, if you just call it stretching, like, and it, because, I, y-, I mean, those, some of the yo-, some yoga poses are things that I was doing in PE class, you know? Like, with, uh, a forward The Forward Bend?



- J: Yes, that's ... back stretch. We call it back str-, uh, well I don't, I don't remember the actual Sanskrit name, but back stretching.
- M: Oh, no, but like in that, like, in gym class.
- J: Oh, yeah. It's Forward Bend. That's a yoga pose.
- M: Right, trying to touch your toes or beyond your toes. Doing, like, your legs spread actually trying to touch your toes from a standing position is also a yoga pose. Well, that's yoga, then.
- J: And like, see, as Wide Legs but any of those floor stretches that you did in gym those are also ... yoga poses.
- M: Yes. It's all yoga. That's, yeah, that's the funny, that's the funny thing, I think, especially coming from –
- C: Well, yoga got it from them, or they got it from yoga –
- L: Oh, yeah.
- C: six of this and half a dozen of the other.
- L: I think it's just the initial –
- C: The terminology.
- L: the term-, uh, yes, and the association It's the association. It's the initial, pshaw, I'm looking for a word, um.
- J: We're not hiding, but I think what -
- L: Hiding it. Be open about it. And, and have them choose, yes, they are connected; whoever got there first doesn't matter. It's just, it's your initial attention in PE. Are you thinking because if you want yoga to be brought into the relaxation, or is it because you want the biological factor stretching the muscle? Does that make sense?
- J: Uh, that's a very interesting point, because if you're just focusing on warming up, possibly, before the basketball game, you're probably not practising yoga. You may be using the Asanas, but you're not practising yoga, and, like, with the breathing, there's obviously a lot of breathing in yoga, but then that'll, breathing also comes in another thing, so, another s-, aspect of other things, so that's an interesting point, whereas if me, being a yoga instructor, I do come from it, from a yoga background, but if you decide the kids need to take deep breaths, because I know it calms me



- down, and we should stretch out, but you're not coming from it, from a yoga background.
- G: You're getting it from a –
- L: Psychological background.
- G: Mm hmm. Yes. That's where I, I must say, when I did, did it with my kids –
- C: I certainly wasn't going at it from yogic background.
- G: I just know how to calm a child. I know how to calm adults. What works.
- L: You did for a, you know, a biological like, um, getting the blood flowing –
- M: Well, and it's just, it is energy. It's, like, I mean, when you breathe, you're you're changing your energy. Yoga's all about energy and moving energy, like, just like Tai Chi. You know, it's, it's about shifting energy.
- L: And I don't believe in energy, so that's interesting.
- J: Yeah, it's, it's very interesting.
- G: Well, it's like, having any teacher with a very strong belief system, it's gonna come through, whether you're a strong Christian, whether you're a Yogi, whether you're how do you stop you coming out. It's gonna come out somewhere.
- C: Somewhere.
- J: We are all people, and we cannot pretend that who we are is not –
- C: Is teaching what you already –
- J: Well, we shouldn't have to as teachers.
- C: Exactly.
- And, and this is why children go from one year to another teacher the next year.

 They're getting a bit of everybody, and actually, it should be okay, and I can't stop who I am being reflected in some way in my lessons or how I fill up my day. I have a b-, I, you, I, I can't try and pretend. I c-, I would be a terrible teacher if I kept thinking, "Oh, I better do it like this," because I can't let me come out.
- L: Yeah.
- C: You can't be spontaneous. I mean –
- G: Yeah, but even being relaxed or and just enjoy your day. I would be very stressed and anxious if I was trying to be somebody, I was trying to be somebody I wasn't.
- C: You wouldn't be able to teach.
- G: No, no, no.



- J: And I guess there are so many, like Naomi was saying, so many studies out there showing how amazing yoga is for therapies for ADD. For, um, kids with Downs. For helping with violence. For improved app-, um, I mean the list is probably as long as I am tall for how many ways it can benefit children, and like it sh-, and all the arguments for, you know, how, practising it in school, and so my question is, why isn't it in school? And it seems like we've come up with, you know, the religious aspect, time, you know, consistency and getting people on board, and it seems like
- G: I know, but then you could say there are many other things. There, there's Tai Chi. You could do, or, a very strong Christian background could also teach a very different kind of, so, if you come at it from any strong point of view, I think you could create a very I think, no, I think if you just had to have a vision of what you want and then go with it.
- M: I mean, I personally think that education is going completely down the wrong road.

 Like, I think we're so focused on, on tests and grades and academics that, like, the wh-, the whole wellness component, it's not being covered just in PE, and it's not being taught, and kids don't know how to take care of themselves, and I think even just –
- J: You mean from a holistic background.
- M: yeah, like, I mean, just, yeah, taking care of -
- J: Not just to eat good food and exercise, but –
- M: Well, you, good food mental health, physical health, exercise, mental health, how to, yeah, how to manage stress, like, how to, like, what you can do to avoid getting on, you know, Ritalin at the age of, like, 6. Yeah. Um, which, of course, has its whole, uh, whatever. Um, it's not gonna get the the counselling perspective of it, but, um, yeah, I think, like, if there was a, a wellness initiative, where maybe the kids had an option, like, we're gonna do yo-, like, it's a school-wide thing. It happens every single morning. These kids go to Tai Chi. These kids take yoga. These kids go and, and, you know, sit and breathe for –
- J: Again with the choice.



- M: a little bit. These kids can have their quiet space to practise whatever, like,
 whatever their religion is. Like, if they want to pray, if they want to, you know, be
 with a –
- J: And you don't feel like that should happen at home, so, like, I'm just wondering, at the ... our day is short I'm wondering, should, is that our job? So, should we not be educating parents to do what, what feels good, like, I'm thinking of my 5-year-old son. So, now, I'm gonna send him off and they have to read the bi-, uh, they, they can't go, if that's their religion how do you manage that? It should be at home, before your child comes to school, and do, do what centres your child. I, I just don't know if we can have this beautiful school where everybody goes and does, uh practically speaking. I mean, it's a beautiful idea, but I'm thinking of it as a kindergarten teacher.
- M: I mean, I just think that most parents don't take their jobs very seriously. Their parenting jobs.
- C: Their parenting.
- M: Yeah, their parenting. Yeah, I don't think they're actually parenting. You know, and especially here, 'cause I think there's so many nannies –
- G: I was talking to my friend, who's got her kids at St Peters and, and the other man was a teacher at St Stithians, so it's one mom and a teacher and I, and they do n-, n-, nothing like it. I think that Carol comes in and talks about it and some teachers treat it as a prep, but if you stay and listen to what she's teaching those kiddos when she's talking about stress, and she's teaching them, she does a beautiful job, really amazing. If we had more time of her coming in, um, if we just stayed and held them to a little bit of what she said I think we would have, sh-, 'cause she, it's the only school, out of all of us, the three schools we are talking about, and the, uh, there are other two schools, they don't do anything close to even talking about it To emotional wellness. at the school. No. And, and whereas we do have a little bit of a programme, it's not big enough, and teachers, unfortunately, to leave the room.
- J: But she incorporates a lot of yoga ideas, whether she knows it or not, into her Paths programme.
- M: But unfortunately, I think it goes back to the priorities of the school. That's what, we have one counsellor 500 kids?



C: Mm hmm.

M: How many? 400 and some? And, and there's not enough time –

G: Mm hmm.

M: — you know, and I, and when I was a counsellor, I was a high school counsellor. Like, there just wasn't enough time to run groups. Like, I had to, you know, get applications in. I had to approve, like, work documents, and there was, like, a laundry list of, of other things, and I think it needs to be, not only coming from one person who has a slight, you know, quote/unquote, expertise in it, but it needs to be something that each and every one of us is living and modelling for our students. You know? It's like a —

G: But I can't model what you, like -

M No. Mm mm.

G: – if yours is a yoga –

M: No.

G: - uh, but what I'm saying is, I mean -

M: It's about the way you live – just about the way you live and being – responsible and, and taking care of yourself, and it's, I think, because I look at yoga, I came to yoga mainly for wellness and exercise, and then it blossomed into this whole other thing, since it certainly wasn't taught to me at home. My parents don't know anything about it. And, um, you know, and I, I think, I think that we will see education results, academic results, improve if we spend more time managing – the stress levels, anxiety levels, and our, like – crazy energies.

G: — example, I did yoga for probably a year and a half, and then I started running, and I couldn't do both. I just couldn't manage the time, and I believe on a run, I feel — as relaxed, and I do not, it, it's also alone time with my thoughts —

M: Yeah, um, it's the same.

G: So, any exercise might be, like, I'm just wondering, like, personally, I think I'm, I, I, I get the same from both.

J: No, I, I, I think you're, I, I actually need to do both. I, I can see with myself when I don't meditate – you might notice it too. When I don't meditate, I'm, I'm not very, I can get a bit more testy – and I get a bit less patient, and I notice it with a, with a lot of things, and I don't meditate – all the time. I mean, once a week if I'm lucky – you



know? But if I go too long, I notice it, and I think, for me, obviously I believe in yoga and think it's great – and it should be brought into the classroom, or I wouldn't have dragged all you guys into this – um, with me, but, I think that it's, uh, finding strategies, since we like that word so much - that you can teach your kids that they can use. So, for me, I w-, I want to find ways that I can teach them strategies to cope, and I can't teach them running. Like, I, you know, I can't go, "Okay, I can see you're really upset right now. You need to go and have, go for a run." So, to me, yoga would be – a way that I could teach them different strategies, or, "Okay, we're obviously having a really off day today. Let's all calm down," and the older they are, to me, to me, yoga could facilitate that – conversation of stress and, not necessarily getting into the yoga aspect of it, because I do believe that that's not my place to teach in, in a classroom. Me, personally, I don't think that going into the deeper meditation and going into all the, the meanings behind that, I think that's – that's, that's not it, but saying, like, okay, you know, when the, they mean the psychological biologic-, biologically, if you breathe deep, you'll calm down. Like, that's yoga or not, so that's I don't know – I think, that, like I rambled a bit there, and I'm supposed to be quiet ... Any, anything else before -

C: We could, we could do it again.



