

Thesis Portfolio for the Professional Doctorate in Health Psychology

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Section A

Preface

Preface

This portfolio contains a range of evidence demonstrating how I have met the required competencies since beginning the professional doctorate and my development through this process. My different professional roles have enabled me to spend time working within Public Health at a more strategic level whilst also working more closely with local communities. Within my varying roles the key outcomes have always been to improve health and wellbeing particularly for those experiencing the greatest inequality, something that is extremely important to me.

Professional Competence

Beginning my training whilst in London and eventually moving to Nottingham has enabled me to work with very different communities with varying health needs, enhancing my understanding of how one's local environment influences health and the need to tailor interventions to the required need of those communities. Moving into different job roles has provided me with opportunities to work with a range of professionals predominately in the public and voluntary sector. This has included nurses, health visitors, councillors and oral health consultants to name a few. Aside from health professionals I have also been fortunate to work with and learn from those within other professions such as the education sector, service design and marketing. Working with such a variety of professionals has increased my understanding of other professions and how powerful collaboration between individuals of different skillsets can be.

Behaviour Change Intervention

Delivering a health and wellbeing intervention in a GP surgery provided me with a great opportunity to develop my skills around designing, delivering and evaluating behaviour change interventions. Whilst delivering Wellogram, I identified that many of the individuals I was supporting were struggling with putting their intended actions into practice due to a lack of motivation. I investigated this further and decided to design a group workshop utilising the facilitation training skills I had developed from my own training and a range of tools which can support behaviour change. This supported me in meeting the behaviour change competency and was an exciting innovative project based purely upon identified need. Since this project I have been asked to do a variety of assessments and evaluation proposals due to my skills and experience in this area.

Research Competence

The main research element of my doctorate has focused on childhood health. This aligns with the majority of my professional roles during the doctorate and is as a result of my interest and dedication in this area. I strongly believe that by improving the health and wellbeing of our children and young people we can prevent many issues from arising and ensure our young members of society grow up to be happy, healthy and resilient adults achieving their full potential. One of the initial reasons as to why I was interested in conducting my research on breastfeeding was due to the low levels of breastfeeding initiation and duration despite a number of large scale campaigns and initiatives that have recently been promoting breastfeeding and its benefits. This suggests that other factors such as public breastfeeding are having a greater influence on behaviour than knowledge. Results of the research illustrated how powerful society is in ostracising these mothers for breastfeeding in public. This coupled with mothers' determination to breastfeed illustrates how professionals need to be focusing on addressing the barriers to breastfeeding and supporting mothers to overcome these. This is likely to have better outcomes than continuing to heavily promote breastfeeding, which may also be having detrimental effects on mothers if they are unable to breastfeed for any reason.

My systematic review focused on mindfulness in pregnancy which was driven by my growing interest and insight into mindfulness. In my role delivering Wellogram we received support from a mindfulness coach which involved regularly engaging in a number of mindful practices to support our own emotional health and wellbeing. I began to realise the impact it can have and was interested in the evidence base for it. Both the systematic review and my research were aspects of the doctorate I found the most challenging but know I learnt a lot from the processes involved and having to overcome the many obstacles I faced. Consequently I feel a great sense of achievement for both the learnings and the outcomes I have achieved within this competency.

Consultancy Competence

Consultancy is a skill which I am increasingly utilising towards the later part of my doctorate and can see my skills in this area developing even further and supporting me as I move forward. The consultancy I chose to write up to illustrate this competency was a literature review conducted around unhealthy supermarket purchasing behaviours for Public Health England. This piece of work required me to utilise the Theoretical Domains Framework tool, something which I had never used myself so provided me an excellent learning opportunity alongside negotiating the consultancy process.

Teaching and Training

Throughout the duration of my doctorate I have taught and delivered training with a mixture of audiences on a range of topics. This has included both undergraduate and master's students, members of the local community and professionals. In my current role I am using these skills to design teaching sessions for teachers to deliver in primary and secondary schools. Topics have ranged from Health Psychology to Eating Disorders and Breast Cancer. I chose to write up the Breast Cancer session as it was one of my earlier sessions where I felt I learnt a great deal about myself and my teaching skills especially given the topic was not one I was particularly familiar with. The teaching and training competency was one of the competencies within which I felt the biggest shift in my confidence across the duration of the doctorate. Upon beginning the doctorate I was nervous about having to teach and was subsequently surprised at the level of enjoyment I received from it. I have also benefited significantly from the variety of training opportunities I have taken advantage of for my own professional development.

Reflecting back on the past few years, I feel all the work I have undertaken during that time and the doctorate opportunities have equipped me with the skills to practice competently as a Health Psychologist. I have developed myself enormously both professionally and personally leaving me excited about the opportunities that may arise and moving forward to build upon the strong foundations I have created.

Section B

Research Competence

**“You think with something so natural that it wouldn't
bother people.” Mothers’ Experiences of Public
Breastfeeding in London: An Interpretative
Phenomenological Analysis.**

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Abstract

Background: Breastfeeding rates continue to remain low in the UK even though a number of initiatives have been delivered in an attempt to increase them. Evidence suggests a large proportion of mothers now perceive breastfeeding as the best feeding practice for their baby and many wish to do so, but are unable to for a number of reasons including issues around breastfeeding in public. This study set out to explore lived experience of breastfeeding in public to better inform our understanding.

Methods: A qualitative approach was chosen using semi-structured interviews to facilitate an in-depth exploration of mothers' experiences of public breastfeeding. Women aged 31 to 40 years old who had experience of breastfeeding in public within London were interviewed and narratives analysed using Interpretative Phenomenological Analysis.

Results: Two themes emerged from the data: "Societal attitudes as ostracising" and "Becoming a nursing mother". It was evident these mothers experienced a strong transference from a British society generally disapproving and feeling uncomfortable with breastfeeding. Consequently implicit expectations are placed on them to conceal the behaviour either by covering their breast or breastfeeding in discrete locations including feeding rooms. Transitioning from a woman to a mother is a significant life stage and being able to breastfeed successfully appeared to be an important aspect of motherhood for these mothers. Their determination to breastfeed exceeded the challenges they faced in public with their confidence enhancing with time.

Findings are considered in light of current social attitudes and the importance of normalising views about breastfeeding in society in order to improve health outcomes.

Introduction

i. Benefits of Breastfeeding

Breastfeeding rates have increased over the last 40 years in part largely due to the evidence base demonstrating its benefits. This has resulted in breastfeeding becoming one of the UK's health priorities (Department of Health, 2012), with a strong focus on increasing its initiation and duration.

Health Benefits for Babies

Breastfeeding has been associated with reducing the risk of a range of illnesses in babies such as gastroenteritis, obesity, asthma, respiratory tract infections, diabetes mellitus and sudden infant death syndrome (Horta et al, 2007, Department of Health, 2013). There is also evidence for reductions in eczema, otitis media and lactose intolerance (Department of Health, 2013).

For obesity and diabetes mellitus occurring later in a child's life, there are a number of explanations as to why this correlation may exist. Formula fed babies have been found to have a greater total energy intake than breastfed babies (Heinig, Nommsen, Peerson, Lonnerdal & Dewey, 1993; Whitehead, 1995). This can lead to greater weight gain which in turn has been correlated to obesity later in childhood (Owen et al, 2003; Stettler, Zemel, Kumanyika & Stallings, 2002). Furthermore, formula fed infants have been found to have higher levels of plasma insulin which can influence weight gain and onset of diabetes mellitus (Lucas et al, 1980). Longer durations of breastfeeding in childhood have also been associated with the consumption of a healthier diet of vegetables, fruits, cereals and oily fish at around 65 years old (Robinson et al, 2013).

Health Benefits for Mothers

Alongside offering health benefits to the baby there is also evidence that breastfeeding provides health benefits for the mother. Two illnesses to which breastfeeding are believed to reduce are breast cancer and osteoporosis with a range of theories as to why (Boswell-Penc & Boyer, 2007). For breast cancer one theory is based around the premise that breastfeeding alters the cells in the breast (Cancer Research, 2016). For osteoporosis breastfeeding mothers bone density returns to what it was pre-pregnancy or sometimes even higher (Dermer, 2001). There is some evidence breastfeeding may also help to protect

against ovarian cancer and type two diabetes mellitus (Su, Pasalich, Lee & Binns, 2012; Cesar et al, 2016). In the short term breastfeeding is believed to promote postpartum weight loss since breastfeeding burns calories and promotes the return of metabolic states to those prior to pregnancy (Dieterich, Felice, O'Sullivan & Rasmussen, 2013).

Cost Savings

Due to the identified health benefits for both mother and baby it has been proposed that increasing breastfeeding in the UK could save the National Health Service (NHS) up to £40 million alongside saving thousands through fewer GP consultations and hospital admissions (Renfrew et al, 2012). This is an estimate that has been modelled from proposed reductions in the variety of health conditions breastfeeding is believed to protect mothers and babies against.

Emotional Benefits

Alongside the physical health benefits of breastfeeding the emotional benefits are also believed to be a significant contributor to both babies' and mothers' health and wellbeing. Skin contact after birth is something that is now actively encouraged across Healthcare Trusts as part of the Baby Friendly initiative, due to the role it plays in bonding. As breastfeeding results in the release of hormones such as oxytocin, this can further enhance this bond between mother and baby (Bartlett, 2005). Prolactin and oxytocin as well as being associated with enhanced bonding have also been associated with lower levels of maternal stress (Uauy, 1995), thus providing benefits to both mother and baby. Longer term implications of the strong bond breastfeeding promotes have been undertaken. Analysis of children internalising problems at six years old found that those who were breastfed as a baby and had a mother who actively engaged with them had a lower risk of internalising problems compared to those who were not breastfed and whose mothers did not successfully bond with them (Liu, Leung & Yang, 2014). This suggests breastfeeding may play some role in enhancing the child's emotional wellbeing and minimise the risk of emotional or behavioural disorders in the long term as well as the short term.

ii. Pressures of Motherhood

The Role of a Mother

The role of being a mother has altered with time, primarily due to changes in the pressures and societal expectations placed upon mothers. This inevitably has impacted the experience of motherhood across time. Since the 1950s the time mothers spend on housework including childcare has fallen, mainly due to factors such as the improvement in labour saving devices and greater accessibility to convenience foods (The Social Issues Research Centre, 2011). During this period motherhood also began to change, with empowerment of mothers working outside of the home (Held, 1983). As a consequence of this, the representation of mothers within the media changed (Lang, 2008) with the perception that mothers needed to be 'super-mums'. This involves being a full-time working woman whilst also being an excellent mother to one's baby (Keller, 1994). During the 1970s this resulted in mothers becoming very image conscious with pressure to conform to unrealistic expectations of how women should look, as promoted by celebrities. In the 20th century this led to the term 'yummy mummy' gaining momentum (The Social Issues Research Centre, 2011). A further example is the term 'alpha mum' which refers to being an all-round mother in terms of being well educated, knowledgeable, fashionable and up to date with all current trends such as technology (Horovitz, 2007). Such importance placed upon perceptions strongly remains in the UK with pressures centred around fulfilling the idealised mother image.

Impact of Becoming a Mother

Alongside societal pressures, becoming a mother is a significant life event when suddenly one is directly responsible for the life and development of a child. For first time mothers there is no handbook defining exactly how to care for their child and many mothers have to learn simply from experience. Consequently when the baby is born mothers face huge practical and emotional challenges with many experiencing what has become known as "baby blues" which exists for around two weeks after birth (Choudry, Counts & Horvitz, 2013). Some mothers have attributed this emotional turmoil in part down to their "raging hormones" (Darvill, Skirton & Farrand, 2010). Mothers have also expressed how they felt a loss of control upon becoming a parent and having to navigate changes in their self-image and the movement from often focusing predominantly on themselves to suddenly always putting their baby first (Darvill, Skirton & Farrand, 2010). For some mothers they felt unprepared for this change and the emotional and physical exhaustion that the postpartum

period brings (Nelson, 2003). This is often exacerbated in first time mothers leading them to search for information and role models around parenting (Dworkin, Walker, Connell & Doty, 2012). This can help to normalise their experiences and feelings (Darvill, Skirton & Farrand, 2010). Unfortunately for around 10 to 15% of mothers their period of low mood and mixed emotions persists and intensifies into post-natal depression (Royal College of Psychiatrists, 2014). Post-natal depression can also affect the partners of those who have given birth, although this is not as common (NHS Choices, 2016). Relationships with partners are also significantly impacted when a baby is born which can have negative implications for both partners. The greatest negative impact appears to be for couples already experiencing numerous difficulties prior to the birth (Doss & Rhoades, 2017).

Importance of Bonding and Attachment

Challenges parents face during the postpartum period that inevitably impact on their health and wellbeing can also influence their baby. It is claimed roughly 1 in 5 women struggle to bond with their baby (Royal College of Midwives, 2012). Importance of attachment has long been recognised through the work of Bowlby who claims that one of the most important things for the child socially, psychologically and biologically is the attachment between a mother and her baby (Bowlby, 1969). Biological evidence for this comes from researching cortisol levels with the finding that infants who have developed a secure attachment with a caregiver at a young age release less cortisol when under stress in the long term (Gerhardt, 2004). Developmental evidence for the impact of secure attachments has resulted from research finding that children with poor attachments develop poorer cognitive functioning, emotional competence, alongside poorer physical and mental health (Ranson & Urichuk, 2008). Correlations have also been found between maternal and child psychosocial problems when children become young adults (Arroyo, Segrin & Curran, 2016).

Pressure to Breastfeed

One aspect of being a mother that can influence mothers' emotional health and wellbeing and subsequent bonding is the ability to breastfeed (Chiorino et al, 2016). This appears to especially be the case for first time mothers where the relationship between mother and baby seems to be influenced by the success of the baby latching on (Kronborg, Harder & Hall, 2015). Mothers have expressed how being able to successfully breastfeed has given them a sense of pride as being able to nourish their child themselves and fulfil a key part of what they feel defines them as a mother (Williamson, Leeming, Lyttle & Johnson, 2012). As

a result of their determination to successfully breastfeed, mothers have reported going through pain and anxiety in order to establish breastfeeding because they want to do what they feel is the best for their baby (Larsen & Kronborg, 2013). Alongside believing it is the best for their baby, findings have revealed how breastfeeding behaviours are influenced by social expectations. Breastfeeding enables mothers to fulfil the good mother image, making it harder for them to seek help when struggling with breastfeeding due to fear they will be judged (Spencer, Greatrex-White & Fraser, 2015). Being unable to breastfeed or having to cease breastfeeding earlier than anticipated has been associated with an increased risk of postpartum depression because of the strong negative emotional impact of this (Chung et al, 2007; Brown, Rance & Bennett, 2016).

iii. History of Breastfeeding

Breastfeeding is an evolutionary behaviour that has been adopted through the ages, yet has varied in prevalence and method. This appears to be largely as a result of the development of knowledge about breastfeeding, safety, the availability of alternatives such as formula milk and changing societal attitudes surrounding infant feeding.

Wet Nursing

Breastfeeding is evident in literature from as early as 2000 BC when wet nursing was the cultural norm. A wet nurse was defined as “a woman who breastfeeds another’s child” (Davis, 1993 p2111). This practice began due to the prevalence of maternal mortality during childbirth. Wet nurses were commonly ex-slaves and often employed by families of a higher social status, as women were worried breastfeeding would ruin their figures and limit them from being able to wear the clothing they were expected to wear (Wickes, 1953a; Fildes, 1986). Wet nurses also provided mothers with greater freedom to continue their active social lives (Wickes, 1953a). During the Middle Ages the attitude towards breastfeeding began to change following the claim that breastmilk could transmit both the physical and psychological characteristics from the wet nurse to the child, not only making children at risk of any conditions and imperfections, but also impacting on their relationship with their mother (Stevens, Patrick and Pickler, 2009). Greater attention and research being placed on bonding and relationships led Omnibonus Ferrarius in 1577 to state that wet nursing may result in babies loving their wet nurse more than their own mother (Osborn, 1979). Where wet nursing continued within wealthy families this resulted in greater profiling of these nurses to ensure they were healthy, intellectual women. From the late 18th century

and through to the 19th century a shift began in the type of individuals who utilised wet nurses, which appeared to have been driven by the Industrial Revolution (Stevens, Patrick and Pickler, 2009). Wealthy families began using them less and less but there was an increase in use amongst lower income families where mothers suddenly needed to work to help support their families during this period (Osborn, 1979).

The Bottle and Artificial Food

Infant feeding practices began to shift away from breastfeeding upon the invention of the feeding bottle and artificial food in the 19th century. There was a continued belief that breastmilk was the best for babies but scientists began trying to design substances that would closely resemble breastmilk (Radbill, 1981). Initially this brought its problems as feeding bottles were not well designed and the lack of sterilisation and poor storage of milk led to the death of one third of babies fed using artificial milk during their first year of life (Weinberg, 1993). Furthermore the increase in different brands of infant food available led to confusion around which were best and at what time point. As a result of parents feeding their babies dried milk and starchy foods, babies were not provided with the vital nutrients they needed and cases of scurvy and rickets increased (Radbill, 1981).

By the 1940s and 1950s advancements in the sterilisation of bottles and the nutritious quality of the artificial milk were made. This resulted in formula milk becoming a safe and popular substitute for breastfeeding, driving a decline in breastfeeding through until the 1970s (Fomon, 2001). At this time, it was reported that only 25% of babies were breastfed at 1 week old which dropped to 14% very quickly at 2-3 months old (Greer & Apple, 1991). Furthermore, mothers appeared to feel a sense of shame in breastfeeding as the breast was a sexualised object (Papastavrou et al, 2015). This decline was exacerbated by the flourishing advertisement of formula feeding and in 1988 this began to be directed at the general public (Stevens, Patrick and Pickler, 2009). Moving into the 21st century, breastfeeding has increased since the 1970s, most likely because of the increasing evidence around the health benefits. However it is still not as prevalent as it was in the early 20th century (Wright, 2007; Papastavrou et al, 2015). Heavy marketing of infant formula milk is something that has continued over the years and is likely to continue for the foreseeable future because of the strength of the competition within this industry (Morrow, 2011).

iv. Main Theoretical Perspectives Relevant to Qualitative Research on Public Breastfeeding

As outlined above breastfeeding is a behaviour whereby attitudes towards it have changed over the years. During those years such changes have been researched and the topic has been strongly debated, often bringing it into the political arena. Within this research a number of key theoretical perspectives have been adopted.

Feminist researchers have been keen to situate breastfeeding within feminist frameworks, illustrating breastfeeding and specifically public breastfeeding as an empowering behaviour. To the point it has been suggested now for many years that women should utilise the behaviour to reassert feminine values, due to the power of being able to nurture (Van Esterick, 1989). However, there is evidence that whilst some mothers enjoy the interconnectedness that breastfeeding brings, others do not like the blurred boundaries it creates between them and their baby (Schmied & Lupton, 2001). It has consequently become what Schmied and Lupton (2001) argued a vexed feminist issue that has been strongly debated within this context. It has also been argued that some of the strong feminist frameworks that focus on breastfeeding as an empowering behaviour can act to limit the understanding around how the experience differs between mothers (Carter, 1995). Resulting in disempowerment or a sense of deficiency in those mothers who do not engage in the behaviour for intended or unintended reasons (Taylor & Wallace, 2012).

Breastfeeding having become something that mothers have to learn from health professionals and seek support has been argued to disempower mothers (Bartlett, 2002b). This led to Kirkham (1997) arguing that the voices of mothers are frequently muted by experts, even though they are the ones who go through the process of giving birth and breastfeeding. Bartlett (2002b) in her paper focused on corporeal feminism acts to challenge this and highlight how mothers are knowledgeable embodied subjects rather than uncontrollable beings that need teaching and managing. One example she uses to highlight this is the intelligence she associates with her breasts as a result of the fact when under stress this would manifest in significant pain in her breasts. She argues the focus placed on the need for mothers to manage their emotions in order breastfeeding successfully acts to disempower mothers who struggle with aspects such as pain. These feministic perspectives can highlight how breastfeeding is much more complex than often portrayed, especially in the context of public breastfeeding.

One of the key reasons as to why breastfeeding in public has been argued to be an issue within the UK is due to the link between breasts and sexuality. Young (1990) in her focus on feminist philosophy and social theory stated how within the West breasts are

considered to be powerful symbols of female sexuality. As a result this makes women feel uncomfortable when it comes to exposing them and engaging in a behaviour such as breastfeeding which challenges that cultural perception of what breasts symbolise (Bartlett, 2002b). This boundary between sexuality and breastfeeding has been researched with some arguing that mothers experience breastfeeding as a very intimate and enjoyable experience (Schmied & Lupton, 2001). Reinforcement of such perceptions can act to reinforce the discomfort surrounding breastfeeding. Many women have however joined together and attempted to challenge the perceptions of breastfeeding as inappropriate and stand up for their rights. In the UK such breastfeeding activism is often in the form of picnics and protests (Boyer, 2011). This is not always well received with some arguing that breastfeeding to prove a point is distasteful (Reading, 1992). This perspective has also acted to move breastfeeding into the political arena and increased the perception that women publicly breastfeed to make a feministic stand for their rights, especially those who are explicit about it, leading to them being viewed as exhibitionist (Grant, 2016).

As a result of public breastfeeding being such a political and controversial behaviour and intertwined with feminism, this had led to the rise of concepts and practices such as “socially sensitive lactation” (Leeming, Williamson, Johnson & Lyttle, 2013). In contrast to mothers breastfeeding to make a stand for their rights some mothers feel very conscious about not creating any discomfort for those around them. They feel required to practice socially sensitive lactation and to follow this set of external rules and etiquette that is set by society around how to publicly breastfeed (Leeming et al, 2013). This involves using covers to hide the breast but also hiding the milk as it can be perceived as a disgusting bodily fluid (Dowling et al, 2012). Why mothers feel the need to conform to this can be explained according to the symbolic interactionist perspective which illustrates how we need others to accept our behaviour as morally acceptable for us to feel confident in the behaviour ourselves (Goffman, 1959). This type of research adds valuable insight into why mothers conceal breastfeeding and highlights the need to explore the social context in which public breastfeeding is taking place within, as it evidently has a significant impact on mothers.

One theoretical perspective that focuses strongly on physical, social and cultural dimensions, and thus the wider context, is the ecological perspective. This perspective focuses on the resources and constraints that can exist in different environmental settings and the interaction between individual and collective behaviour (Stokols, Allen & Bellingham, 1996). This is important in the context of public breastfeeding because breastfeeding is not a behaviour that exists in isolation but is imbedded in the social and cultural milieu (More & Harrison, 1987). We therefore need to focus on how these multiple layers influence engagement and the experience of breastfeeding publicly and subsequently intervene at these levels. Within McElroy’s socio-ecological model (1988) five

levels of influence are believed to exist which are the individual, interpersonal, community, organisational and policy. These act together to influence behaviour. Compared to the feminist perspective, this perspective is more frequently adopted by public health researchers due to the ability to formulate a health promotion strategy based upon the worldviews identified (Dodgson, Duckett, Garwick & Graham, 2002). Researchers adopting this approach within the context of breastfeeding have found multiple factors influence breastfeeding such as the healthcare system, families and communities and therefore use this as evidence that in order to successfully increase breastfeeding rates interventions need to address these multiple factors simultaneously (Tiedje et al, 2002). However, although the importance and value of doing this is often recognised, achieving it in practice is very difficult making this research sometimes limited in transferability.

Breastfeeding confidence was something that prior to the 21st century was not really discussed from a theoretical perspective. However Dennis (1999) argued that it should be because of the associations with duration rates. This has been supported by researchers concluding it to be an important variable in initiation, duration and exclusivity within an ethnically diverse group of mothers in the UK (Gregory et al, 2008). Dennis (1999) went on to develop the self-efficacy scale as a result of using self-efficacy theory to research breastfeeding confidence. This acted to theoretically conceptualise breastfeeding confidence as self-efficacy. In the context of public breastfeeding this perspective can be valuable due to the level of confidence mothers need to have in order to breastfeed publicly in a society where it is not common. In contrast to the ecological perspective this theoretical perspective focuses more directly on the individual and has the risk of placing too much responsibility on individuals themselves. However taken together, these perspectives can complement each other well within public breastfeeding research.

Reviewing the main theoretical perspectives relevant to this research highlights the complexity of breastfeeding and research around it and how intertwined it is with politics, feminism, culture and social norms along with individual factors. It also illustrates how breastfeeding and specifically public breastfeeding can be researched and understood within a range of different theoretical perspectives, all of which have their strengths and weaknesses and influence the way research along with its results and implications are positioned and valued.

v. Current Breastfeeding Rates

Current guidance from the World Health Organisation recommends that babies are breastfed exclusively for the first six months and thereafter are fed with other foods for two years or more (WHO, 2011). They also advise that breastfeeding should be initiated within an hour of birth and continue on demand during the day and night (WHO, 2011). In 2014, due to the perceived importance of exclusive breastfeeding during the first six months, in 2014 the World Health Assembly set out to increase the rate of exclusive breastfeeding by mothers in the first six months of the baby's life to 50% by the year 2025 (WHO, 2014).