Addendum N: Focus Group C

- J: Okay, so I guess I'll start off. What do you guys know about yoga?
- A: I really don't know anything about yoga, so this is gonna be interesting.
- B: Well the most I know is, um, is about the little meditation I know and, um, breathing which is important in yoga because my two daughters did it, but I don't know much about it.
- H: Okay for me, I know a bit about yoga cause I've done it before, and as a teacher I can imagine it can really help in the classroom, because for me it helped me calm down, but you need peace and quiet for that and some time. In a busy, in a busy environment it could be very interesting to see how you could incorporate that.
- J: So just to give, I think, of a bit of a background so maybe you have a better understanding. When, when I talk about yoga in the classroom I talk more about the breathing and the stretching and that sort of thing. Not bringing in the meditation, but just how to stand properly, how to breathe, how to, how to calm down.
- A: To relax?
- M: Yes, because we work with little crazy preschoolers.
- A: Yes.
- B: Is that the time that you will put aside in the morning so for instance to, to keep started in a, in a positive calm way.
- J: You can do it in the morning. I, I, I think you need to see what works best for your schedule in your class. Now in my class currently, I actually don't do it in the morning. I do it after our third break because they come back –
- B: Wild.
- J: Crazy. And if I have them breathe and stuff they calm down. This is what, what I found. So –
- A: But then if, if they learn the exercises. If we teach them the exercises then, so you can use it anytime in the classroom I suppose, it becomes easier.
- J: Yeah
- B: When they basically used to do that exercise you can just say breathe and they can do that exercise.



- J: And what if you see a kid who is, you know, ready to have a tantrum and then you're just like, okay you need to go over there and breathe.
- A: Does it work? Do you find that it works?
- J: I've found that it works. I've found that with anything you have to kind of persevere because in the beginning they are children, and they don't want to sit still and breathe. But I found after two weeks, two months, it really made a big difference and they really started liking it. But just like teaching them to read or write or sit still or anything at school, it wasn't like snap and they got it. It really was ... in the beginning I was like, why am I doing this but I, I did see results. I found like, you know when they come back from recess and you spend 20 minutes getting them to be quiet? I'm not gonna say that like it was faster but I would do 10 minutes maybe or 20 minutes practising yoga, and I felt like I was getting more out of that time rather than constantly saying shh, shh, shh, quiet sit down, be quiet, listen, and I was less frustrated. So I would just practise yoga with them and then that same 10 to 20 minutes was "wasted", but I felt they were more ready to learn after that.
- B: What age are they?
- J: Um, I've practised yoga with ... my kids right now are 6 and 7, and I've done it with, hold on, 8-, 9-, 10-, 11-, 12-year-olds, as well.
- A: So you use it to get a friendly learning environment, after you've done your exercises?
- B: Basically to, to calm them down and everything, and then I talk about, you know, breathing, and one thing I have done with them, is I've had my kids like get themselves amped up breathing really shallow, and then I'll say, how did you feel.

 And then we'll take deep breaths and I'll say, how did you feel? And just to try to get them to make that connection.
- H, A: Connection.
- J: Yeah.
- B: So there's not a negative reaction from parents that they think oh, yoga or whatever, this is bad, what is it, are you teaching religion to my kids?
- J: One of the reasons I was here, because I work in a very liberal school. I mean I have kids from ... 16 different countries in my class. So at my school it's not an issue at all.



- But I didn't, I was, I'm curious to know how you guys might perceive it, if there would be an issue here. I don't know.
- B: Well, usually with things you have pass something through the principal.
- A: Mm hmm.
- H: And our big principal is upstairs, upstairs (laughs), but if you, if you sell, not sell it but if you tell him it's more like breathing yoga, because I think sometimes people might have a connection or negative connection just with the word *yoga*.
- B: Yoga, yes.
- A: With the meditation, that sort of stuff, I don't know what.
- H: Yes, with the word *yoga*, but, um, if you call it breathing exercises and sort of leave out the word *yoga*.
- B: I wouldn't use the word *yoga* at all. I think there is really a negative connection to the word *yoga* in the Afrikaans community. They are very conservative and it would not sit well.
- A: Because we've had children in the past and they have seen it on TV and they will take this yoga pose and go oooommmmm and so forth.
- B, H: Yes, yes.
- A: And one of the parents freaked out.
- B, H: Yes.
- B: She saw that and she was like, what's this, what are you teaching the kids here it was not good.
- H: I think of the parents would think and even say, what is it are you teaching, religion to my kids.
- J: So, you think the way to get around that is not use the word yoga?
- B: Another word for it.
- A: Yeah, not the word *yoga*.
- J: So if you could not use the word yoga, do you think there'd be any other concerns?
- B: Like she said, breathing exercises, you can –
- A: If you don't do the meditation part, I don't feel that there will be problems.
- B, H: Yeah.
- A: But I think the meditation part is the, is the most crucial thing that you're gonna have to work around or leave out.



- H: Even if you do a few stretches or something you know, breathe in, and breathe out.
- B: Mm hmm.
- H: But then rather call it breathing exercises or –
- A: Or calming exercise whatever...
- H: Mm hmm.
- J: So you said you don't really have any experience with yoga; so how would you feel about trying to bring it into your classroom?
- A: I think, I think -
- J: I'm just curious because you said you have no experience.
- A: Yeah, I think if, if, if I can see how it works. And maybe I'll have an open mind to it because there are sometimes that you feel you need the children to relax and calm down safe. If that works, um, I'd go for it, but not the meditation part.
- J: Yeah, well I agree. I don't, I ... as much as I totally support yoga, I don't agree that belongs in school, period. So, um, but then I think for you, um, what I'm hearing is more like you're saying give me some information, educate me, show me what to do and then, then you know.
- A: Mm hmm. Yes. Yes, and then I can make a decision about it. I would also have to see how it fits into the day and how much time it takes. We have a lot to do each day.
- J: Okay, sorry. So, you asked about in the morning. When, when do you think would be a good time to try to?
- B: I don't know. I think maybe in the mornings ... um, I agree, I think, they are very wild after break time. I've got a few kids in my class that, um, need calming down.

 Especially when they get back from the Tuck shop. They get to school in that state and like this. And, um, it would be nice to calm them down even before you start talking.
- H: Well, and in the morning I am feeling less rushed about what needs to happen. If I was going to do it in the afternoon I might never find the time.
- B: Yes that is true.
- A: And special needs children?
- H: Yeah.
- B: We've got a few of them.
- J: Special needs as in physical, as in mental?



B: Physical, as well as...

H: We've got, we've got autistic children, we've got mentally –

A: Special.

H: Mentally special children.

B: Yeah.

H: We've got, um...

B: Challenged.

H: Yeah, mentally and physically challenged children.

J: See to, the exercises that I use which I don't mind typing up and passing on to H or, I mean, I can easily show H and she can pass it on to you, or sometime I can come and show you guys, they are very, very, very simple and I use them for that reason. So anyone can feel comfortable teaching them and so any child can do them. I have a boy in my class who has dwarfism and he's that tall and got a lot of physical disabilities. And it's more a matter, depending on what it is, you don't use your arms or you don't use your legs. So it's sort of you have to see what needs. With my autistic children, um, as you know you kind of have to give them their time to get used to it but I haven't had problems with them as long as it's explained slowly. And the same thing with the mentally challenged children that we've worked with. It's more a matter, you have to as a, just like with anything, but I haven't really seen an issue with it. I mean, cause you know your kids best.

A: The way you present it is important.

J: You know? That's why sometimes for me it's hard to come into the class and do it.

In some ways I think it might be great because, oh, the yoga lady's here or the stretching lady's here, you know? But in other ways you, you do know your kids best. So you, if I give you five or ten exercises, you might know what would be best for them.

B: I don't know, it would be interesting, you know.

A: So basically what, I, I just want to recap. What I'm, what I'm hearing is, um, the word *yoga* could be an issue, um cause it's religion and...

A, B, H:Yes.



- H: There is a bit of stigma, maybe because people are not well informed enough. And if they are informed they still won't necessarily, like, because of religion and lack of experience.
- J: So you're not, you don't think like, well in an ideal world if you got the parents to come to an informational meeting, you don't think that would help?
- A: I don't they think they would come.
- H: I think that would help, if they came.
- A: Mm.
- J: So, more just, what if, and I'm, I'm being, playing devil's advocate here. What if, you know, incorporate breathing and stretching, which is you know, what we're talking about, and then a parent finds out that that same pose is done in yoga. Do you think that there would be repercussions?
- A: That's a difficult one.
- H: You know there's always that one person. That's the problem.
- B: Mm hmm.
- H: Most people won't even notice it or know, and wouldn't even mind. But you need one person in the whole school to make sort of waves and if you haven't gone through the right channels or right people then there could be repercussions.
- A: I think you must play open cards and say that it is exercises that you're doing from yoga but they it isn't yoga yoga. That you are only using certain aspects, not the meditation, but the breathing and stretching only.
- H, B: Yeah.
- H: The breathing and stretching, whatever. But you have to inform, you have to go through the right channels and you have to inform them, sort of inform your parents.
- J: So it would be the right channels?
- H: If this, I think if the, she can maybe speak to R, she is the principal here. We've got the principal yeah, and then we've got the **** principal the, um, in charge of the whole school. And then the big boss. I think you have to sort of ... you want to incorporate everyone somehow. But I, like, I wonder if you can't just do it but because like you said if someone finds out and I think, oh no, this is yoga and now there is trouble.



- A, B: Yeah.
- J: It's a hard thing cause it is your class and I'm sure like you bring in books and like everyone, I love running so I talk about running in my class a lot. Okay, running is not it's not a hot topic. But as a teacher you often bring in things that you're into and you don't So, I don't know. But yeah, so the, the big concern I've heard, is the whole yoga religion thing, needing to know, more information, and feel comfortable actually doing it. Is there anything else like?
- H: Maybe people aren't always sure what it is.
- J: So just information again.
- H: Mm hmm.
- J: Anything, anything else? Any questions you have for me or any? Thank you for talking with me.



Addendum O: Interview with J

- J: It says recording, that means it must be recording. So my questions ... I have several (wink) um, when um, when I guess Heidi first came you and I were like we're going to do this yoga thing (high pitched voice). What did you think?
- T: I thought it was a brilliant idea, ya, cuz then we also learn something out of the whole process. I ...
- J: Did you foresee any problems with like parents or students? I mean there always are.
- T: YES, definitely because people are different ... in many ways. Some ... Yes, there will always be parents opposing such a such a um activity, or ya ...
- J: Mmhmmm (nodding).
- T: Cuz they hear the Y, the word yoga and they have no idea what it really is about.
- J: Yeah.
- T: People are um and some people are very set in their ways or very, ummm, how can you say, uhhh, conservative.
- J: Mmmhmmm (nodding).
- T: We have to keep an open mind. Once you realise er ah, maybe when you start and you realise, but um, this is, it ... you know, it's nothing to do with religion.
- J: Mmhmmm (nodding)
- T: But there's a difference because some people when they hear the word yoga they ...

 It's about meditation and all of that, they think that there's religion involved.
- J: Yeah.
- T: It, it, ya it's it's tou(gh) ... and people who are very, um ... conservative (?) will oppose strongly against. They will definitely.
- J: Yeah yeah yeah. We, we, we ... I think did okay that, here.
- T: Yes, umm, because we, we do have parents that are very open-minded and um ah, we are not here to teach religion.
- J: Right.
- T: Yeah, ummm, to me it's also, I've also done yoga for a while, so I've got more knowledge on it, you know?
- J: Mmhhmm (nodding).