Rates of mothers initiating breastfeeding vary across the UK at approximately 73% (NHS England, 2017). Within London rates are slightly higher at around 92% (NHS England, 2017). However the number of mothers continuing to initiate breastfeeding at 6 to 8 weeks post birth drop down to around 44% (Public Health England, 2017) illustrating how many mothers do not continue breastfeeding beyond the first few weeks. A difference also exists between the percentage of mothers who breastfeed partially and those breastfeeding exclusively as there is often a tendency for mothers to breastfeed but then 'top up' with formula (PHE, 2013). The latest infant feeding survey found that only 1% of mothers across England were meeting the WHO guidance of breastfeeding exclusively for 6 months (Health and Social Care Information Centre, 2012). This is believed to drop down to 0.5% engaging in any form of breastfeeding by the time their baby is one year old (Victora, 2016). Our rates in the UK are comparably poor to other countries (Cattaneo et al, 2010) with 23% of mothers breastfeeding in Germany at 6 months, 55% in Brazil and 99% in Senegal (Victora, 2016).

Within England, rates of breastfeeding differ substantially across areas. In the South rates are higher than in the North (McAndrew et al, 2012). Differences also exist between cities and rural areas with higher rates of breastfeeding within cities (McAndrew et al, 2012). Alongside geographical location, socioeconomic status, age, race and ethnicity have also been found to influence infant feeding decisions (Li et al, 2008). One's cultural background in which they have grown up within and withhold the values of can shape whether a mother will choose to breastfeed and the resulting experiences she will have breastfeeding. This is because cultural attitudes strongly define acceptability and how much breastfeeding is valued (McBride, 2010).

Those least likely to breastfeed are young mothers from low-income families who leave school early and do not pursue professional careers (McAndrew et al, 2012). Those most likely to breastfeed are slightly older mothers from higher income families who have an established professional career. Younger mothers may chose not to breastfeed because breastfeeding is less acceptable within their social circles. Formula feeding can also provide

mothers with the freedom of sharing feeding with other family members (Condon, Rhodes, Warren, Wilthall & Tapp, 2013).

Given that the knowledge around breastfeeding has increased, with a large proportion of people now believing “breast is best” (Eglash, Montgomery & Wood, 2008) rates of breastfeeding have not increased in line with this. Sixty percent of mothers report stopping before they intended or would have liked to (McAndrew et al, 2012) implying that further work needs to be done to determine the barriers to breastfeeding.

vi. Barriers to Breastfeeding

Breastfeeding has been identified as requiring a large amount of determination, resilience and self-sacrifice on the behalf of the mother in order to continue in the face of adversity (Nelson, 2006). However it is a behaviour that is described as natural, thus encouraging the expectation that it should be easy and something all mothers can do. This creates a dichotomy between this cultural perception that breastfeeding is natural and should be easy, with the reality of mothers’ experiences of breastfeeding as something that is not always straightforward (Williamson, Leeming, Lyttle & Johnson, 2012). Such expectation of ease acts to isolate and disempower mothers who struggle with breastfeeding (Larsen, Hall & Aargaard, 2008) yet the reality is that many mothers attend drop in clinics with concerns over latching, painful nipples and not knowing whether their baby is getting enough milk (Berridge, McFadden, Abayomi & Topping, 2005). In a cohort of 500 mothers, over half were concerned that through breastfeeding they would not be able to tell if their baby was getting enough milk (PHE, 2017). Problems mothers can face are insufficient milk supply to meet their baby’s needs, difficulties around the delivery of the baby and its current health and ability to breastfeed, alongside implications of maternal obesity and smoking on breastfeeding (Thulier & Mercer, 2009). Mothers with premature babies are also less likely to initiate and successfully achieve exclusive breastfeeding due to the practical difficulties of breastfeeding a premature baby who is often weak and unable to successfully latch and feed for a substantial duration (Rayfield, Oakley & Quigley, 2015).

Many mothers express the importance of social support when breastfeeding. This includes support from their family and friends, their workplace, and health professionals (Thulier & Mercer, 2009). Support from partners is extremely important with some mothers fearing their partners will become less sexually attracted to them if they breastfeed, as a body part that was previous sexualised in their relationships shifts into its functional role (Mathers, Parry & Jones, 2008). This consequently impacts strongly on their breastfeeding behaviour.

Breastfeeding can be a relatively time consuming feeding method especially with babies wanting to feed regularly. As a result, some mothers do not feel they have the time to breastfeed and choose to bottle feed instead (Daly, Pollard, Philips & Binns, 2014). Time can also be problematic when mothers return to work and a key reason why mothers stop breastfeeding (Daly et al, 2014). Evidence suggests nearly one in five mothers felt returning to work impacted on their breastfeeding with over half saying it caused them to stop or cut down (Health and Social Care Information Centre, 2012). One of the reasons for this was being unable to find facilities to express milk at work and the complicated logistics of continuing to breastfeed at work.

Breastfeeding in Public

The Equality Act (2010) states that mothers have the legal right to breastfeed whenever and wherever they choose including all public environments (Government Equalities Office, 2011). This was a significant step as The National Childbirth Trust stated that two thirds of mothers who breastfed find breastfeeding outside the home a stressful experience (National Childbirth Trust, (NCT) 2009).

Across the UK a greater number of mothers bottle feed rather than breastfeed in public (McAndrew et al, 2012). Research into those who have never breastfed in public found that 80% of this group had not wanted to do so or ever tried, but the remaining 20% had wanted to and found a lack of confidence to be the greatest barrier to doing so (McAndrew et al, 2012).

Mothers who successfully breastfed in public are more likely to be mothers aged over 30 years old, with their second or third baby and have a higher socioeconomic status (McAndrew et al, 2012). It has been estimated that as many as 80% of mothers are too embarrassed to breastfeed in public and around 70% worry about being judged by others when breastfeeding (Johnston-Robledo, Wares, Fricker & Parek, 2007). Of a sample of mothers who breastfeed just over half felt uncomfortable breastfeeding in front of others, largely in public but also in their own home in front of relatives (McAndrew et al, 2012). In 2010, 11% of mothers stated that they had been made to feel uncomfortable by others or were asked to stop breastfeeding (McAndrew et al, 2012).

UK Societal Perspectives of Breastfeeding

Recent research into society's perspective of public breastfeeding has revealed that some people view mothers who breastfeed in public as lacking self-respect and as unattractive (Grant, 2016). This illustrates how breastfeeding is a behaviour that deviates

from the expectation of how a woman should conduct herself. Consequently there is a perception that a mother covering herself enables her to maintain her modesty and is the more feminine way to breastfeed rather than fully exposing oneself (Callaghan & Lazard, 2012). Mothers have also been viewed as exhibitionist for engaging in breastfeeding in public (Grant, 2016).

Breasts as a Sexual Object

Grant's (2016) research highlights how breastfeeding is linked to sexuality with breasts perceived as a sexual body part rather than a functional one. This explains in part why mothers feel much more uncomfortable breastfeeding in front of men compared to other women (McAndrew et al, 2012). Indeed, breastfeeding challenges the British perception of women's bodies and the purpose of them, particularly their breasts (Bartlett, 2002a). This sits in contrast to other cultures such as in Mali, West Africa where breasts are perceived as purely functional, having no sexual connotations and breastfeeding being perceived as essential to bonding. This inevitably supports the very high breastfeeding rates they achieve (Stuart-Macadam & Dettwyler, 1995). It has therefore been argued that until Britain shifts its perception of breasts primarily as a sexualised object, mothers will continue to feel uncomfortable breastfeeding in public as it is viewed as an unacceptable and uncomfortable behaviour (Ward, Merriweather & Caruthers, 2006).

Experience of Public Breastfeeding

Although most research suggests mothers find breastfeeding in public a challenge in Britain, there is some evidence to indicate that mothers often find the experience better than anticipated due to high levels of prior anxiety (Boyer, 2012). Some qualitative research has identified that mothers feel embarrassed at the prospect of breastfeeding in public (Scott & Mostyn, 2003; Earle, 2002) which in some instances has led them to feeling they have to choose between either going out or breastfeeding, and consequently find it easier to not initiate or continue breastfeeding (Scott & Mostyn, 2003). Fear of judgement appears to be a further challenge, both in terms of breastfeeding and consequently exposing oneself in public or choosing not to breastfeed and receiving judgement from health professionals (Thompson, Ebisch-Burton & Flacking, 2015). This results in mothers experiencing negative emotions around failure and isolation. An observational study in Bristol explored how breastfeeding can mark a transition between life stages and within this study issues around feeding in front of male family members became apparent (Mahon-Daly & Andrews, 2002). However experiences of public breastfeeding have not been explored in detail,

limiting us from being able to fully understand these practises and provide effective interventions to support them (Spencer, 2008).

Kate Boyer has conducted research exploring public breastfeeding in detail in three mixed methods research papers since 2010. These studies have all been conducted in Southampton focussing on the geographical and spatial element of public breastfeeding. In Boyer's 2010 research paper she seemingly conducted one of the first geographical explorations of breastfeeding in public. This research involved interviewing lactation activists and breastfeeding promoters to explore lactation activism. Alongside this, breastfeeding mothers were also interviewed to better understand their experiences. Within this group of white breastfeeding women, a mixture of attitudes around discretion was apparent. Some mothers believed it was important and tried to ensure they were near feeding rooms when they were likely to need to feed and others not caring about the public (Boyer, 2010). One thing all mothers agreed on was the rarity of seeing women breastfeeding in public. From this research Boyer concluded that to improve breastfeeding rates, spatial norms around the acceptability of breastfeeding needed to change alongside support after leaving hospital when the mother no longer receives intensive support from health professionals. In a further study, Boyer interviewed 11 first time mothers in 2008 to 2009 and supplemented this data with surveys and discussions taking place on 'Mumsnet', a website for parents in the UK hosting discussion forums. Results revealed that many of the mothers experienced discomfort and negative reactions when breastfeeding which Boyer discussed in the context of them failing in their duty of public comfort (Boyer, 2012). Mothers wished they did not care about others and tried not to but felt uncomfortable breastfeeding in public. Their experiences in lactation rooms was explored with some mothers finding them very comfortable and others not enjoying being away from friends or family, or felt the spaces were not comfortable (Boyer, 2012). Boyer concludes that lactation rooms provide a technical fix in hiding mothers away which in some cases makes them and society feel more comfortable yet does little to integrate breastfeeding into society. Utilising what appears to be some of this data alongside more recent posts on Mumsnet, Boyer recently produced a further paper reinforcing the obstacles mothers face publicly breastfeeding (Boyer, 2016). Mothers shared the experience of discomfort they felt breastfeeding in public and explained how they used formula when out the house to avoid discomfort, or decided to no longer breastfeed (Boyer, 2016). Anxiety over public breastfeeding was evident even prior to birth for some mothers, with a fear over becoming upset should anyone say anything.

These three research papers provide some insight into the complexity of mothers' experiences and highlight the need for further in depth research around public breastfeeding. New research is necessary as the interview data dates back to 2008 and

since then the laws around breastfeeding have changed with the introduction of breastfeeding rights in the Equality Act of 2010. Furthermore given mothers' experiences of public breastfeeding have been found to differ depending on the location to which they are breastfeeding within (National Childcare Trust, 2009) research needs to be conducted in demographically different parts of the UK. Currently there is very limited qualitative research on public breastfeeding in London, despite its diversity and size, alongside the large number of mothers, making it a really important area to research in order to better understand mother's experiences in this context. London as the capital of England has a diverse population differing in aspects such as gender, ethnicity, age, socioeconomic position, religion and job status. All of which have been found to influence attitudes towards breastfeeding at some level. For example teenagers have been found to perceive breastfeeding as morally inappropriate (Dyson, Green, Renfrew, McMillan & Woolridge, 2010) and McBride (2010) found that cultural attitudes influence acceptability of breastfeeding. Thus implying that mothers' breastfeeding within London may have to negotiate a greater range of complexities, that mothers within smaller towns or rural areas may experience differently, yet this and any positive or negative impact is not currently well understood. According to the NCT (2009) survey, London was one of the top places where mothers felt most comfortable breastfeeding in public, highlighting the need to understand if this may still be the case, what may be driving this, and whether it may be possible to be replicated in other cities. As location impacts mothers' experiences this suggests that over time, changes in demographics within different locations may also have an impact on mothers' experiences. Conclusions must therefore be drawn from current research that reflects the current society mothers are breastfeeding within.