- T: So you don't go into the um ... it's the exercises that count; stretching, which is very good for you as a person. Stretching and getting your core and eventually you get to that stage ... it's a long process. But it's good for your body, for your core and your muscles and to keep your bones upright and ... you know?
- J: Posture.
- T: Your posture, YES.
- J: That was my next question, was how your experience was with yoga, if you'd practised? What, how much you had practised, known about it?
- T: Um, I think, I think it's ... it's a good idea. Because it's not something that you, you, there a lot of discipline in it, where you, you know breathing in and breathing out and things like that. But it's not like you are hopping around all the time, you definitely need to concentrate, it, it, it just gives, it's good for you, you concentrate and you are taking care of your health in a way where you exercise.
- J: Hmmm (nodding).
- T: Cuz not a lot of people like running or ...
- J: Or CAN even run.
- T: Ya, exactly. Or don't like running. Or cycling or anything like that. They more um, ya.
- J: Yeah.
- T: So I found it, I, I, I enjoyed it. And it was a challenge for me to get poses right. But, umm, I didn't ... the lady stopped and so I also stopped going, you know?
- J: Yeah, that's the hard part.
- T: Well, she left and um, I didn't continue on my own, but ya, but some of the things I do, but you needed to do it regularly to really get uh uh...
- J: Yeah.
- T: Uh uh, a proper benefit out of it.
- J: Do you notice a difference with the students?
- T: Um, the children are very excited, you know they see you and they go like 'Yes'.

 LAUGHTER
- T: And I think um, with this age group, you get your children that are serious who really want to do it. Cuz some of them have been introduced to it in their life um. Cuz we had a lady coming for Yoga classes and she stopped but um, I've seen ah um er, you



- know, change in the children, they are glad if you come. And you know, if children are glad about exercise or you know, then it's good.
- J: Mmhmm (nodding).
- T: Yes, oh yes, I have noticed a difference. They listen better.
- J: Do you think the time of day that we've been doing it, after break, is a good time of day?
- T: It can, er, YES, I think it is because then the children can re-focus.
- J: Mmmhmm (nodding).
- T: And, and, and on their (the) work. Yeah.
- J: Cuz they go out for break and they kind of run around like crazy people and...
- T: YES and then it's to re-focus them when they come back, er uh cuz your best time of the day, you know, when the concentration is best, is early in the morning.
- J: Mmmhmmm. (nodding)
- T: And then after break, it dwindles and then ... so it's good to just let them re-focus.
- J: So do do do, do you notice a difference, um like with their, I don't know, I want to say teachability, if that's a word, on the days when we do yoga and then you teach afterwards, versus the other days, or ...
- T: (interrupts) YES! Yes, I've noticed a difference. Um, they are ... they listen better ... um ... But I also had a huge talk with them, so I don't know if that's got an influence on, on ... you know.
- J: Yeah, it's hard to say.
- T: (coughs) It IS hard to say, but it's um, when they were in the groups they were more focused.
- J: Mmhmm. (nodding).
- T: Whereas I've noticed in the past where they would um, you know run around, and all. Ya.
- J: Mhhmm. (nodding) So would you feel comfortable doing the little bit that we did with students, on your own? After seeing me do it. Like, as, as, as a teacher?
- T: Yes I, I don't mind to do it because it's good for the children, cuz we are here for the children and what's ... if they can benefit out of it, then yes.
- J: Well, part of it to me also is I didn't want to do exercises that were extremely complicated that the average person would struggle with



- T: Yes, ya.
- J: So, so the poses are ..
- T: They're easy poses.
- J: Yeah. (inflection)
- T: Where they can breathe in and breathe out and um, but it's also good for them, for their development you know to to to, to concentrate, for their balance and all of that. You need to concentrate in order to succeed, and this helps.
- J: Yeah.
- T: It's, it's, it's good.
- J: Yeah, and I noticed in the beginning, the first week, they were still kind of figuring this out (Yeah) and I'm not sure about (Yeah) this, but now they're, it's i'ts impressive to me (Yeah); they actually most of them take it quite seriously.
- T: In the beginning they didn't focus as much as they do now. Or they did later. Especially now after the holidays too where they are more focused, you know where they are not joking around as much as they USED to. Because um, I think some children got benefit out of it and maybe you know this can work for me, and if it's not too difficult then they can manage it (mmhmmhmmm), and any exercise, any ,,, it's it's good for you because you need to keep your balance.
- J: Yeah, I agree totally. So, do you think you are going to try to keep doing it even when I don't come all the time?
- T: (BIG LAUGH) I'll try.
- J: Should I, should I send little sms reminders to you, do your yoga now?
- T: No, no, T and I can discuss it, and we can um you know, what, what we can do in class, you know (mmhmmm) um it's difficult for the ones then you have to send them out and...
- J: Yeah. (sympathetic tone)
- T: And then it becomes like but I think there's just oh one child's parents who um was very you know was, he did not want his child to get too exposed.
- J: Any exposure, yeah.
- T: To get exposed AT ALL.



- J: I wonder if you could call it um, well it might be tricky now because they've all seen it, and they know that's it yoga-related, but I was going to say you could call it breathing exercises, we are going to do some breathing exercise and stretches.
- T: Yes, definitely.
- J: And then if you, and I thought about wording it that way when I sent the letter out (ya). But I wanted to also say that the background is yoga, so, so it was a double-edged sword for me. I feel like if I hadn't used that word, these parents may not have objected but...
- T: Ya ... um ... well ... doing exercise like in the morning, like stretching and so on, yes definitely, it's good for you. You don't have to call it yoga, you can say you know, let's just stretch a little bit, so there's a pa pa parts of yoga which um, but we don't ya, you don't need to go into that ... you can just do the breathing and stretching exercises and um ... cuz it makes you feel good.
- J: Mmhhm. (nodding)
- T: (small laugh)
- J: Did you, did you feel like with the, with the breathing exercises that the students um, that it changes their behaviour or affected them at all? Just specifically with the breathing.
- T: Hmmm ... that's difficult for me to answer.
- J: Mmm. Cuz what I was, when I was ... if you want to do the same thing with them what I found was if they would be getting out of hand, like not focusing, then I would stop whatever pose I was doing and I would make them breathe again. (Mmm) And then they would calm down again. So that's what I noticed. So I was wondering if you...?
- T: Well, I must truly honestly say I did not pay that, uuhhhh that much attention.
- J: Mmmm. That's okay.
- T: Ya.
- J: But note to self, that worked for me. Cuz after the whoosh, which we know is their favourite, sometimes they get a bit silly and then I'll immediately go right back into breathing (ya), and with this age group what I also found was if I did a posture, especially balancing, and if they're being silly, then we need to take five deep



breaths again, and then we can do the next posture, (yes) and then five deep breaths again. Whereas if I'm teaching adults I can move from posture to posture.

- T: Yeah, sure, definitely and um unfortunately in a disciplined ... anything that's you know, there's discipline to it. You cannot be silly and if they are silly then they need to re-focus. That's a good way in, in introducing or in doing the exercise they like the most, so they need to focus in order to do, you know the exercise the whoosh one, (she giggles) that they want to do more often or all the time.
- J: All the time, yeah. (laughs)
- T: Umm. But it's good that you have something that they like, to keep like a carrot in front of a donkey or horse, you know.
- J: Yeah, yeah, exactly.
- T: So, if you don't listen or do it this way, then you can't do the whoosh.
- J: Yeah, and there are a few other ones like the whoosh that I am sure they'll like, but I left it with just that one.
- T: Ya.
- J: (chuckles) Not too many.
- T: Ya.
- J: Um this may seem like a silly question, but um do you think that concentration is important to learning?
- T: Absolutely!
- J: And why?
- T: Ya. Because if you cannot concentrate you cannot take in what you are reading. If uhh specially and even with adults, it's not only with children. (mmhmmm) You need to especially when you have, when you do work which is more difficult like a comprehension, but if it's questions that the answers come easy, then it's umm then it is okay, but you need to concentrate and some questions are put in such a way you need to concentrate.
- J: Yeah.
- T: You need to, it needs to be quiet around you. Some children, most children, and I've done exercises in the class where they were quiet, and at times where, where, where it was more rowdy in the class, and I asked them what do they like best (mmhmm) do you like it when it was aaaa vvvery noisy or um quiet? And then



- they said no they liked it when it was quiet. And then I asked them, why? And they said because we could concentrate. So yes.
- J: And then you said, and why aren't you quiet more often? (Laughs)
- T: (Laughs) Yes, But um it's important because some children are easily distracted. (mmhmmm) Some can work through distractions around them um and others can't.
- J: So is concentration a problem in the class?
- T: Yes, with many ...
- J: Right, a concern maybe *problem* is a bit harsh.
- T: Ya, no, concern, but um and they also get more work done when you concentrate.
- J: So do you think concentration is something that the students learn or are born with?
- T: (*clears throat*) My opinion?
- J: Mmm. (affirmative nodding)
- T: You can learn to concentrate. If you or I think, it's also something that you can learn.

 But you can have like an imbalance in your brain, chemicals and so ... that um ...
- J: Well, like ADD or ADHD.
- T: Ya, that you need some help. And when um um gets some medication it betters your concentration span um with some and others I don't know. With me, I cannot have a lot of distraction around me. I need to, it needs to be quiet (*mmhmmm*) for me and I can work quicker um when it's quiet around me than when it's, when there's a lot of activities going on (yeah). I can, for instance when I'm driving, I can block out the uh noise and concentrate on the road. It depends on what activity.
- J: Yeah, um, when I think, for me it also makes a difference if the noise is constant, (mmmm affirmative sound) like the same kind of level or same kind of thing, (YES) that's one thing; but if it's this and up and all over the place then it's like ... (shaking head)
- T: No. When it's uh, because once I drove children to another Montessori school and they were having such a ball in the car and rather than asking them to be quiet, I just blocked it out. But it wasn't I ... er ah er ... because it was a more physical activity, the driving, you know, and reacting on that, (mmhmmm) than sitting down quietly and reading something. It was a different activity that took place (mmhmm). You know, when you're driving you see cars and you um uh um you um you estimate the distance, you know, if you see a car stopping or then you slow down. It's different



than when you have to sit down and read something and concentrate (Yeah). You need more concentration (*mmhmm*). But I cannot with pictures, when there's a lot of pictures in a conversation it freaks me out. (*mmhmm*) Concentration.