Furthermore there has been an increased prevalence and presence of public breastfeeding in the media and on social media over the last few years. This is particularly in UK cities and specifically London with one of the most high profile and widely discussed situations being when a breastfeeding mother was asked to stop breastfeeding in Claridge's and the subsequent "nurse in" that took place outside as a protest for what had happened. This makes it is an important time to be understanding mothers' experiences, especially in places like London where negative media coverage is relatively common, and explore whether this is at all impacting on their overall experience. There is a potential risk of people assuming and believing all mothers in the UK are experiencing challenges because of the negative portrayal of breastfeeding in the media.

Having identified the need for further exploratory research into public breastfeeding, the aim of this research was to explore first time mothers' experiences of breastfeeding in the public domain within London. The research question was therefore defined as 'what are mothers' experiences of public breastfeeding within London'. Through this insight we can

increase our understanding of what it is like to breastfeed publicly within London and subsequently enhance our ability to deliver more effective interventions to support mothers when breastfeeding. This in turn would act to improve both physical and mental health outcomes for mothers and their babies (Michie, Atkins & West, 2014).

Reflexivity – Part 1

Reflecting on my contribution to the construction of meaning is essential when conducting qualitative research (Willig, 2008). This is due to the deep personal engagement with the topic and the resulting interpretations likely being influenced at some level by my own personal and professional position.

Alongside the need for further research and understanding around mothers' experiences around public breastfeeding, the decision to conduct this research was reaffirmed by my personal and professional interest around this area and beliefs about the benefits of breastfeeding. I do not have any personal experience of having a child or breastfeeding but having been trained to support mothers and witnessing some of the barriers they face around breastfeeding I strongly believe it is an area we need to provide more support around. I think the difficulties are possibly not always fully understood and often not given enough attention by both professionals and society. As a result campaigns and interventions are often designed by professionals that do not address the wider barriers beyond the individual and therefore are not as successful as they could be. This leads mothers to be unsupported in a behaviour that we want more mothers to engage in to improve health outcomes. I also felt that now was an interesting time to research public breastfeeding, specifically because of the recent increased presence over the past few years that it appears to have gained across the media and social media. This is likely to have had an effect on mothers' experiences that is really important to understand.

My personal position on breastfeeding is that I believe if mothers are able to breastfeed then they should be encouraged and supported to do so, due to the health benefits for both baby and mother. Yet I do not believe breastfeeding makes someone a 'good mother' and feel mothers should not be forced to breastfeed or experience a lot of pressure to do so. There needs to be an equal balance of advice and support from professionals rather than a focus on advising breastfeeding as the best method of feeding. I also strongly feel mothers should not be judged or made to give up breastfeeding because of society making them feel uncomfortable.

Method

i. Design

Qualitative research enables enhanced understanding and insight into the topic of interest (Gilmartin, Long & Soldin, 2013). This is due to the predominant focus on interpretation of phenomena in terms of the meaning these have for those who are experiencing them (Langdrige, 2007) thus focusing on experience rather than testing casual relationships. As a result, qualitative research enables us to access unquantifiable knowledge in an attempt to understand the meaning people place on their everyday lives (Berg & Lune, 2014).

IPA is a qualitative method focused on exploring lived experience and how individuals make sense of such experiences. Its theoretical underpinnings are informed by three key areas of philosophy: phenomenology (Moran, 2000), hermeneutics (Palmer, 1969) and idiography (Smith et al, 1995).

IPA is centred in phenomenology through its concern with examining and reflecting on personal lived experiences, whilst maintaining as much of the participants' view of the phenomenon as possible. Phenomenology, as coined by Edward Husserl, focuses on the relationship between a person's consciousness and the world. It holds the position that people all have their own subjectivity, which is difficult to access externally. However the way consciousness is turned out to the world and the relationship between individuals' consciousness and the world is the basis of phenomenology and IPA, and provides an explanation as to how we can meaningfully access individual experience. Phenomenologists use eidetic reduction in an attempt to recognise the essential components that make a phenomenon unique (Pietkiewicz & Smith, 2014). Traditional phenomenological approaches, such as those of Husserl, stress the importance of adopting the epoché and thus bracketing one's own perceptions to avoid these from impacting on the interpretation of participants' experiences.

Heidegger built upon the hermeneutic tradition through the perception that we are inseparable from the world we live within making it challenging to completely bracket off our own perceptions. IPA adopts this approach of hermeneutics, the theory of interpretation, in appreciating that the researcher is highly influential in the analytical process due to this inability to gain direct access to one's experiences as well as the subsequent interpretation required to analyse the meaning participants ascribe to their experiences (Willig, 2001). IPA's interpretative stance enables the researcher to produce a theoretical framework that may exceed the participant's own conceptualisations (Smith, 2004) whilst still maintaining

what is perceived to be their perspective by ensuring analyses remain grounded in the data. IPA therefore considers phenomenology to be connected to hermeneutics as it attempts to get as close as possible to the individual's personal experience whilst also making sense of that experience through interpretation (Smith et al, 2009). The researcher's active interpretation results in a double hermeneutic whereby the researcher is attempting to make sense of the participant who is in turn making sense of their own world (Smith & Osborn, 2003). Underpinning this methodology there is a need for acceptance of language being the medium to which all interpretative understanding of existence comes through (Langdridge, 2007), with interpretations being dependent on participants' ability to articulate their thoughts and experiences (Baillie, Smith, Hewison, & Mason, 2000). As researchers are not always consciously aware of the influence their attitudes and perceptions have on their interpretations, reflexivity is an extremely important part of the analysis process (Brocki & Wearden, 2006).

IPA's ideographic nature is evident from its examination of the individual rather than large groups aiming to develop widely applicable theories. However, it has long been believed that through greater in depth understanding of the individual, we can get closer to the universal, through individuals' experiences illuminating and affirming arising themes (Warnock, 1987). Even though overarching themes are produced to encapsulate as much of the data as possible, IPA's ideographic stance requires the identity of individuals' accounts to be maintained as much as possible and convergences and divergences to be identified. This is also ensured through IPA's focus on exploring individuals' experiences of phenomena before generating overarching themes.

Research questions centred on experience are most appropriately explored and answered through the use of phenomenological research methods (Willing, 2008). Due to the identified need to enhance understanding of how mothers themselves experience breastfeeding in public, IPA was deemed the most suitable qualitative research method. This was as a result of its focus on the detailed examination of human lived experience and expressing these as much as possible in the participant's terms (Smith, Flowers & Larkin, 2009). Hermeneutic phenomenological approaches have also been identified as one of the best suited methods for researching mothers' experiences of breastfeeding (Spencer, 2008), making it the most appropriate method to meet the identified needs and aims of the research.

Thematic Analysis, which aims to identify, analyse and report patterns within data (Braun & Blarke, 2006), bears similarities with IPA but predominantly lacks the interpretation. Furthermore there is limited agreement around what Thematic Analysis is and how it is performed (Braun & Blarke, 2006), making it a less vigorously sound research method. Grounded Theory, a method for the discovery of theory from data (Glaser & Strauss, 1967)

is based on the premise that meaning is negotiated and understood by individuals interacting in social processes (Jeon, 2004). It was also discounted due to the aim not being to create a theory around public breastfeeding but rather to explore experiences. Lastly Foucauldian Discourse Analysis which involves examining how language shapes and reflects societal practices (Gee, 2005) was considered an inappropriate method for this research question due to its focus on language rather than making sense of experience. Within this context it was felt this method may be more appropriate for research exploring the societal discourses around breastfeeding.

The epistemological position taken in this research was that to which could be most closely associated with critical realism. Therefore the position taken was not that of pure social constructivism whereby reality is entirely negotiated within the context of social interaction. Rather the assumption that there is one reality that can give rise to different perspectives and interpretations (Marks, Murray, Evans & Vida Estacio, 2011), was favoured. Language is considered a tool by which we can share knowledge and experiences of reality, hence the benefit and decision to conduct interviews. An extreme critical realist perspective was however not adopted because it was accepted that although language can provide great insight and arguably the best insight we can access, it cannot provide direct access to reality or one's entire experiences of reality, meaning a level of interpretation is required. Analysing both the descriptive and linguistic content of the interviews was considered important during the analysis to provide as much insight as feasibly possible. Engaging in this level of interpretation requires the acceptance that the researcher will bring some of their own preconceptions and views to the analysis. Acceptance around a level of interpretation being required for analysis is a further reason as to why IPA was considered the most suitable method to answer the specified research question.

ii. Participants

Seven first time adult mothers with a child aged between 0-12 months were recruited for participation. They were required to have at least one experience, and ideally more, of breastfeeding in public anywhere in London. Mothers with minimal experience were deemed appropriate to be included because mothers may have only breastfed in public once or twice but had a significant experience during those times. Southwark was chosen as the area to recruit from due to it being an ethnically diverse borough and one of the more deprived boroughs in London (Southwark Council, 2015). This was important due to the desire to research the impact diversity within London has on breastfeeding mothers.

Therefore recruiting from a diverse area would increase the chances of being able to explore this. Furthermore the decision was made to recruit from a GP surgery, rather than a breastfeeding group in one of the most deprived areas within Southwark in order to increase the diversity of mothers recruited. Also to increase the chance of recruiting mothers who are less well represented in breastfeeding research, such as those of a lower socioeconomic status.

A smaller group of participants are considered appropriate for IPA due to its idiographic approach of providing detailed interpretations of participants' experiences (Smith et al, 2009). Therefore a sample of seven mothers was chosen. This is also within the range recommended by Smith et al (2009) for doctoral research and is an appropriate number in order to maintain individuality whilst obtaining enough data in order to meaningfully compare and contrast attitudes (Smith et al, 2009).

One of the exclusion criteria was mothers with a baby over 12 months old. If mothers are continuing to breastfeeding at this point it moves into what is viewed as extended breastfeeding. This has different connotations (Colletto, 1998) to which this research did not aim to explore. Mothers have also expressed feeling more uncomfortable breastfeeding an older child due to the attention it may bring (Choo & Ryan, 2016). This would therefore suggest it may have a significant impact on their experiences and would benefit from being researched as a separate entity. Being a first time mother and currently having a child under 12 months is also considered important as the research aims to explore mothers' current experiences rather than their retrospective experiences. This ensures the findings are as up to date and relevant as possible to breastfeeding in London at the present time.

Mothers were required to have a substantial grasp of the English language to the point they fully understood what they are consenting to and could understand and engage with the researcher during the interview as unfortunately, access to interpreters was not possible. Furthermore due to language being the tool to which interpretations are based upon, translation into English can result in a loss of meaning. This could negatively impact the conclusions drawn and the validity of the research (Van Ness, Abma, Jonsson & Deeg, 2010). No other selection criteria were applied but aspects such as ethnicity, age and education were recorded (Table 1).

Participant Profile

All mothers were aged between 31-40 years with an average age of 36 years. Their babies ranged from 2-10 months old with an average age of 6 months. The majority of mothers were married, educated to degree level and in employment but currently on maternity leave. Mothers all lived in South East London but had varying nationalities.

Diversity is important due to the inequalities between mothers of different nationalities being identified as a barrier to breastfeeding, which needs improving particularly in London (PHE, 2013). A homogenous group was purposefully chosen as it enables deep and rich data to be collected in order to answer the specific research question (Kuzel, 1999).

Table 1:

Summary of participant demographics

Name	Age (yrs)	Age of Baby (months)	Ethnicity	Marital Status	Level of Education	Employment Status	Breastfeeding Status
Adia	31	2	Black, African	Single	University	Employed	Mixed Feeding
Karolina	33	6	White European, Polish	Married	University	Employed	Mixed Feeding
Gabriela	40	7	White, Brazilian	Married	University	Employed	Breastfeeding
Sophie	39	3	White European, French	Married	University	Employed	Mixed Feeding
Hettie	36	9	White, South African	Married	University	Employed	Breastfeeding
Ava	34	4	Mixed Ethnic Group	Married	GCSE	Employed	Breastfeeding
Olivia	38	10	White, British	Married	University	Employed	Breastfeeding

iii. Procedure

The GP surgery utilised to recruit mothers is centred in one of the most deprived areas of Southwark. Mothers were recruited using criterion sampling through the Health Visitor and one General Practitioner. The Health Visitor and General Practitioner identified mothers who met the criteria and asked them to complete an expression of interest form if interested in taking part (Appendix A). This was passed on to the researcher who made contact with the mothers providing further information about the research, what it would involve and ensuring they met the inclusion criteria. If they remained interested they were emailed the information sheet (Appendix B) and consent form (Appendix C) and a time arranged to meet for an interview. There was no reimbursement of money spent on travel or any incentives provided for participation.