- J: Yeah
- T: And most children need, it's just a few, a very few, I think a very small percentage, that can concentrate with a lot of noise around them.
- J: Yeah. I've seen, I've seen some in the class that it doesn't seem to matter what's going on around them, they're fine. I've seen others that when the class is calm and quiet, (yes) they're working very very well, but as soon as (yes) the students lose their their, you know, whatever, then these kids are, nope I'm done. (Small laugh)
- T: Ya, and also when an activity is interesting to them, then they will work, but if it's not then it's like, this is too hard or too difficult, so it's ... you cannot determine, is the concentration because of the activ, activity or, or if, if an activity's interesting to them, then they concentrate; but if an activity seems too difficult then they rather leave it. (yeah) And zone out and do something else, (mmhmm) you know, than tackle this difficult problem.
- J: Well, what's interesting...
- T: And then you wonder, is it concentration or is it that something is interesting?
- J: Yeah, a little bit of both.
- T: Mmmm (nodding).
- J: What I found with the um, with the yoga with the students, oh and the students I talked to all said the same thing: the balance poses or certain, like the palm tree or the tree, were difficult in the beginning, and NOW they say they're easier for them. And and that there, like we realise that we have to concentrate when we're doing them. And I was like, YES! Thank you for saying that! So it's interesting to see that they're making these connections themselves.
- T: Yes, and definitely with the yoga, yes um because it's a concept that they must also understand. You know, it needs to be quiet so that you can do your work. And they like it when they can do their work in class.
- J: Yeah.
- T: So for the concentration...
- J: Is there anything else you want to add?



- T: Thank you that you came to our school, and helping or showing us, and you know it will benefit the children.
- J: Well, thank you for letting me into your classroom. I know it can be a bit stressful to have some (laughs) stranger in your classroom.
- T: (laughing) Ya it's it's um ... it was wonderful having you here. We've learned so much about you as a person (laughs) and really enjoyed the time. And um um so that was um.



Addendum P: Interview with T

We went outside and sat in the sun to have our chat. T was nervous; she get nervous because it is "official", otherwise she is open and never concerned. It was a sunny and windy day, so the recording picked up a lot of wind and made it difficult to hear. Luckily I took very detailed notes as well. We had to fit the chat in during school hours and before she left for France. She was all smiles and happy. She was very serious about her observations and often participates with the students or at the very least observes what is happening in class, while I am working with them.

- J: Don't be nervous; I just want to talk, so stop worrying so much, we talk all the time.
- T: Okay, okay, I am ready.
- J: Have you noticed a difference in students' work?
- T: You know what I think, there is definitely a difference. We should do work after the exercises to see even better. With exams, things have been hectic. It has been difficult to observe because the students didn't have work. Next week we should present after. But I have seen some children have definitively progressed. I think you really notice it when you do a presentation with them. But they are much calmer. It definitely calms them down, and quickly. I can see progress. Some children have definitely progressed.
- J: Yes, it is difficult since they are not doing lessons in the afternoon. Would the morning have been better?
- T: No, in the morning they are focused, plus they have had exams.
- J: I see. Well has student behaviour changed at all?
- T: The students do calm down, I think you will really notice it when you do a presentation with them. But they are much calmer. It definitely calms them down and quickly. I can see progress. I can see they listen and follow directions, even the ones who never sit, will sit a bit and do what I ask.
- J: So how would you feel if you were going to teach these exercises yourself?
- T: I would love it but my gross motor is poor, I think I was one of those kids who need therapy, only I didn't get it. I would need to practise a lot. We definitely will do this; it helps the kids a lot.
- J: When do students struggle to focus?



- T: This time [afternoon after break] they are ready to go home and want to play; they don't want to learn.
- J: When is the best time for students to focus and complete work?
- T: Morning, hands down. They are fresh and rested.
- J: How do the exercises influence student behaviour?
- T: They focus and concentrate. It is amazing to watch them. They are calmer. They have to do it and they do, they sit and breathe and after they are more manageable.
- J: Is focus and attention a problem in class?
- T: (LAUGHING) Major! Only a few can actually focus. You can see the children who do concentrate, and it reflects in their work and grades.
- J: Why is it important? [Focus and attention]
- T: Otherwise you don't take anything in. You don't learn if you don't concentrate.
- J: What poses do you like the best?
- T: The one where you stand like this [puts her leg on her knee, referring to tree], because they lose concentration, because they have to balance.
- J: Yes, I put that one in because balancing is a great way to work on your concentration.
- T: That makes sense and I can see that some students are getting much better at it.
- J: What would you feel the most comfortable teaching?
- T: Breathing in and out.
- J: So did you feel the breathing exercise were helpful?
- T: Yes, very.
- J: Why?
- T: It forces you to relax, it relaxed me and it forces you to concentrate. You actually [in Afrikaans] you think of yourself and your body, you are forced to control your body.
- J: Have you enjoyed having the exercises in your class?
- T: Yes, very much. Can you take ... so we can keep doing this with the children when you aren't here?
- J: Of course, next week.



Addendum Q: Interview W

M: What is your understanding of yoga?

H: Yoga is a way to relax your mind, body and soul.

M: Okay, so why do you think people practise yoga?

H: To relax.

M: Do you think there are other benefits to yoga, or mainly just relaxing?

H: Oh I think with you, you can exercise and strengthen your body, and it helps you to relax your mind.

M: Okay, so what do you think of when you hear yoga in the classroom?

H: What would the parents think ...?

M: What do you mean?

H: Well, I would worry what the parents might have issue with us using or teaching yoga to their kids.

M: Why?

H: Well, because they might not know much about it and they might have only seen some stuff on TV or in the news, and I think they might be offended and think we are trying to convert ... to preach to their kids. We did have one parent who saw a kid sitting cross-legged, playing at recess, and was going like ommmm and holding his hands like this, because he has seen it on TV, and she freaked out – it was a huge deal.

M: Wow. Okay, so parents would definitely be an issue then?

H: Oh yes

M: So what then would make you as a teacher comfortable with bringing yoga into your classroom?

H: If the parents and the principle give consent, I will feel comfortable about bringing yoga into the classroom. Having some training in how to do yoga with kids. I will feel uncomfortable if I know people do not agree with yoga and if I am not fully prepared in what to do. Think it would make me uncomfortable if I am not able to do some of the moves!



M: So, if you had consent and training you would be comfortable using yoga in your classroom?

H: Yes.

M: So then, when would you think yoga would be best in the classroom? What time of day?

H: Hmmm ... I would say the best time would be after playtime, to calm them down, or even just before they go home. It might even be useful before class starts, just to calm everyone down. I think it would depend on the group and how they react towards the yoga. I would not consider it part of a subject, just part of the day plan.

M: Would the age of the child matter in your using yoga in the classroom?

H: I think it would definitely matter. Smaller children may struggle with the moves, they cannot concentrate that long. Think the yoga sequence needs to be adjusted for certain age groups, looking at their physical, emotional and cognitive developmental stages.

M: So, you have already mentioned you feel you would need the parents' and administrators' support. How might administrators feel, do you think?

H: They might be concerned about what the parents think.

M: The parents seem to be a big concern from what I am hearing. How might parents feel?

H: Some parents might feel it is outlandish and not appropriate.

M: Why is that?

H: Well, they might not see how yoga is helping their kids learn anything. I know we are only teaching grade R/K here but parents still want their kids learning reading, writing and maths, and to them yoga is something for maybe playtime or an extra, or even worse, some religion that they do not want their kids exposed to. The parents just don't know. They hear the 'Y' word and, and they have no idea what it is really about.

M: Okay, so from what I am hearing the parents would need some convincing; what about eh students? How might the students feel?

H: Most of them will like it ... I think ... some might think it is funny in the beginning.

They hear the word *yoga* and they think it's about meditation and all of that, and they think there's religion involved.



M: And how might teachers feel?

H: Well, I think teachers will have mixed reactions towards yoga. They do not know enough about it to understand it. It is something new and some might have similar views to the parents. We have a lot of pressure to get the kids ready for grade one, and yoga takes time out of our day. I think teachers might be easier to convince because you could show them studies and things, and if you can show teachers how good something is for their kids, they will go for it. But at first they might think you are wasting their time and making them learning ahhh something new.

M: Do you think teachers would be able to find the time to use yoga in the classroom?

H: Yikes, we have a very busy schedule ... they might have time but I think some might be too lazy to do it. It is something new and they have to learn it and they may not be 100% convinced it will work, so, so, so some yes will make it work and some will maybe not.

M: So how can we overcome these issues with parents, admin and teachers?

H: I think the best way to start would be by educating teachers, parents and children about the benefits of yoga in general. One might even consider getting in a professional yoga teacher to give class ... uhhhh to everyone, and then discuss the benefits. I think once you get some people on board they will be able to help you get the rest on board. The hard part is getting a few to start.

M: Sounds like a great idea. Thank you; is there anything else?

H: No thank you.



Addendum R: Student Surveys

Survey Students

I like the exercises.



NO





The exercises help me with class work.

3









Days when I do the exercises I get more finished in class.

4

2

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I feel no difference in my day and class work if I do the exercises.



5











The exercises make it harder for me to complete my work.



















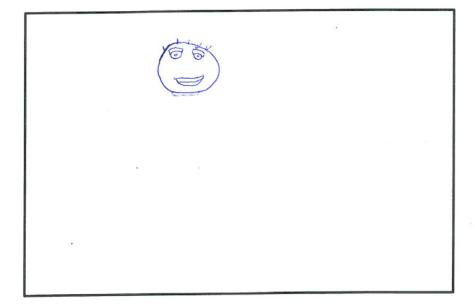
NO





Name your favorite part of the exercises Whoosh "!

Name your lease favorite Swaging from tree







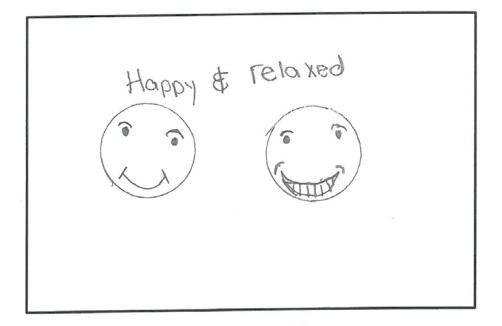
NO





Name your favorite part of the exercises Brith

Name your lease favorite Cratch





I like the exercises.



1

1



The exercises help me with class work.

2 3 4 (5)

Days when I do the exercises I get more finished in class.

2 3 4

I feel no difference in my day and class work if I do the exercises.

1 2 3 4

The exercises make it harder for me to complete my work.

1 2 3 4 5





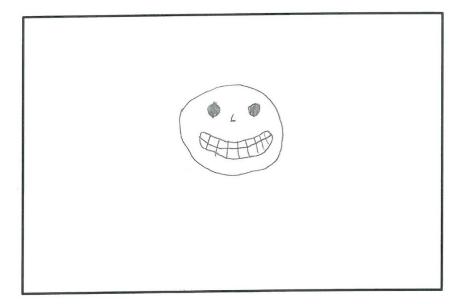
NO





Name your favorite part of the exercises The "whoosh"

Name your lease favorite None





I like the exercises.