Interview schedule

An interview guide was developed with open ended questions intending to illicit a broad conversation with mothers' around their experiences of breastfeeding in public (Appendix D). The interview began with a question about mothers' experiences of breastfeeding in general. This was intended as an open question to begin building a rapport between interviewee and interviewer and ease the interviewee into the interview. Probing questions were utilised in order to enhance understanding into what mothers meant by what they said or to gain further information about a particular comment. The interview guide was very much used as specified, with each interview covering the main questions but often in varying orders. The guide was utilised as more of a tool for the researcher to occasionally turn to in order to ensure all questions considered beneficial had been asked. This was important in order to allow for the participant to explore and share what was significant to them about their experiences rather than what the interviewer wished to discuss. A pilot interview was undertaken to determine the effectiveness of the interview guide. Due to the quality of the pilot interview no changes were made to the interview guide.

Interview Process

Upon agreeing to participate an interview date, time and location was agreed over the phone. Where possible interviews were conducted in the GP surgery. However because mothers may have needed to bring along their babies to the interviews and possibly even breastfeed, the interviewer was flexible in agreeing a location that suited the mother. Some interviews were conducted in mothers' homes, a rented room in a local library or a private room at the GP surgery. The interviewer also aimed to be as flexible as possible around the time of day although evenings and weekends were preferred. Before beginning the interview the information sheet was discussed and the consent form signed along with the additional information form being completed (Appendix E). During the interview if a baby was present the researcher allowed the mother time to tend to her baby's needs at any point throughout the interview. After the interview there was time for any further questions to be asked and the debrief sheet was provided (Appendix F). Interviews varied in duration from around 45 minutes to an hour and a half.

iv. Ethical Considerations

Ethical approval was obtained from the National Childbirth Trust but the decision was made to seek NHS ethical approval and recruit through the NHS in an attempt to increase the diversity of mothers recruited and a more representative sample of women living within Southwark.

Ethical approval was obtained from the London Metropolitan University Ethics Research Committee (Appendix G) prior to study commencement. Since participants were recruited from within a National Health Service (NHS) GP surgery NHS Ethical approval was also obtained (Appendix H) and written confirmation received from the GP surgery that they were willing to let the researcher recruit their patients (Appendix I).

Information sheets (Appendix B) and consent forms (Appendix C) were provided prior to participants taking part in the study. These were received in advance of the interview allowing participants time to properly read the information provided. The consent form was reviewed and signed at the beginning of the interview. As requested by the NHS Ethics board, participants had to confirm their acceptance of the interview being audio recorded within the consent form. Participants were reminded they could withdraw from the research up until one month after interview. After completion of the interview participants were provided with a debrief sheet which contained sources for further support and a discussion was had around this (Appendix F).

Transcribed data was stored on a password protected PC with any identifiable participant information such as names and personal details stored separately from interview data. When analysing the data and writing up the analysis all participants' data was anonymised through the use of pseudonyms and attempts have been made to limit information shared to minimise the chance of mothers being identifiable. Any identifiable printed information such as consent forms were stored in a locked cabinet to which only the researcher had access to. Once no longer required, consent forms and data were shredded and will be deleted from the PC.

v. Analysis

Data was analysed with reference to Smith et al's (2009) guidelines, consisting of the individual analysis of transcripts prior to collating themes across transcripts. After all interviews were transcribed verbatim, the first transcript was read multiple times enabling the researcher to fully embed oneself within the data prior to beginning any written analysis.

This was especially important due to time lapses between when the interview was conducted, transcribed and analysed. Initial thoughts and anything of semantic or linguistic relevance was written on the transcript in order to capture the researcher's understanding and interpretations of the data. This information was subsequently used to develop themes which summarised the essence of the interview content. These themes represented a synergistic process of both description and interpretation. Upon completion of this step, all themes from the initial transcript were collated and connections established. This enabled the themes to be organised into smaller related groups. Any themes that had weak evidence were provisionally dropped at this point in the analysis. This entire process was then repeated with the other six transcripts. When analysing new transcripts conscious attempts were made to ensure existing themes did not impede the development of new themes arising (Smith & Osborn, 2003). However, themes that had previously effectively explained the individual's experience were utilised where relevant. Once themes from each transcript were developed, an extensive process of attempting to collate and draw comparisons between all themes began. Themes within and across transcripts were collated in order to produce a smaller number of subthemes and superordinate themes. Similar to the initial grouping of themes, themes were grouped based upon their resemblance. This final stage consisted of a number of iterations to the superordinate and subthemes until the researcher felt confident the themes were representative of the mothers' experiences. Throughout the analysis process the researcher engaged in supervision to discuss the development of the themes and to ensure the interpretations remained grounded in the data. Writing a brief summary of each interview after analysing it also enabled the researcher to ensure the essence of the data and individuality was not lost when combining themes across transcripts.

Results

Table 1:

Summary of themes

Superordinate Themes	Sub Themes	Illustrative Quotes
1. Societal Attitudes as Ostracising	Breastfeeding as a Taboo	<i>"It's just, it's not sexual, it's just...it's just her feeds" (Gabriela, p. 1; line 33)</i>
	The Unwritten Rule of Concealment	<i>"I'm having a quick look at it. And I remember at that time I said, "I...I shouldn't...uh, I don't feel I should cover up to breastfeed." And so I know that I didn't buy any of those horrible things. But then when I had to do it in the public, I thought I don't...I shouldn't have to cover up but I'm going to do it just so as to...to not disturb other people around me. So perhaps, the fact that I knew that those horrible scarves existed gave me the idea that it's something you're supposed to do." (Sophie, p. 10; line 412)</i>
	Discomfort in Visibility	<i>"I have to say, I was always feeling most comfortable when I had a sort of kind of...when I was able to sit somewhere in a corner where nobody was kind of noticing. At least not straight away." (Karolina, p. 1; line 26)</i>
	Need for Protection from Society	<i>"And my husband was like more supportive as well. He's like, "Well, if anyone says anything then I'll tell them." (Laughter) So now I don't care, I'll do it anywhere." (Ava, p. 1; line 39)</i>
2. Becoming a Nursing Mother	Determination to Breastfeed Superseding Challenges	<i>"I always made...wanted for sure like to...to make sure that I uh I had to do and I wanted to do so I would...I didn't want to...to don't do because of other people and how they would. I...I wanted to make sure, no, no." (Gabriela, p. 1; line 28)</i>
	Confidence as a Process	<i>"Yes. I think with the second one I will have a little bit more confidence. With the first one you don't know what to expect. You don't know how to behave." (Karolina, p. 5; line 211)</i>
	Identifying with Other Breastfeeding Mothers	<i>"Um...and when I see someone breastfeeding, like really breastfeeding in public today I feel happy. I feel like...oh that's good. Someone that is similar to me and is in the same situation. Yeah, it's a good example." (Gabriela, p. 18; line 764)</i>

This study set out to explore mothers' experiences of breastfeeding in public using IPA. Two themes emerged from the data which were 'societal attitudes as ostracising' and 'becoming a nursing mother'. For all these mothers, their experiences of publicly

breastfeeding appear to be strongly impacted by societal expectations of how women should conduct themselves in the presence of others. Mothers express a strong transference from society that breastfeeding is something that is largely unacceptable in the public domain and therefore should be concealed through the mother covering herself or placing herself in 'corners' when breastfeeding. This is likely to be as a result of the sexual objectification of breasts, making exposure of them something that society feels uncomfortable with in social situations. The sexual objectification that is also internalised within these mothers results in apprehension and discomfort when having to feed in public and therefore expose the breast. This exists alongside frustration and anger at society's inability to perceive the breast as a functional body part and breastfeeding as a natural behaviour. The pressure to conform to society's expectations of how women should behave often results in submission into concealing the breast and positioning oneself in private areas for the purpose of ease and due to a lack of confidence and energy to challenge this. This demonstrates the power and control society's implicit perceptions and expectations have on these mothers' experiences of publicly breastfeeding. The level of unacceptance mothers believe society holds for public breastfeeding is illustrated by the strong sense that they need their partners there to protect them from any negativity they are likely to receive.

When beginning to breastfeed, mothers are in a very challenging period whereby they are having to adapt to their new identity as a nursing mother and all the emotional and physical change that entails. This appears to be particularly difficult for first time mothers who are initiating and attempting to establish breastfeeding alongside determining how to breastfeed in public. Their strong determination to breastfeed their baby was evident through their tendency to downplay the negative aspects, such as the discomfort they frequently face, and focus on the needs of their baby and the benefits breastfeeding could provide. This group of women were resilient enough to face and manage the adversity they faced from society and continue to meet their intentions of breastfeeding. Experience appeared to be a strong influencer on how comfortable these mothers felt breastfeeding in public. Furthermore being able to identify with other likeminded breastfeeding mothers seems to be empowering, providing them with reassurance that there are other people like themselves. This makes the mothers feel less alone and minimises in some sense the impact of the societal ostracism and isolation they face from society, for choosing to breastfeed publicly.

1. Societal Attitudes as Ostracising

i. Breastfeeding as a Taboo

These mothers hold strong perceptions that society view breastfeeding as a taboo which is not accepted as a normalised behaviour. This illustrates the power of societal perceptions in being able to turn a natural behaviour into a taboo and strongly impact on mothers' comfort in engaging in a natural mammalian behaviour. From the mothers' point of view, the level of taboo appears to be exacerbated within men, different cultures and religions and within business people. One of the many implications of these mothers not conforming to societal expectations of appropriate behaviour, is mothers themselves feeling uncomfortable as if they are engaging in something they should not be. This results in a sense of needing to explain and defend their breastfeeding behaviour:

"It's just, it's not sexual, it's just...it's just her feeds" (Gabriela, p. 1; line 33)

Mothers appearing to feel the need to attempt to explain and normalise their behaviour as natural likely results from women's breasts and nipples, unlike men's, appearing to hold a level of taboo in British society. There is a sense that within British society breasts are perceived in a sexual nature, therefore making people uncomfortable and judgemental at the use of them in public to meet a child's basic needs. This is highlighted by one mother who had grown up outside of British culture and could provide some perspective on differences between societies attitudes:

"I felt the English, they're really uncomfortable with boobs and pussies and stuff like that." (Sophie, p. 6; line 238)

Sophie when talking about her experience of making someone uncomfortable discussed in depth the contrast between how breasts are perceived in Britain compared to France and highlighted the discomfort the British have with nudity. This implies that the struggles mothers face around public breastfeeding are strongly driven by cultural principles. Within British culture breasts are rarely exposed and when they are, it is often in a sexualised nature leading to a societal discomfort surrounding them. Breasts are perceived to be something reserved for intimacy and pleasure rather than being associated with their primary functional purpose, to feed a child. For these mothers, their perceptions of their breasts differs from society's, as illustrated by their confusion as to why societal discomfort with breastfeeding exists when it is a behaviour that has been in existence for many years:

“I did think about it a lot when I was pregnant. Um. I did think, “What am I going to do?” But then after, I was like, actually you know people have been doing it for years and years and years. I don’t think...see why it’s such a big thing now.” (Ava, p. 5; line 171)

“But yeah, it’s...it’s a strange one. You think with something so natural that it wouldn’t bother people. But yeah, I don’t understand it.” (Olivia, p. 4; line 176)

Confusion evidently exists for these mothers around why the historical prevalence and existence of breastfeeding across mammalian species has not resulted in normalisation of the behaviour. Societal defined perceptions clearly have a much more powerful influence over human nature. Behaviours that have been in existence since the beginnings of mammalian life are easily altered by how society thinks and feels about that behaviour. The dichotomy between mothers’ perceptions of the breast to feed their baby and meet their needs as well as society’s perceptions of the breast as an intimate body part appears to result in some mothers feeling frustrated with the inability of others to perceive the breast in a similar way:

“You feel a bit sometimes like if somebody went in there with a baby, and got out a bottle and fed them, really, nobody would bat an eyelid. But why should breastfeeding be any different? As long as the baby is being fed at the end of the day, surely that’s the most important thing. It would be nice not to be judged.” (Olivia, p. 19; line 824)