NO





2

The exercises help me with class work.

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Days when I do the exercises I get more finished in class.







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I feel no difference in my day and class work if I do the exercises.

1

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4

The exercises make it harder for me to complete my work.

(1)

2

3

5















I like the exercises.



NO





The exercises help me with class work.

3

1

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3



Days when I do the exercises I get more finished in class.

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I feel no difference in my day and class work if I do the exercises.

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The exercises make it harder for me to complete my work.



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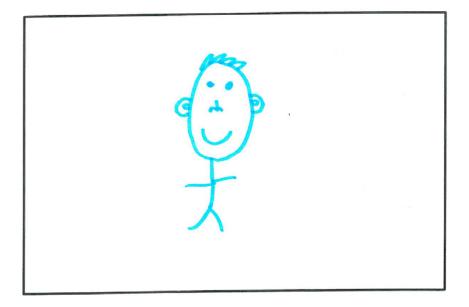
NO





Name your favorite part of the exercises all I and

Name your lease favorite non are ny least favioratz



I like the exercises.



NO





The exercises help me with class work.

3

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3



Days when I do the exercises I get more finished in class.

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I feel no difference in my day and class work if I do the exercises.

2









The exercises make it harder for me to complete my work.

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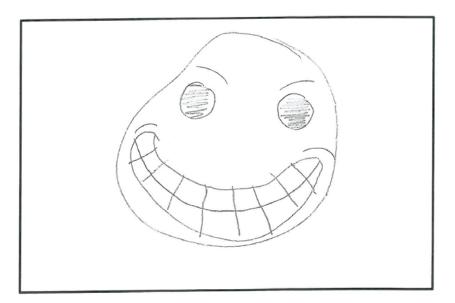
NO





Name your favorite part of the exercises breathing

Name your lease favorite bending down





I like the exercises.



NO





2

The exercises help me with class work.

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Days when I do the exercises I get more finished in class.

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I feel no difference in my day and class work if I do the exercises.

3















The exercises make it harder for me to complete my work.

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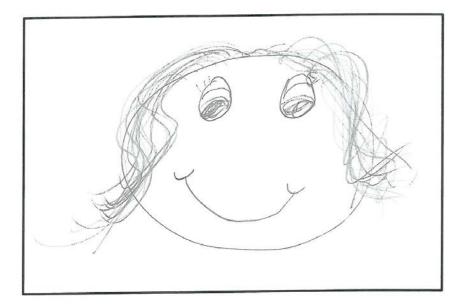






Name your favorite part of the exercises When we are quet

Name your lease favorite <u>Vone</u>



I like the exercises.

YES (NO)



The exercises help me with class work.

1 2 3 4 5



Days when I do the exercises I get more finished in class.

1 2 3 4 5



I feel no difference in my day and class work if I do the exercises.

1 2 3 4 (5)



The exercises make it harder for me to complete my work.

1 2 3 4 5



Did	you	enjoy the	e breathing	exercises?
-----	-----	-----------	-------------	------------

YES

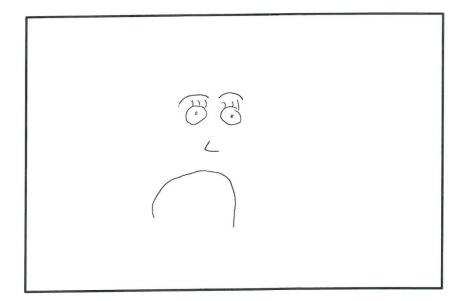






Name your favorite part of the exercises _	None
--	------

Name your lease favorite breathing

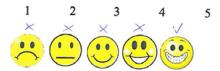




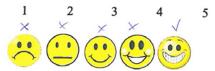
I like the exercises.



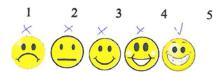
The exercises help me with class work.



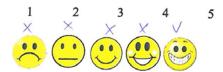
Days when I do the exercises I get more finished in class.



I feel no difference in my day and class work if I do the exercises.



The exercises make it harder for me to complete my work.





Did you enjoy the breathing exercises?					
YES NO					
Name your favorite part of the exercises					
Name your lease favorite					
Draw a picture of your feel after the exercises.					



5

Survey Students

I like the exercises.

YES NO



The exercises help me with class work.

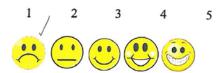
2 3 4



Days when I do the exercises I get more finished in class.

1 2 3 4 5

I feel no difference in my day and class work if I do the exercises.



The exercises make it harder for me to complete my work.

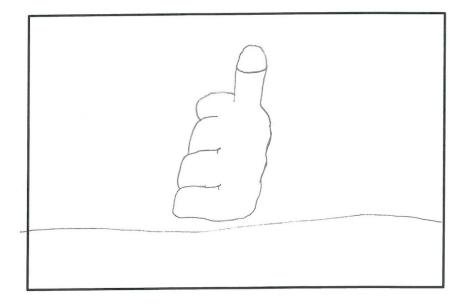
1 2 3 4 5





Name your favorite part of the exercises The balince

Name your lease favorite The breathing





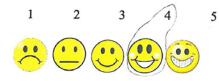
I like the exercises.



The exercises help me with class work.



Days when I do the exercises I get more finished in class.



I feel no difference in my day and class work if I do the exercises.

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1

The exercises make it harder for me to complete my work.

4





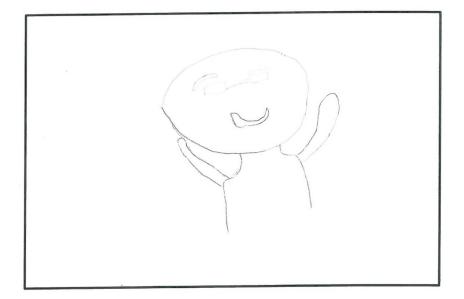
NO





Name your favorite part of the exercises The woosh

Name your lease favorite Pan Lice



Survey Students

I like the exercises.



NO





The exercises help me with class work.

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3



Days when I do the exercises I get more finished in class.

4

2

(3)

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I feel no difference in my day and class work if I do the exercises.

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The exercises make it harder for me to complete my work.

2

3















Did you enjoy the breathing exercises?

YES NO

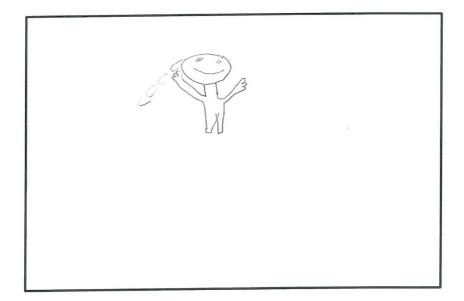




Name your favorite part of the exercises

Name your lease favorite Palma + Cal

Draw a picture of your feel after the exercises.



5

Survey Students

I like the exercises.

YES NO

The exercises help me with class work.

2 (3) 4

Days when I do the exercises I get more finished in class.

1 2 3 4 5

I feel no difference in my day and class work if I do the exercises.

1 2 3 4 5

The exercises make it harder for me to complete my work.

1 2 3 4 5



Did you enjoy the breathing exercises?

YES NO

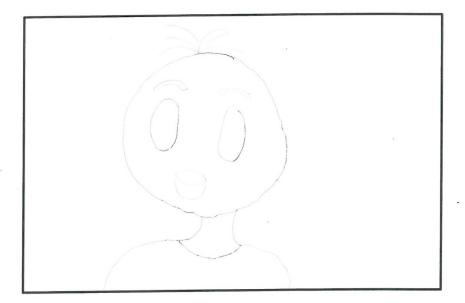




Name your favorite part of the exercises	11/	hoosh	
Traine your lavorite part of the enteresses	1		_

Name your lease favorite

Draw a picture of your feel after the exercises.





Survey Students

I like the exercises.

YES NO



The exercises help me with class work.

1 2 3 4 5



Days when I do the exercises I get more finished in class.

1 2 3 4 5



I feel no difference in my day and class work if I do the exercises.

5

2 3 4



The exercises make it harder for me to complete my work.

2 3 4



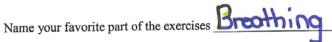


Did you enjoy the breathing exercises?

YES NO

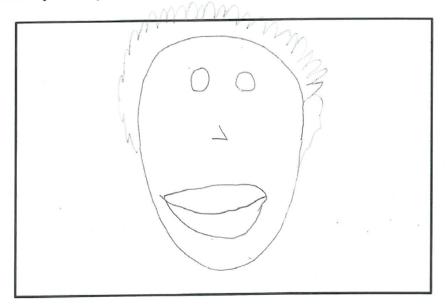






Name your lease favorite Pome tree

Draw a picture of your feel after the exercises.





Survey Students

I like the exercises.

YES NO





The exercises help me with class work.

2 3



Days when I do the exercises I get more finished in class.

3 5



I feel no difference in my day and class work if I do the exercises.

5

3

The exercises make it harder for me to complete my work.

3 5



Did you enjoy the breathing exercises?	
YES NO	
Name your favorite part of the exercises	
Name your lease favorite 1000	
Draw a picture of your feel after the exercises.	



Survey Students

I like the exercises.



NO



The exercises help me with class work.

5

5







3



Days when I do the exercises I get more finished in class.

2

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4











I feel no difference in my day and class work if I do the exercises.

3 4













The exercises make it harder for me to complete my work.

(1)

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Did you enjoy the breathing exercises?



NO

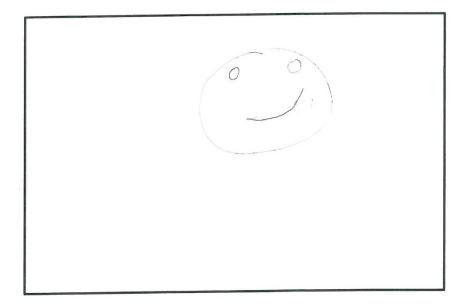




Name your favorite part of the exercises Whose

Name your lease favorite the bending one

Draw a picture of your feel after the exercises.





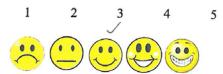
Survey Students

I like the exercises.

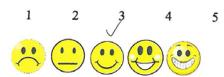
YES NO



The exercises help me with class work.



Days when I do the exercises I get more finished in class.



I feel no difference in my day and class work if I do the exercises.

1 2 3 4 5

The exercises make it harder for me to complete my work.

1 2 3 4 5



Did you enjoy the breathing exercises?

YES NO

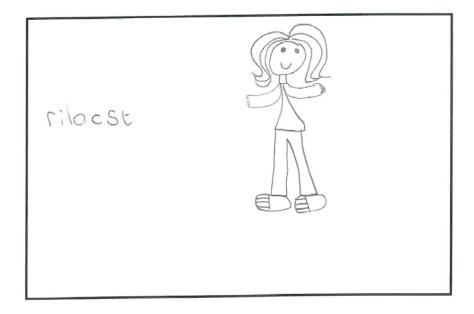




Name your favorite part of the exercises <u>tuech in ower</u> toews

Name your lease favorite Nachien

Draw a picture of your feel after the exercises.



Survey Students

I like the exercises.









The exercises help me with class work.

1

3









Days when I do the exercises I get more finished in class.

1

(2)

3

4

5









I feel no difference in my day and class work if I do the exercises.

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2





3



The exercises make it harder for me to complete my work.

(2)

3

4

5















Did you enjoy the breathing exercises?

YES

NO

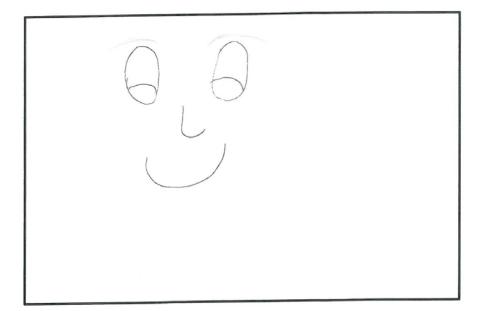




Name your favorite part of the exercises _______

Name your lease favorite ______

Draw a picture of your feel after the exercises.





Addendum S: Exit Slips

Exit Slip 1

Before the exercises I felt ... I felt some and unexercised

After the exercises I felt ... I felt happy and excersied

The exercises make me feel ... HAppy but a little bit sace.





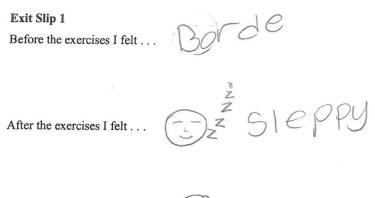
Before the exercises I felt ... eX TOO

After the exercises I felt...

The exercises make me feel ... Stronger and healtry







The exercises make me feel ...







Before the exercises I felt . . .

Sad, Nurves and Sceard.

After the exercises I felt . . .

I felt Good, healthy.

The exercises make me feel ...

happy and healthy.



Dipalesa



Before the exercises I felt . . . O

Awesome

After the exercises I felt ... Tou seen Ausemey

The exercises make me feel ... like I was flying





Before the exercises I felt ... like I wouldn't like it

After the exercises I felt . . . good

The exercises make me feel ... & ecxercised





Before the exercises I felt ... I thought that it was gleat

After the exercises I felt. I brought that you are a good or

The exercises make me feel \dots Happy





Before the exercises I felt ... bored and tired

After the exercises I felt ... beter and relaxed

The exercises make me feel ... calm respect and chilled





Before the exercises I felt ... 900 d

After the exercises I felt... More cormfable

The exercises make me feel ... re | $a \times e \lambda$





Before the exercises I felt . . . bo red

After the exercises I felt . . . pqin

The exercises make me feel $\,\ldots\,$ C x CP () Se(





Before the exercises I felt ... happy

After the exercises I felt ... good

The exercises make me feel ... (claxied





Before the exercises I felt ... Awsome

After the exercises I felt ... \downarrow in e

The exercises make me feel $\dots \downarrow \vdots$





Exit Slip 1

Before the exercises I felt ... Sced and Exited

After the exercises I felt ...

The exercises make me feel \dots 900 d





Before the exercises I felt ... Exited

After the exercises I felt \dots Tired

The exercises make me feel ... ready for bed





Before the exercises I felt . . . Sleepy

After the exercises I felt ... relaxes and awake

The exercises make me feel ... happy and relaxed





Before the exercises I felt . My tummy felt pain ful

After the exercises I felt . T. was

The exercises make me feel hoppy so happy





Before the exercises I felt ... Soif Stiff

After the exercises I felt... Stretched and happy

The exercises make me feel ... Happy and Stretched





Exit Slip 1

Before the exercises I felt ... Enegetic, hyper

After the exercises I felt ... Calm and relaxed

The exercises make me feel ... Happy and





Before the exercises I felt . . .

After the exercises I felt... Sorry & did't no The exercises I felt sicle

The more I do the exercises





Before the exercises I felt ... tired

After the exercises I felt . . . a Nake

The more I do the exercises ... the more I feat relaxed





Before the exercises I felt . . . \bigcirc $\mbox{$\mathcal{K}$}$

After the exercises I felt

The more I do the exercises The More i teel happy





Before the exercises I felt . . . bored

After the exercises I felt . . . reVitilized

The more I do the exercises I yet relyxed





Before the exercises I felt ... I felt tiyerd

After the exercises I felt ... I felt 50 90 50 50 50 50 ... Good

The more I do the exercises ... the detter I fell





Before the exercises I felt ... Teles #

After the exercises I felt . . . 9006

The more I do the exercises don't





Before the exercises I felt ... E e c Suetien

After the exercises I felt ... Fresh

The more I do the exercises. It bicuems Iesi.





Before the exercises I felt . . . + +

After the exercises I felt ...

The more I do the exercises The more I con San that





Before the exercises I felt ... Ot and tired

After the exercises I felt ... beter and caln

The more I do the exercises I get fiver and calmer





Before the exercises I felt ... \mathcal{F}

After the exercises I felt ... Te cixed

The more I do the exercises ... The more achivements
I can get in Rock climbing





Before the exercises I felt + tred

After the exercises I felt relaxed

The more I do the exercises the more tgot I get more Ernegy





Before the exercises I felt . . . 900 d

After the exercises I felt ... Austral Awe some

The more I do the exercises Impossibe





Before the exercises I felt ... We

After the exercises I felt . . . tical

The more I do the exercises I feel better





Before the exercises I felt . . . tired

After the exercises I felt . . . good

The more I do the exercises ... I feel better





Before the exercises I felt.. I felt hopey

After the exercises I felt $\dots 5ed$





Before the exercises I felt. I. have it was Execut

After the exercises I felt of

The more I do the exercises T.F. Happey



1 Card

EXS/out



Before the exercises I felt . . 50 Relast

After the exercises I felt . . ? y leg was Lette e pain

The more I do the exercises . I. ferl good





Before the exercises I felt ... I was tired

After the exercises I felt ... I was more fired, But i liked the was exercise.

The more I do the exercises ... I feel Strong and i feel Cool





Before the exercises I felt... I could not do the exercice CAZ I heart my toz

After the exercises I felt... but It looked very relaxing and temporal next time I will do it

I like doing the exercises because ... It Yelaxes me

I do not like doing the exercises because I like it





Exit Slip 2
Before the exercises I felt . . . Exit Slip 2

After the exercises I felt . . . (22) $\frac{2}{2}$

I like doing the exercises because ... I get think

I do not like doing the exercises because ... It is tiering





Before the exercises I felt ... like I an an angon

After the exercises I felt ... 400 d

I like doing the exercises because . . . it





Before the exercises I felt. Lired

After the exercises I felt . Telaxed

I like doing the exercises because . _ Fee! good

I do not like doing the exercises because $\,\ldots\,$





Before the exercises I felt . . Good

After the exercises I felt. . beter

I like doing the exercises because . It is fun





Before the exercises I felt ... co

After the exercises I felt ... relayed

I like doing the exercises because ... Wey make me feel relaxed





Before the exercises I felt ... pained

After the exercises I felt ... revitilized

I like doing the exercises because . . .

I do not like doing the exercises because $\,\ldots\,$

Iloveit





Before the exercises I felt . . . Aowseime

After the exercises I felt . . . Super

I like doing the exercises because . . . it 15 -5 where





Before the exercises I felt ... STressed

After the exercises I felt ... NOT SO STRESSED as be FOR

I like doing the exercises because ... It leeps me happy.





Before the exercises I felt ... We wishthere

After the exercises I felt ... Tween there

I like doing the exercises because . . .

I do not like doing the exercises because $\,\ldots\,$





Before the exercises I felt ... O

After the exercises I felt ...

I like doing the exercises because ... it makes me relaxed





Exit	Slip	2

Before the exercises I felt . . . Size C $\nearrow \searrow$

After the exercises I felt . . . 5 PEP

I like doing the exercises because ... The filling the Ropers





Before the exercises I felt . . .

Happy

After the exercises I felt . . .

Sleepy

I like doing the exercises because . . .

it make me feel better

I do not like doing the exercises because $\,\ldots\,$

I do not Know





Before the exercises I felt. Lood

After the exercises I felt .

I like doing the exercises because . 15 5 Fun

I do not like doing the exercises because ::::.





Before the exercises I felt ... UNC OW

After the exercises I felt ... Colon colo

I like doing the exercises because ... 1





Before the exercises I felt . . . Ten Se

After the exercises I felt ... Te eased

I like doing the exercises because ...; 5 gsmothen my muscles





Before the exercises I felt . . . good

After the exercises I felt ... FilacSt

I like doing the exercises because ... it good





Before the exercises I felt . . . good

After the exercises I felt . . . exercised

I like doing the exercises because ... they help me

I do not like doing the exercises because \ldots of the laughing







After the exercises I felt . Relaxed

I like doing the exercises because . I Feel good





Addendum T: Teacher Surveys

complete it.

Interview Question Teachers Have you noticed a difference in students work? Some of the children that have serious concentration problems, has improved, bocus bether, but continuous. Does student behavior change on days when exercises are done? Show well yes, they debinately bours nearly better. How would you feel if you were going to teach these exercises yourself? I would love to, but the problem is that some of our parents do not affrove of the exercises. What have you observed about your students' ability to focus in class? It has improved afther the exceruses. When do you students struggle to focus? Ofter break, it they were too long outside, when the work period is too long, when the children are tired, didn't When is the best time for students to focus on complete work? In the mornings from 8-11 > 12 h 30 Ofter break when they had comething to got their concentration How do the exercises influence student behavior? Can you give examples? The escercises coloned the children, Mey are forced to concentrate whilst doing the excercises. Although not complex excercises, you need to concentrate to



Is focus and attention a problem in class? How? Please give an example.

Yes, the children get leasily distracted, especially the level tree.

What poses did like best for the students? Least?

What poses would you feel most comfortable teaching? Least?

Breath in and out.

Did you feel the breathing exercises were helpful? Why?

Yes, it borced | helps the children to focus and relasce that dren to focus and relasce their bodies. This results in bether corcentration.



Survey Teachers

Do you like the exercises for your class? Please explain

Yes. The exercises are rasy enough for children to manage to do.

Do you feel the exercises help your students with class work?

Yes, because special exercises can help the children to focus. The fact that they have to concentrate when they do balancing exercises, are very good.

On days when we do the exercises are there any changes in class work?

Some days, the children's behaviour and co-operation were better than other days. Ther co-operation were better after Joing the exercises

Would you feel comfortable teaching the exercises to a class?

Yes, because these specte kind of exercises me beneficial to anybody. You need to concentrate in order to succeed.