Olivia’s frustration at the inability of others to see beyond the visual perceptions of feeding choice to the resulting outcome of the baby’s needs being met is evident. As Olivia highlights, societal perceptions are warped to the point they make no logical sense and instead leave mothers questioning why they are being judged for being a responsible and attentive mother. It is evident that level of judgement has a substantial impact on Olivia and creates a sense of feeling inferior to bottle feeding mothers. Through this comment, Olivia also highlights the importance British society places on perceptions, with breastfeeding not being as socially acceptable as bottle feeding. This can only be a result of the method that the baby receives milk, and exposing a breast for a baby to feed from does not align with the perceptions of how women should conduct themselves in public. Society’s obsession with perceptions is reiterated through Karolina’s perceived sense that breastfeeding is an unfashionable behaviour:

“And also, I think uh it is such a nowadays...it is such um uh important for young people to make a good impression to look good, to be so cool and that's why a picture of a women who's having to sit down and breastfeed is kind of out of fashion. And I think...I think so it is important I think it's very important that um that I don't feel that I'm kind of um odd.” (Karolina, p. 15; line 602)

Karolina explains how breastfeeding does not fit in with the current idealised identity within society. Her references to fashion can be interpreted to portray the pressure on women to meet certain visual expectations and to be aesthetically pleasing. Karolina as a breastfeeding mother appears to feel a disconnection with these female ideals and consequently must fight the high probability of being ostracised for this. This demonstrates the pressure placed on women and the enhanced pressure on women like breastfeeding mothers, who do not adhere to societal ideals of the female identity. It is no surprise mothers then feel uncomfortable breastfeeding in public due to engaging in a behaviour that deviates from what is considered normal:

“Yeah, you feel a little bit sheepish I guess sitting there breastfeeding.” (Hettie, p. 11; line 458)

The internalisation of the societal perception of breasts as a sexual body part is illustrated by Hettie's discomfort in breastfeeding her baby with her breast. Her reference to 'sheepish' signifies the sense of shame she feels for engaging in such behaviour in public, as she appears to have internalised the belief it is an inappropriate behaviour thus making her feel uncomfortable breastfeeding in the presence of others. This discomfort is something which was evident across all mothers.

One group of people that the majority of the mothers identified as lacking such understanding of breastfeeding were men, unless they were fathers themselves. This often resulted in mothers feeling uncomfortable breastfeeding in their presence:

“I think it very much depends on the attitude of the other people. For example there are some people that make me feel more comfortable, and there was such a case when I felt I should go next door, especially men. I think women were always kind of very understanding.” (Karolina, p. 2; line 57)

Karolina implies that men do not understand or respect breastfeeding for the functional behaviour it is. Karolina's immediate belief that she should be the one to go next door, even in her own home, demonstrates the respect she has for men over herself. Men's inability to

understand results in her needing to alter her behaviour and instead breastfeed in privacy in order for her to be able to achieve any level of comfort. The importance a number of these mothers placed on concealing the behaviour around men was reiterated by Hettie, who felt it appropriate to cover her breasts when feeding to ensure the comfort of men in her company was not compromised:

“A sense of showing...um, respecting that if there were men that might not be comfortable with that I think.” (Hettie, p. 3; line 86)

Men’s lack of understanding and mothers’ desire to ensure both the comfort of themselves and men in their presence can seemingly make breastfeeding in front of others a challenge to begin with:

“Well, I suppose, initially the things going through my mind were you know, if they were friends who were boys, it's like you know... (whispering) they don't want to see my boobs, that's weird. But um you know, they're not...they're boys that are friends of girls that I know, or husbands or boyfriends of girls that I know. So, it's not like they're looking at...they're not looking at that. They're not ogling me when I'm trying to feed her. It's urr...you have to realise that I suppose, it's...and it didn't take me too long with, yeah, close friends.” (Olivia, p. 8; line 361)

Olivia’s whispering highlights her discomfort even talking about her male friends seeing her breasts. This, alongside the perception that it would be weird for her male friends to see her breasts signifies her association with her breasts as an intimate body part that they, as friends, should not be seeing. This may provide some explanation to why Olivia compared to the other mothers experienced greater discomfort publicly breastfeeding. Olivia seems to gain reassurance from the fact her male friends have partners, implying they would not be using her breastfeeding as an opportunity to look at her breasts in a sexual manner. Olivia’s use of the terms ‘boys’ and ‘girls’ acts to dissociate these individuals from their adult status, by which they would be more likely to have greater levels of maturity and understand and accept breastfeeding as a functional behaviour. Instead it associates these individuals more closely with younger less mature individuals who are more likely to be unable to move beyond the perception of breasts as a sexual body part. Olivia proceeds to address the process she needed to go through to understand how these male friends would perceive her breastfeeding and feel reassured that they would not be looking at her in a sexual way. This implies the need for the mother to dissociate at some level from the sexual and

resulting societal connotations of it as a taboo. This process can result in some initial confusion:

“But, um, I would say for instance the brother-in-law of my boyfriend, yes. I don’t mind but I know it can be...it could be awkward. It’s not because.... I don’t know how it’s not...I don’t know how it works.... I don’t know why I had the feeling it could be awkward and it’s not.” (Sophie, p. 3; line 128)

Sophie’s confusion around why she initially felt it would be awkward but it is not can be understood by the clash between societal perceptions making her believe it would be awkward exposing herself in front of her brother-in-law and the reality of breastfeeding as a normalised behaviour enabling her to feed her baby. Once breastfeeding, Sophie appears to perceive the behaviour at a more functional level of meeting her babies needs, minimising the level of awkwardness she feels. For improvements in the perceptions of breastfeeding, there is a sense that society needs to transition through the same process mothers do upon initiating breastfeeding and consequently reframe the meaning of breasts by simply understanding breastfeeding:

“I think it’s a process, the same as uh as it was process for me to feel more encouraged, I think it’s a process for the society to get used to that and to understand this is a natural thing.” (Karolina, p. 16; line 664)

Through referring to the cultural change required in society Karolina’s use of process highlights the multiple stages and levels to which society needs to travel through, in order to understand and accept breastfeeding. Thus implying change will be gradual and take some time.

Culture and religion also appear to be variables that these mothers perceive to influence the acceptability of breastfeeding as a natural behaviour rather than a taboo. Diversity and the convergence of multiple cultures and religions, which is pertinent to London being an ethnically diverse community, appears to create some anxiety since mothers perceive that breastfeeding holds different perceptions within different demographic groups. Sophie experiences her colleague questioning whether public breast feeding is allowed and appears to attempt to understand why he doubted its acceptability:

“I thought that perhaps he had been influenced by, um, by the Pakistani culture at home rather than, um, England. I don’t know how long he’s lived in England.” (Sophie, p. 5; line 186)

Sophie attributes her colleague's questioning whether public breast feeding is allowed down to his culture. This illustrates her perception of culture driving the acceptability of the behaviour. Understanding how culture and religion can influence acceptability of breastfeeding appears to make mothers more aware and considerate of how exposing a naked breast might make others feel. It does however also appear to instil a level of fear, particularly for one mother:

"I think specially, um, I guess with rel-...the mix of religions as well in terms of how much flesh to bare and things like that and they're opposed to breastfeeding as well. Um, so in certain areas in London there's no way I'll breastfeed for example, um, for those reasons because you don't know what the backlash would be for example. Um, so that's a tricky one." (Hettie, p. 13; line 539)

Hettie's fear of how certain religions may react to breastfeeding is shown by her level of determination never to breastfeed in certain pre-defined areas where there is a mix of religions. Her concern over a 'backlash' indicates the level of fear she has for her safety when breastfeeding around individuals identifying with certain religions. This fear is something which is very likely to have been driven by the generalised assumptions society formulates of certain religious groups.

Concern over how to behave in line with societal norms and expectations appears to be exacerbated for mothers who were not born within the UK:

"This friend, she was just...she is also Brazilian and she...she lives here and she was saying that in the beginning when it's been a while that I haven't met her but in the beginning, she said, well, in the beginning I was a bit concerned here as well, because I know that in Brazil...if I was in Brazil I would have no problems taking my breast out and feeding him. But here in the beginning I...I didn't know what I could do. So she was just also concerned." (Gabriela, p. 15; line 641)

Gabriela identifies her experience with the uncertainty and isolation her Brazilian friend felt as a result of the different culturally defined perceptions of breastfeeding behaviour. This illustrates the challenge mothers face when moving into London and attempting to determine the cultural acceptability of public breastfeeding and align their behaviour with cultural norms. Maintaining one's own cultural perceptions and behaviours which differ from 'British Rules' can result in mothers feeling like an outsider and distinctly different:

“Well since I’m...I’m still a kind of outsider, um, I’m trying to integrate, but there is still one part of me that is foreign and that will maintain because I grew up in France. So people will always regard me as a little bit outside and so I can get away with stuff, uh, kind of. So very often I just, like if I do something a bit weird, I can just say, “French people do that.” (Laughter) Which is very often true. But I mean I could almost use it if I want...if I just wanted to just be weird, you know. (Laughter) So there’s this thing where I...I feel less pressure or perhaps the...perhaps the...the pressure that just comes from certain parts of British Society, I feel it less because...because I don’t...I don’t feel that I’m expected to abide by those rules.” (Sophie, p. 6; line 259)

It is apparent that the cultural differences Sophie is referring to impact on her emotionally, from her use of the word outsider and her ongoing attempts to integrate. She appears to perceive herself as someone who sits outside societal norms, which can be a position of isolation and vulnerability. Furthermore, her attempt at using humour when discussing her isolation attempts to minimise any display of emotion around the topic. However she appears to attempt to downplay the impact feeling isolated has by focusing on the benefits of being an ‘outsider’ and the resulting freedom she feels from the British rules surrounding breastfeeding.

For some of the mothers, their vulnerability and discomfort appears to be enhanced when in the presence of business people engaging in work related tasks:

“We were just all of us breastfeeding at that time a little kind of place, so that's why it was a completely different situation, all of us we were feeling much more comfortable than in a place where people are just coming, some maybe coming to talk about business, when you are sitting next to them breastfeeding which was certainly a difficult situation.” (Karolina, p. 9; line 378)

“Um, oh, for example, in the beginning when we flew from City airport I know there’s a lot of business people there. Um, I actually fed him formula just before we flew because I wanted to feed him. Um, I wasn’t comfortable enough to feed there” (Hettie, p. 4; line 136)

Both mothers expressed their discomfort when in the presence of business people which led to Hettie being unable to breastfeed. Karolina’s reference to feeling more comfortable in the presence of others engaging in the same behaviour rather than business people could be understood by considering the unity between mothers and divergence between business people. Mothers perceive themselves as breastfeeding mothers feeding their babies as

distinctly different from a business individual at work, doing important business. Therefore there is no connection and mutual respect between the two. Such perceptual divergence may exist from the traditional gender role ideology of women as child bearers and men as the providers for their family, with the two being kept at substantial distance and withholding different levels of respect and authority from society. The disconnect mothers feel and the level of taboo around breastfeeding and work is made apparent by Adia's questioning around whether offices even accept breastfeeding:

"I don't think it's right for anybody to restrict you from doing that. But I don't know about offices. I don't know about offices. I think they don't have to even stop you from doing that provided you get a place where you can sit. Of course, you can go and sit by the receptionist down there. And then say that you're breastfeeding. If you sat there to breastfeed probably you have to like you're facing this way, you have to face the wall and then breastfeed the baby." (Adia, p. 16; line 701)

Adia's perception of having to hide in a corner and face the wall like a misbehaving child illustrates the divergence between breastfeeding and work. It is as if breastfeeding in the workplace is unacceptable and something one should be ashamed of and attempt to hide. For Gabriela, this disparity appears to provide justification for why her male manager is not openly accepting of public breastfeeding:

"So I was, uh, speaking to the head chef and I was...I was telling him well that's...that's ridiculous, how...how did that happen? She was just...and he said well, there's different um, there are different points of view, something like that. So he was, and...and I think he was like, um, agreeing with restaurant actually or the hotel, uh, rather than with the woman that was asked to cover herself."

"So in...in this sense, I would say no. He...he...I don't feel him very supportive, but he's just one person and he's...he's my head chef (laugh) so I don't have to expect this from him. (Laughs)" (Gabriela, p. 4; line 134)

Gabriela's repetition of 'he' acts to highlight the role his gender plays in his negative perceptions of public breastfeeding and the resulting level of understanding and support he has for breastfeeding mothers. As he is her boss, it is as if this position negates him from being understanding and supportive thus further illustrating the divergence between work and one's personal life.