Addendum U: Consent and Assent Letters

Letter to Head of School

Dear Director.

I am a student studying through the University of Pretoria. I am currently enrolled for my PhD in the Faculty of Education. I would like to ask you whether you will be willing to allow me to conduct a part of my research in your school.

The project is titled: The use of Yoga Techniques in the Classroom to Improve Learning. The goal of the research is to help students become better learners by teaching concentration with the help of yoga techniques. There are a variety of poses and breathing techniques which can help with concentration. There are warm up poses, strengthening poses, release of tension poses, and calming poses. The ultimate goal is to teach the students to manage themselves and learn how to help themselves to learn, focus and concentrate. When students feel themselves unable to focus they will be able to use a technique which works best for them. Physical activities are an excellent way to reach students. Not only will these stretches and poses help with finding and using gross motor skills, balance and strength, they also help to focus and relax students so they can be ready to learn (Cheatum, Billy Ann and Allison Hammond, *Physical Activities for Improving Children's Learning and Behaviour*, Illinois: Human Kinetics, 2000.).

If you agree to allow me to conduct research in your school, I will ask one or two teachers to observe students' concentration, focus and completion of tasks. After a month I will teach the students approximately 10-20 minutes of simple exercises and breathing techniques at a set time 2-3 days each week. The teachers will then again observe students' concentration, focus and completion of tasks. The teachers will also be asked their opinions about the exercises. Only my supervisor and I will have access to this information. I will interview teachers before and after the instruction of the yoga techniques and will also ask students for their observations and opinions.

All participants, teachers and learners are free to refuse to participate. The parents or guardians of learners must give permission for their child to participate in this research. The learners themselves must assent to take part. Participation can be withdrawn at any time.

The identity of the school and all participants will be protected. Only my supervisor and I will know which schools were used in the research and this information will be treated as confidential. Pseudonyms will be used for teachers during data collection and analysis. Learners will be asked not to write their names anywhere on the questionnaire and they will remain fully anonymous. The information that is collected will only be used for academic purposes. In my research report and in any other academic communication, pseudonyms will be used for the school and teachers, and no other identifying information will be given.

I subscribe to the ethical principles of:

- Voluntary participation in research, implying that the participants might withdraw from the research at any time.
- informed consent, meaning that research participants must at all times be fully informed about the research process and purposes, and must give consent to their participation in the research.



- □ Safety in participation; put differently, that the human respondents should not be placed at risk or harm of any kind e.g., research with young children.
- □ Privacy, meaning that the confidentiality and anonymity of human respondents should be protected at all times.
- Trust, which implies that human respondents will not be respondent to any acts of deception or betrayal in the research process or its published outcomes.

If you agree to allow me to conduct this research in your school, please fill in the consent form provided below. If you have any questions, do not hesitate to contact my supervisor or me at the numbers given below, or via E-mail. If there are not enough students or teachers who wish to participate then I will locate another school to conduct my research at.

Signature of student

Name of student: Jennifer Wiegman Contact number for student: 0712957127 E-mail of student:

jenniferwiegman@gmail.com

Dr Lubbe-De Beer (Supervisor)

carien.lubbe@up.ac.za



Conser	at form
	(your name), Headmaster of(name of school) agree / do not agree (delete not applicable) to allow (name of student) to conduct research in this school. ject is titled: The incorporation of yoga techniques in the classroom.
students teach th they will observe	stand that one or two teachers will be asked to be interviewed and to observe is concentration, focus and completion of tasks. After a month or two I will be students 10 minutes of simple exercises and breathing techniques and be able to practise these each morning. The teachers will then again students' concentration, focus and completion of tasks. The teachers will asked their opinions about the exercises.
feelings take pa	s will be asked to participate in exercises and share their thoughts and , but only if their parents or guardians have given permission for their child to rt, and the learner agrees. Learners will be asked to fill in the questionnaires e and place determined by the school.
I unders	and that the researchers subscribe to the principles of:
	Voluntary participation in research, implying that the participants might
	withdraw from the research at any time.
	informed consent, meaning that research participants must at all times be
	fully informed about the research process and purposes, and must give
	consent to their participation in the research.
	Safety in participation; put differently, that the human respondents should
	not be placed at risk or harm of any kind e.g., research with young children.
	Privacy, meaning that the confidentiality and anonymity of human
	respondents should be protected at all times.
	Trust, which implies that human respondents will not be respondent to any
	acts of deception or betrayal in the research process or its published
	outcomes.
Signatu	re: Date:



Letter to Parents

Dear parent/guardian,

I am a student studying through the University of Pretoria, studying for a PhD degree in Learning Support, Guidance and Counselling in the Faculty of Education. I would like to ask your permission for your child to take part in my research.

The project is titled: The use of yoga techniques as teaching and learning tools in the classroom. The goal of this research is to explore the use of yoga in classrooms in order to facilitate enhanced learning in terms of focus and concentration. The working assumption of the research is that there are a variety of poses and breathing techniques which can help with focus and concentration. Physical activities are an excellent way to reach students. Not only will these stretches and poses help with finding and using gross motor skills, balance and strength, they also help to focus and relax students so they can be ready to learn (Cheatum, Billy Ann and Allison Hammond, *Physical Activities for Improving Children's Learning and Behavior*, Illinois: Human Kinetics, 2000).

If you give me permission, your child will be asked to agree to take part in this research. No student will be forced to take part if they do not want to and they will not be penalised if they choose not to. Your child may choose to withdraw at any time.

Your child will be asked to answer questions about how they feel about the exercises and if they are better able to concentrate. Your child will also be asked to fill out surveys. The exercises and questions will not affect their learning; if anything it will make them better able to focus their attention on learning.

For your child's protection, he/she will not be asked to provide his/her name. No one will be able to link any questions or answers to a specific individual. Your child will remain anonymous. Information obtained from the questions will only be used for academic purposes. Information given by participants will be treated with confidentiality and will not be discussed with anyone outside the research team. I must write my doctoral thesis and a scholarly article about the findings, but no one will be able to trace any information back to your child or to the school.

If you agree to allow your child to take part in this research, please fill in the permission form provided below. If you have any questions, do not hesitate to contact me at the number given below, or via E-mail.

Signature of student
Name of student Jennifer Wiegman
Contact number for student 0712957127
E-mail of student jenniferwiegman@gmail.com



Consent form

I, parent / guardian of	(name of
child), give permission / do not give permissio	n (delete what is not applicable) for my
child to take part in the research project titled:	The use of yoga techniques as
teaching and learning tools in the classroom.	I understand that my child will be asked
to agree before he / she will take part. My chil	d will be asked to do some exercises to
assist with concentration and answer question	ns about he/she feels.
I understand that the researchers subscribe to	the principles of:
Voluntary participation in research, imp withdraw from the research at any time.	lying that the participants might
•	ch participants must at all times be fully
informed about the research process and purp	•
participation in the research.	, 3
Safety in participation; put differently, th	nat the human respondents should not
be placed at risk or harm of any kind e.g., res	earch with young children.
Privacy, meaning that the confidentialit	y and anonymity of human
respondents should be protected at all times.	
Trust, which implies that human respor	ndents will not be respondent to any
acts of deception or betrayal in the research p	rocess or its published outcomes.
Signature:	Date:



Letter to Teachers

Dear Teacher,

I am a student studying through the University of Pretoria, studying for a PhD degree in Learning Support, Guidance and Counselling in the Faculty of Education. I would like to ask you whether you will be willing to allow me to conduct a part of my research in your classroom and if you would be willing to participate.

The project is titled: The use of yoga techniques as teaching and learning tools in the classroom. The goal of this research is to explore the use of yoga in classrooms in order to facilitate enhanced learning in terms of focus and concentration. The working assumption of the research is that there are a variety of poses and breathing techniques which can help with focus and concentration. Physical activities are an excellent way to reach students. Not only will these stretches and poses help with finding and using gross motor skills, balance and strength, they also help to focus and relax students so they can be ready to learn (Cheatum, Billy Ann and Allison Hammond, *Physical Activities for Improving Children's Learning and Behavior*, Illinois: Human Kinetics, 2000).

If you give permission, you will be asked to agree to take part in this research. Participation is voluntary. You may choose to withdraw at any time.

You will be asked to answer questions about students' focused attention and learning and the exercises used in the classroom. You will be asked to make observations and fill out surveys. This should not take more than an hour of your time. Finally, you will be asked to allow me to: spend time in your classroom, observing students and instructing 10-20 minutes of yoga to your students several times a week for 4-6 weeks.

Information obtained from the questions will only be used for academic purposes. Information given by participants will be treated with confidentiality and will not be discussed with anyone outside the research team. I must write my doctoral thesis and a scholarly article about the findings, but no one will be able to trace any information back to your child or to the school.

If you agree to take part in this research, please fill in the consent form provided below. If you have any questions, do not hesitate to contact me at the number given below, or via E-mail.

Signature of student
Name of student
Jennifer Wiegman
Contact number for student 0712957127
E-mail of student
jenniferwiegman@gmail.com



Consent form

I, what is not applicable) to take part in th techniques as teaching and learning too	give consent / do not give consent (delete e research project titled: The use of yoga ols in the classroom.
withdraw from the research at any time. Informed consent, meaning that informed about the research process ar participation in the research. Safety in participation; put difference be placed at risk or harm of any kind experience, meaning that the confidence provided in the confidence process are participation in the research. Trust, which implies that human	ch, implying that the participants might research participants must at all times be fully not purposes, and must give consent to their ently, that the human respondents should not g., research with young children. entiality and anonymity of human
Signature:	Date:



Letter to Students

Ω	sser	60	m
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		

l•	(your name) agree / do not agree
(delete what you do not agree with) to	o take part in your rerearch project.
l understand that I will have to answer	questions about how I feel about the
exercises I will be practising regularly activities.	, and that it will not interfere with school
	e part if I do not want to I understand that take part. My name will not be used by the
researchers.	
Signature:	Date:





Addendum V: Letters From Professors



Jennifer Wiegman < jenniferwiegman@gmail.com>

favor to ask

Linda Tamura <tamuralindag@gmail.com>
To: Jennifer Wiegman <jenniferwiegman@gmail.com>

Sat, Mar 7, 2015 at 3:01 AM

Hi, Jennifer.

Congratulations on getting to the closure of your dissertation. Whew. How exhausting and exciting at the same time. I did some scanning – mostly your first and final chapters.

It's good to see that you're tackling a relatively new topic. (I recall an MAT student used this as a topic for his inquiry project a no. of years ago too, but more from the students' perspective, not the teachers'.) And how wonderful to combine your interests, background and skills. I also noticed that you deliberately chose to begin with a Montessori school that was unfamiliar to you so good thinking about avoiding bias, contamination.