Society which subjects mothers to feel they are engaging in an un-natural taboo behaviour results in the majority of these mothers experiencing a sense of unease and hypervigilance when breastfeeding in public:

"I'm always prepared to...for a crazy person just come to me and say oh, you're not uh, can you please...if someone ask me to cover or to tell me that I can't do, I'm just...I'm always expecting this kind of, so I'm always aware." (Gabriela, p. 5; line 205)

Their concern prior to breastfeeding is heightened to the extent that some mothers appear to be surprised and consider themselves 'lucky' as a result of their experiences once breastfeeding in public:

"They don't...I think I was worried about how people would react and actually they've all been fine" (Olivia, p. 14; line 622)

"I was lucky I never got any...any, as I said no negative comments in a...in a café or...Um, no one looked at me and you know, or rolled their eyes or.... I never...I never got this so." (Sophie, p. 7; line 311)

As illustrated by Sophie, mothers deemed themselves lucky for not receiving any negative reactions, highlighting the low-level expectations they hold of the society in which they live. There appears to be a strong prior expectation that their decision to breastfeed in public will be met with considerable disapproval illustrating how society has instilled that belief in them. These attitudes that society holds are very influential to mothers' experiences:

"Being comfortable is a challenge. Yeah, I think. It is important because if society more relaxed then it doesn't really matter where you are sitting and who you are with. And whether it's a restaurant, a café or at a train station. Uh, it is all about the other people." (Karolina, p. 16; line 657)

Karolina, alongside all the other mothers evidently finds being comfortable when publicly breastfeeding a challenge primarily because of the powerful influence society has in ostracising the behaviour. Therefore in order for things to improve, society needs to alter the level of taboo that it holds against breastfeeding and enable mothers to feel comfortable with the behaviour instead of being made to feel they are engaging in an inappropriate behaviour. This would remove the evident ostracism and disconnection they feel with the

wider public and support them to feel more integrated, particularly mothers who are less familiar with British culture.

ii. The Unwritten Rule of Concealment

Mothers highlighted the sense of expectation they feel from society to conceal the breast when publicly breastfeeding and to place themselves appropriately in public environments. This creates significant frustrations for some mothers, especially around feeding rooms, perceiving these as an indicator that they should be breastfeeding in a separate room. However, attempting to challenge the unwritten rule around concealing breastfeeding in the hope of altering societal perceptions and normalising breastfeeding requires too much energy. Mothers instead find it easier to cover themselves or seek privacy wherever possible when breastfeeding in public, even though they know and feel disgruntled by the fact this reinforces the stigma and taboo around breastfeeding.

For the majority of the breastfeeding mothers, covering themselves whilst feeding in public is something they appear to feel is expected of them:

“I think there...there was one instance where I could say that I was expected to cover up and it’s, um, one day I had forgotten the muslins. And, uh, then she got hungry like I had gone shopping and it took much longer than I should have, as I always do. (Chuckles) Um, so I went to a Starbucks to have a tea and breastfeed. And I told the guy behind the counter after ordering my tea, um, “I need to breastfeed my daughter and I forgot my muslin. I’m fine with it, but if you don’t want...if you think it’s going to disturb the other customers, can you lend me some a tea towel or whatever?” A clean one. And the guy thought a little bit and then he was, “Let me give you my apron.” So he gave me his Starbucks apron. (Laughter) And, uh, and I breastfed under the Starbucks apron...I found it kind of nice because he offers help. But at the same time it reinforces the idea that a woman should cover up when she is breastfeeding in public.” (Sophie, p. 7; line 315)

The employee in the coffee shop providing Sophie with an apron signifies to her his concerns over disturbing his customers. Even though Sophie evidently felt comfortable with not covering when in public, by seeking permission this implies some level of expectation that one should ask. The staff member reinforces that breastfeeding is a taboo behaviour that should be concealed to respect others and the situation highlights the power and influence of the expectations that society has created. This is further reinforced by the fact

a number of mothers feel uncertain about whether they are even allowed to breastfeed in public:

“I’ve never investigated that myself what my rights are and if somebody told me, oh you cannot actually breastfeed here. I would think okay, probably I cannot.” (Karolina, p. 16; line 678)

“Just after when I started, I was a little bit, hold on nobody told me. Can I...can I just breastfeed in public? And then, I had to...to Google, uh, that’s what happened, actually.” (Gabriela, p. 4; line 164)

For Karolina she has clearly been made to doubt her freedom to feed her child in public to the point that she would accept someone telling her to stop or move elsewhere. Gabriela similarly questioned herself and whether she was able to breastfeed in public, needing to seek reassurance from the internet. Doubting their right to breastfeed clarifies the impact the implicit societal rules have over the law around public breastfeeding. For one mother, it appears the internalisation of the expectation to cover oneself is so great that she believes it completely unacceptable to not cover up when publicly feeding:

“And obviously, you have to cover yourself. You cannot, no it’s not allowed. Everybody will be looking at you. And that, that is not a nice thing to (Laughter) show so you have to use your muslin and then do it.” (Adia p.8; line 324)

Adia’s perceived discomfort with exposure is evident through her use of language and belief that not covering is not allowed, when no explicit rules about covering exist. Due to the expectation that mothers should be concealing their breasts when publicly feeding, not covering then falls into the category of being a political act being performed with the intention of making a statement and a stand for one’s rights:

“I don’t use anything to cover, I...I don’t like to. I like to do this as well because, again, I think it’s political act. I think we have to do it and people have to get used to it. Because it’s just a normal thing. That’s how I feel.” (Gabriela, p. 2; line 62)

Gabriela desperation to alter perceptions and normalise breastfeeding by exposing society to breastfeeding rather than hiding it, is evident. Her subsequent conversation around her attempts to conceal her breast and her preference for feeding rooms demonstrates a paradox between her actions and desires. In practice, implementing her

ideal of not concealing appears to be more of a challenge. Even though a number of the mothers do not want to cover themselves, they end up doing so as it is often easier to conform than to stand out. This is summed up by Olivia when talking about covering herself:

“So, yes, sometimes I'd rather just...I suppose, yeah, have an easy life. And not put myself in a situation where I might have to say something” (Olivia, p. 10; line 432)

“And I don't know, like part of me thinks I should stop covering up because how are people going to get used to it if they never see anybody doing it? Um, at the same time, I don't want to be the militant woman who doesn't cover up. Uh, I'm keeping my energy for other stuff. (Chuckles) Yeah, so like I'm covering up because I think it's...it's a sign of goodwill towards other people who happened to be in the same place as me and haven't necessarily decided to be there at the same time as me. Um, but if more people like me offered to breastfeed without covering up, then perhaps the general public or even us would get more used to it and we would have...and we wouldn't be obliged to do it, become more, um...normalised and something totally usual. And, um, also the fact...the fact that we cover up sort of reinforces the idea that it's something not to be ashamed off but that it...it is something intimate or sexual, like it doesn't feel sexual at all. (Laughter) But, uh (pause) yeah and urm yeah it doesn't feel sexual at all.” (Sophie, p. 8; line 346)

As reiterated by Sophie, women who do not cover up when breastfeeding are considered extremists, with their behaviour being far removed from the norms society imposes. Attempts to normalise breastfeeding requires considerable effort and as a new mother with many competing priorities, challenging society is too overwhelming. Sophie's use of 'obliged' highlights the lack of choice breastfeeding women feel they have around covering themselves and the pressure they feel to conform to the expectation to conceal, in turn reinforcing the perception of breastfeeding as a sexual behaviour. Society is shown to push breastfeeding mothers into a corner, both literally and metaphorically and this power imbalance prevails as a result of mothers' vulnerability and limited capacity to fight to challenge this. It therefore becomes easier to simply avoid any possibility of upsetting members of the public:

“But apart from that I mean, in general public, um, majority of places, um...yeah, I mean, you always have people that's negative, but it's like people on the road as well who have road rage for example, and you can't do anything about it. Yeah, just don't provoke them, I think. (Chuckles)” (Hettie, p. 14; line 569)

Hettie's use of road rage as a comparison to how the general public feel about breastfeeding acts to illustrate the anger that society directs towards breastfeeding mothers. This comparison demonstrates how breastfeeding mothers must adhere to the broadly accepted rules to avoid upsetting others. This is comparable to when one obeys laws of the road, others are less likely to get road rage. Hettie evidently feels defeated at the prospect of ever being able to alter attitudes towards breastfeeding and instead the best action to take is to minimise any exposure of breastfeeding. Respecting the general public and not wanting to make them feel uncomfortable was something that most of the mothers felt was important:

"Whenever we were going like for coffee or to a restaurant, sometimes I have to say that was perhaps the kind of, you know, thing that was sometimes stopping me because I was kind of afraid that I will make somebody feel uncomfortable or I will make myself feel uncomfortable if I see that somebody else is kind of, you know, a bit kind of surprised." (Karolina p. 2; line 89)

"Probably because everybody else was at ease as well. So they made it easier as well I suppose. Like nobody seemed uncomfortable or anything. Yeah, I can't really think of anything else that makes it easier." (Ava p. 11; line 433)

As demonstrated by both mothers, knowing those around them are at ease with their behaviour is important and strongly impacted their comfort and ability to publicly breastfeed. Illustrating how the expectation to conceal the behaviour from others is internalised and respected by mothers. On the other hand for some mothers such pressure to conform can result in resentment of the objects used to conceal:

"I'm having a quick look at it. And I remember at that time I said, "...I shouldn't...uh, I don't feel I should cover up to breastfeed." And so I know that I didn't buy any of those horrible things. But then when I had to do it in the public, I thought I don't...I shouldn't have to cover up but I'm going to do it just so as to...to not disturb other people around me. So perhaps, the fact that I knew that those horrible scarves existed gave me the idea that it's something you're supposed to do." (Sophie, p. 10; line 412)

Referring to the scarves as 'horrible' draws attention to Sophie's anger and resentment at the pressure she feels to use one. This resentment is so great, they become an object not deserving of their title and she attributes their existence as the reason for the expectation to cover.

Feeding rooms appear to be comparable to muslims as they create powerfully negative responses from some of the mothers as a result of the isolation associated with them:

“When we went to IKEA and there was a separate, completely separate, kind of area for mothers breastfeeding, and I felt that's wrong. Because at some point I thought, why I cannot stay with my friends who I came with. I have to go to that kind of corner and just take the baby and just be completely isolated from them, why I cannot stay with everybody.” (Karolina, p. 1; line 30)

“I think by creating these separate spaces is almost making a woman...these women feel that oo I should not be breastfeeding in public.” (Karolina, p. 15; line 616)

Karolina appears to feel a strong sense of injustice about being separated from her friends as apparent when she questions why she must be separated from them and made to feel an outsider. Mothers often disclose feeling as if they are not prioritised and are left frustrated as they are made to feel that publicly breastfeeding is unacceptable and should only happen in private. Mother's frustration around their lack of consideration is reiterated through Sophie's sarcasm around feeding rooms needing to provide a much greater benefit to them as mothers, than the public, through luxuries such as massage chairs and mini fridges:

“Why would I use a separate room? No. No, that's a bad idea. That's segregation. Um, the only thing that would make me use a feeding room is the fact they have like this super comfortable armchair, uh, that...that massages your back at the same time and you have like a...like a...like a mini-fridge within reach and you can get your things from. (Laughter) Then I would-...I wouldn't mind being segregated. But if it's just so that peop-...other people, non-breastfeeding people are not disturbed...no why would you put women in a separate room? If it's more comfortable then yes, yes, totally. If it's to make our life easier, but otherwise...” (Sophie, p. 12; line 526)

Both mothers associated feeding rooms with 'isolation' and 'segregation', terms which strongly signify the sense of discrimination and exclusion. As a result of breastfeeding, mothers feel a lack of prioritisation and a longing for this is evident:

“maybe that sounds a little bit funny but sometimes when you are in a tube and you see the sort of chairs that have the uh mother and baby drawn or say the person drawn and you know that this is a priority area for these people. And I, for some...for...for a while I was kind of wondering whether there should be sort of priority areas, not separate areas

but priority areas. And I...I want everybody else to know that there for...for, um breastfeeding um moms.” (Karolina, p. 17; line 708)

“Probably with, um, places dedicated for mums, a place dedicated for breastfeeding or just open spaces so there’s space to not be in a corner or something.” (Hettie, p. 13; line 520)

Karolina initially believing what she is saying might sound ‘a little bit funny’ demonstrates how strange prioritisation of breastfeeding mothers feels. This highlights their belief and feelings that their needs are often put behind the comfort of the general public. Both mothers place significant emphasis on the words ‘priority’ and ‘dedicated’ further acting to reiterate their desire for their needs and comfort to be considered important rather than being made to feel that they should be hiding the behaviour in a corner or a separate room.