You approached your topic with background on your personal interests and background on yoga & lit studies on its effects with children. When I got to your research question, I was surprised to see that it was about teachers' beliefs, perceptions, and opinions about using yoga in the classroom. You might lead into your question by transitioning from yoga and children to summarizing what we know &/or questions about teachers' reluctance to use it in the classroom (or wondering why it's not used more frequently). That would prepare the reader for what's next – or at least me[©]

Good to consider barriers and assets. And I notice you used interviews and student exit sheets. I didn't read teachers' responses to them but that connection will be important.

You're juggling full-time teaching AND your dissertation! Still, I suggest another



round of editing to be sure this reads clearly. Some general considerations:

- punctuation (comma, for example, after "learn" in first line of intro.
- missing words, e.g., "in" on line 3.
- added words, e.g., to" on 4th to last line, p. 155.
- repetitious sentence beginnings, "I approached this study..." 3 times.
- some confused wording/run-on sentences, e.g., 2nd to last sentence in paragraph 2 & 3rd sentence in 2nd para, p. 158.
- spelling, e.g., Piaget (1.3.1)

Good luck as you continue your journey, so nice to hear from you, and have fun growing your hair!

Oh, another MAT is completing her doctorate at the Peabody School at Vanderbilt, another's in a doctoral program at U of S. Florida, and one's teaching (w/her doctorate) at the U of Colorado. So you're among good company! (Oh, heard last week from another alum who remembered my comment that she should teach 5 years before going for her Ph.D.

Cheers,

Ī

[Quoted text hidden]

--

Linda Tamura





Jennifer Wiegman

<jenniferwiegman@gmail.com>

Dissertation

1 message

Robin Fromherz <rfromher@willamette.edu>
To: Jennifer Wiegman <jenniferwiegman@gmail.com>

Wed, Mar 18, 2015 at 5:09 PM

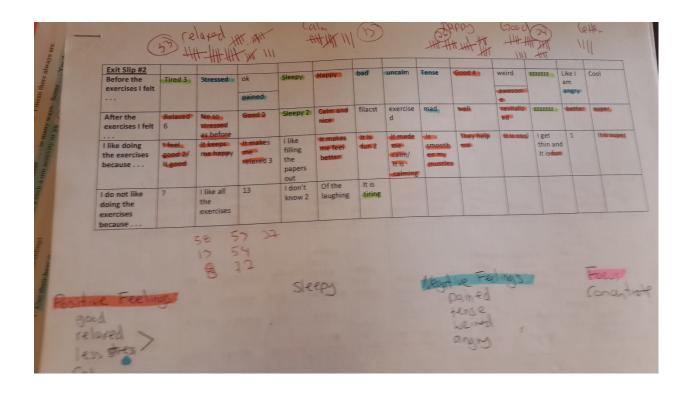
Finished a cursory read...you have an amazing study here! I did not notice any glaring grammatical edits or any confusing flow of ideas...I did not check references, know that your committee will....enjoy this process...you have accomplished much! Take care, let me know how things go....smiles, Robin

Sent from my iPad

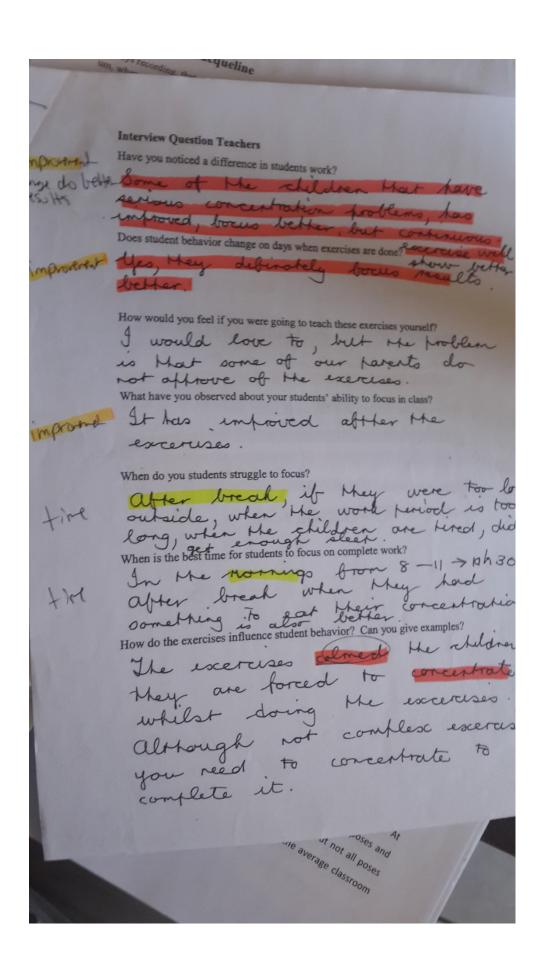


Addendum W: Examples of Coding

When coding began I looked for themes relating to the themes that emerged in phase 1 of the data collected. As coding progressed, new themes emerged. The following examples show the most legible of the examples of coding. The different colours represented different themes. For example, in the first picture, red indicated positive feelings, blue negative feelings and pink focus. In the next examples, yellow indicated religion, orange, lack of understanding, pink, education needed, and green, time constraints. These were the final themes which emerged. As discussed in Chapter 3, the themes emerged over time.









T;	I think if if its which assas happening if there's a set time for it and it doesn't interfere from the teachers.
M;	Teachers?
Ti	Yeah I thinks so and and it us us us assessment
M;	Yeah I thinks so and and if its its if someone else is doing it I don't think yea. You think it has more strength if someone comes in to do it rather that you as teachers doing it? Is that what your saying?
Ji	Well you you need to know what you need to do, when to breathe in and, when to breathe out. How your body needs to be in what position. You know you have sit of know, so you need to know you.
M:	So you either need to have it very simple and explained to your trained how to do this specifically for the classroom or you need to be some sort of yoga instructor is that what I am hearing you say?
Jano	T: Yeah Yeah exactly
J;	You need to have a form of doing it the correct way.
M;	Ok yea. So the problems that I'm hearing with bringing yoga into the classroom are J you seem to say are more the parents?
J;	Well some some remember last year when we we sent out the the forms.
M;	mmhmmm
J;	and then parents said but you know its they think it something connected to religion. So there can be this misconception.
M:	So How, I mean you said educating the parents. I mean is that the best way you think to get over that or not using the word yoga? Just calling it exercises? What do you think can be done?
F;	I think you must educate the parents."
	Yea definitely because one can do that with a parent evening. Say we are going to talk about yoga and this is it and you know educate the parents.
1	That sounds brilliant. Tell the parents and that way you include them.



	httitihttitti
H	Principal
	Principals who want to do it, convince their staff that it's a good idea. Umm yea I think it do something to help the converse today are frustrated and they are first and they are fire
	think in general a lot of teachers today are frustrated and they are tired and they want in the past are now week to the children and they well a lot of the strategies and they want.
	to do something to help the children and they well a lot of the strategies that they want if the past are not working anymore. You know?
	working anymore. You know?
H	Why do you think that is?
#	
	Mell you are not allowed to hit them anymore so now you have taken away the element
	of fear. The children are no longer fearful of what's going to happen to them, because
	the consequences are: sitting in detentions, I'm going to happen to them, because the parents are also busy so the more often deserving to tell your mom, you know and
	know they just don't work anymore. It's a different kind of child and on top that we have more children with ADD and all sort of learning difficulties and special needs that
	Were not diagnosed in the past that now have names.
11	
J:	Yeah
11:	Knid Washallandon Landon de de
M:	Rutal
	unat would be, I mean
	it if I
	go around saying Capalat and it had these near it was instituded
C:	But that would be, I mean, but that's something like you said, if it was instilled schoolit, if I go around saying Capalabati, uh, like, it's a little too much.
	we had, like, things like pro-
M:	Well, we had, like, things like pre-pose, you know? Chair pose.
C:	Warrior. Downward dog. You know, they love those names. It's, um -Let's get into
	that. Let's get into this.
M:	and, um – let's get into
IVI:	Right, But, yeah as far
	be one of the most beneficial things for kids, actually.
G:	Hmm.
	ruum,
M:	So, I mean if you're talking
	So, I mean, if you're talking about, like a, a universal, I want to say a universal truth, like, like a universal language, it sounds like you soll.
	like a universal language, it sounds like a, a universal, I want to say a universal truth, like, or higher ups on board, 'cause it's very difficult, I, I'm, I feel that it's very difficult as, like, even if a group of six tooschess say "lob to the like,"
	Story of six teachers say, "On, we'll instigate " -instigate sounds barch you
	know?
G:	Wall Ishink Ishink up haf
G.	Well, I think, I think, um, uh, often it just has to be driven by one thing and we look at, um, um, Words Their Way. One person brought it in and if it's good, it can be brought
	in. It has to be modeled. Well, whatever it is, whichever program, and it has to be
	good. Everybody has to eventually buy it, and that's happened. We have too many
	things going on right now, and too many different rules, and too many teachers are, are
	I think, are just full of new concepts coming at us, um -And, so, we've been through the
	whole Brain Gym. We used to go to assembly and rub our ears. I have been here a lon
	time. We've done lots of different things and they all work in some way. I think they're all fantastic. I think it's great, and, but, it's hard to hold onto things that are important
	because new people, new change, new ideas, which are great, but then we're just losi
	because new people, new change, new treats, which are great, and then have
	it. It's new. All the time. When the set through a ten me who to who does pressent set through a ten me say African school
0	Language too if this was a South African, purely south African, unit, say of the south
C:	would be a no-no. Because, if it's considered a, a cult, in some countries –
	Would be a no no.
1.	Mm hmm.
L:	
C:	- uh, of, um, it's bowing down to a, a being, which is not necessarily the God that is the Bible, so from that religious point of view, it will be seen as, uh, not, not, not



Addendum X: Ethical Clearance Certificate



Faculty of Education

RESEARCH ETHICS COMMITTEE

CLEARANCE CERTIFICATE

CLEARANCE NUMBER:

EP 12/04/01

DEGREE AND PROJECT

PhD

The incorporation of yoga techniques in the classroom

INVESTIGATOR(S)

Jennifer Wiegman

DEPARTMENT

Educational Psychology

DATE PROTOCOL APPROVED

10 May 2012 5 October 2015

DATE CLEARANCE ISSUED

Please note:

For Masters applications, ethical clearance is valid for 2 years For PhD applications, ethical clearance is valid for 3 years.

CHAIRPERSON OF ETHICS COMMITTEE

Prof Liesel Ebersöhn

DATE

5 October 2015

CC

Jeannie Beukes Liesel Ebersöhn Prof C Lubbe-de Beer

This ethical clearance certificate is issued subject to the condition that the approved protocol was implemented. The Ethics Committee of the Faculty of Education does not accept any liability for research misconduct, of whatsoever nature, committed by the researcher(s) in the implementation of the approved protocol.

Please quote the clearance number in all enquiries.