By talking about the unwritten yet societally defined rules mothers identify with around public breastfeeding, one mother began to question why she felt the need to sit in the corner:

“Where do I get this idea? I don’t know where I get this from. So it must be an unwritten rule that is very.... Because I’ve never had dirty looks. I’ve never had, no one has ever told me, “Please go and sit over there,” or something like this. Um, so I don’t know where I get the idea that other people expect me to...to go into a corner to do that. And perhaps that’s the most worrying part of it. (Chuckles) Because you think that people want you to do it and perhaps, perhaps they don’t.” (Sophie, p. 7; line 301)

When analysing where the expectation to sit in a corner arises from, Sophie begins to question herself and the reality of this belief that she holds. This shows just how influential society and their socially defined rule systems are to mothers on an implicit level. The strong sense from society that public breastfeeding is unacceptable and something that should be concealed is enough to define breastfeeding mothers’ behaviour without the need for any physical displays of disapproval. This appeared to be the case for nearly all of these mothers, as most had not experienced any negative comments from members of the public but nearly all the mothers felt the expectation to conceal or hide the behaviour when in public.

iii. Discomfort in Visibility

Mothers experienced high levels of discomfort in exposing themselves when breastfeeding in public, especially in busy areas due to the unwanted attention it would draw. Public breastfeeding consequently becomes an abnormal behaviour which mothers do not feel comfortable engaging in, in the presence of others. With all these mothers it appeared their way of dealing with the level of discomfort public breastfeeding created for them was to minimise public breastfeeding where possible. When this was not possible they would conceal the breast often with the use of a muslin and hide oneself through careful placement within public spaces, thus adhering to the expectation to conceal. For one mother the discomfort of attention was so great it resulted in avoidance of breastfeeding altogether:

“You know what I think the best is to breastfeed most of the time. The best is to breastfeed. But generally, because you are out and you don’t want to expose yourself that’s when the bottle comes in. (Adia, p 4; line 141)

The extent of Adia’s discomfort with attention is apparent from her decision to bottle feed, even though she accepts that she is not doing the best for her child by making that decision. Other mothers reiterated their discomfort exposing themselves when breastfeeding:

“Yeah, I think because when you start to have to...is the moment that you have to...to take it out so I think is the most difficult part but um, I always try to do it in a way that nobody...and nobody can really can see but there’s always this (laughs) weird thing then you got to (laughs) check nobody is looking but then...then when she’s attached it’s...it’s...it’s fine, yeah, then I relax more after doing this first task.” (Gabriela, p. 8; line 331)

“So, yeah, it’s kind of...it depends. If it’s somewhere where we regularly go, then, it’s just like... it’s fine. But yeah, it depends. It depends on the audience. Once she’s on there and feeding, you know, that’s...the difficult bit over sort of thing. They can’t see anything.” (Olivia, p. 12; line 536)

Gabriela’s difficulty at even saying the word ‘breast’ illustrates the discomfort felt when initiating feeding in public due to the high risk of exposure. Olivia’s reference to the audience indicates the associations being made between breastfeeding and performing, as if they are on centre stage putting on a show. Being a performer also acts to remove these mothers from the majority and place them in the minority, reinforcing the exclusion experienced. Both

mothers find the concept of exposure very uncomfortable as illustrated by them laughing and references to initiation being the most difficult aspect. A state of greater comfort can only be obtained once the baby is feeding and less breast tissue is on show. Areas where mothers experience greater discomfort appear to be busy places which lack privacy. Open spaces also appear to heighten mothers' vulnerability:

"The group of people and the atmosphere, just if it's very busy. It's not...uh, you sit on top of each other so it's quite difficult sitting to side by side and (Chuckles) kind of feeding. People staring and things." (Hettie, p. 4; line 153)

"I have to say, I was always feeling most comfortable when I had a sort of kind of...when I was able to sit somewhere in a corner where nobody was kind of noticing. At least not straight away." (Karolina, p. 1; line 26)

"If I'm in a restaurant, I just do it very discretely and try and sit in the corner or something." (Hettie, p. 3; line 108)

Mothers revealed their affinity for and comfort felt within a corner, demonstrating their feelings of inferiority and withdrawal from society when breastfeeding. Corners offer the protection of two walls which provides privacy and avoids the possibility of being surrounded by people. As Hettie states, privacy minimises the attention drawn to oneself when breastfeeding therefore making the experience less stressful than in a crowded space and on full display.

One mother highlighted how herself breastfeeding in public also created discomfort for her husband:

"I felt much more comfortable when I was using that scarf because I knew that it was not even just me in front of other people. It was also my husband, who didn't feel that it was kind of, you know...That was difficult for everybody I would say. It was important for me that also he feels comfortable as well. Not like in that restaurant I mentioned and that he felt uncomfortable, so that helped him as well." (Karolina, p. 11; line 434)

Karolina clearly wishes to minimise the discomfort felt by others and particularly her husband who previously questioned the acceptability of her openly feeding in a restaurant. By using the scarf to cover herself and minimise the attention received, Karolina was enhancing the experience for her husband by making him feel more comfortable and

consequently improving her experience. This shows the powerful impact her husband has on her behaviour simply because he finds her exposing her breasts uncomfortable.

Due to mothers' discomfort when breastfeeding in public some mothers sought comfort in feeding rooms, where they felt a greater sense of belonging and privacy:

"Yeah, you have your own little space even though you're out in like a busy place. You've got that little bit of, your own little sanctuary. (Laughter)"

"Most comfortable would be in parent rooms because you um, they have, some of them had the little separate cubicles where you can go and breastfeed. So you can close the door or pull the curtain across. That would be the most comfortable. You're just there on your own and you can just relax. (Laughter)." (Ava, p. 9; line 370)

"You know that that place is for...for...for this purpose so everyone that is there is doing the same or at least if it's not breast feeding but know it's a proper room for...for this so then I feel 100 percent, like, relaxed no problem at all. Yeah." (Gabriela, p. 8; line 344)

For Gabriela, the reassurance that those rooms are accepting and encouraging of breastfeeding appears to be what makes them comfortable and consequently a secure and safe place to breastfeed. Ava's repeated reference to 'your own' signifies the true sense of belonging and ownership felt when within these spaces. This is in stark contrast to feeling uncomfortable and ostracised when breastfeeding in public spaces. Referring to feeding rooms as a 'sanctuary' is indicative of the relaxed state they can induce rather than the anxiety associated with public spaces.

iv. Need for Protection from Society

Society's discomfort with and lack of acceptance of public breastfeeding results in mothers feeling vulnerable and unsafe. Many of the mothers appear to feel the need to be protected against members of the public and find reassurance in their partners' presence in order to provide that level of protection. Alongside their apparent fear of society this also demonstrates the lack of confidence in their ability to self-defend themselves if necessary. This may be because a male presence feels much more powerful, creating the perception that people will be less likely to challenge a mother when she is with a man, or he will be confident and strong enough to defend her:

“I was with Andrew so, uh, I feel more relaxed if I’m with him because then if someone, uh, happened to... tell me something, at least he will...he will help me (laugh)” (Gabriela, p. 1; line 40)

Gabriela’s reference to her need for help insinuates the vulnerability she feels as a breastfeeding mother when in public and the need for her partner to enable her to be relaxed and feel safe. This male presence can result in greater feelings of self-confidence and empowerment around one’s right to publicly breastfeed:

“And my husband was like more supportive as well. He’s like, “Well, if anyone says anything then I’ll tell them.” (Laughter) So now I don’t care, I’ll do it anywhere.” (Ava, p. 1; line 39)

“And of course, it depends if you’re on your own, you know. At least, Jack was there with me. So, you know, it’s not like anyone’s going to try intimidate me, I would hope.” (Olivia, p. 5; line 216)

Olivia appears to find reassurance in the company of her partner as she articulates feeling confident no one would ever intimidate her when he is present, as they might do if she was alone. Similarly, Ava appears to feel empowered to the point she no longer cares about what others may think and would breastfeed anywhere with her partner because he has told her he will deal with anyone who attempts to express any disapproval. Mothers’ lack of self confidence in their own power to avoid and defend themselves from potential criticism highlights the challenge for these breastfeeding mothers when breastfeeding alone in public.

It appears that one of the biggest factors driving mothers’ perceptions that they need protecting from society and potential criticism is the media. Currently there is a focus in the media of reports of negative reactions mothers have received for breastfeeding in public. For these mothers this appeared to fuel their anxieties as evident through their discussions around the media and negative stories they had heard. It was also reiterated through the fact that very few mothers had ever received any negative verbal reactions from members of the public and often felt their prior anxieties were not necessary. All the mothers were very conscious and fearful of receiving negative responses, certainly in the early days of publicly breastfeeding. Media appears to make them think and doubt the support of the general public:

“I think it's because of this um story that I heard about Claridges..... So that's what made me uh feel a bit um like a uh, yeah. Um, how can I say um, yeah like protective about...about...about the others” (Gabriela, p. 10; line 432)

“I suppose in the media, quite a lot of what you read is not for breastfeeding. You know, the stuff that gets in the media is people being asked to leave or saying they won't be allowed back, even when they're covered up sort of thing. I can't remember if it was somewhere like the Ritz or somewhere like that, one of them. And you just think, well if you can't go somewhere like that which generally is...they're not busy places. Everyone's having afternoon tea, it's very quiet and formal, you know. The last thing you want is a screaming baby. And you know, if you can't go to places like that and not be asked, you know. You're not flashing and being indecent, you know. It doesn't feel necessarily like you're well-supported in that respect.” (Olivia, p. 15; line 677)

“I think it's from like watching all the like social media and stuff when you see people how they react to it. I think I saw a few things when I was pregnant when they compared a lady sitting in the bikini and to a lady sitting breastfeeding. And so I've always like had that in my head. (Laughter) Like just about how people can be really rude to someone breastfeeding.” (Ava, p. 7; line 263)

“You hear so many stories of people being offended and I don't want to be in that situation. So you do try and avoid that” (Hettie, p. 3; line 116)

These mothers illustrate how powerful the media stories are, with Ava not being able to dismiss something she read around a year ago, and making them feel unsupported. Olivia was shocked at how places where she thought breastfeeding would have been more likely to have been accepted, were not. This appears to reinforce in her mind a lack of confidence in the support of the general public and instead acts to foster a level of fear.

2. Becoming a Nursing Mother

i. Determination to Breastfeed Superseding Challenges

Successfully fulfilling mothers' potential to breastfeed appeared to be particularly important for these mothers. Given all the discomfort they felt at varying times when publicly breastfeeding, their desire to meet their babies' needs in what they perceived to be the best way, superseded any of these challenges. Their baby is their clear priority over themselves, highlighting the selfless nature of these mothers alongside the level of resilience within them to achieve and persevere with their intentions to breastfeed. For one mother in particular her intention to breastfeed was a given:

"It's perfectly natural, it's what we are meant for". (Olivia, p. 12; line 543)

Olivia appears to be identifying with the role of a nursing mother as her primary purpose, thus highlighting the expectation she is placing on herself to fulfil what she perceives as her natural potential and something she should be able to do. This coupled with the health benefits mothers perceive breastfeeding to provide, appears to encourage breastfeeding:

"And only because I was aware of the benefits that it gives to the baby, I thought okay, I'll try it. I have to say, um, I think it's something urm kind of inside of a woman's kind of mind, if you decide to do something you will just do it." (Karolina, p. 1; line 18)

Karolina appears reluctant to initiate breastfeeding and implies the only reason she has continued with breastfeeding was a result of women's strong determination. Therefore, from initially making the decision she wanted to try and breastfeed, by being a woman and possessing such strong determination to fulfil her goals she has been able to continue breastfeeding. Such determination to fulfil their potentials as a nursing mother and meet their babies' needs was illustrated by most mothers prioritising their baby when in public:

"Every time I need to. (Laughter) It's just I...like for me, I don't care where I am. If she needs it, she gets it." (Sophie, p. 1; line 38)

"But then like I said after I just, it doesn't bother me. It didn't bother me after because I thought, "Well, if my baby's hungry, I'm just going to, I'm going to feed him." People like it or they don't like it, I don't care. (Laughter) I'm going to feed my baby. (Laughter)" (Ava, p. 2; line 66)

Both mothers emphasise that they 'don't care' about anyone else and are purely focused on feeding their baby and meeting their needs, thus clearly stating how the baby is prioritised over anyone including themselves. Mothers appeared to possess a strong drive to ensure that others never influenced their decision to breastfeed and pushed them to alternative methods of feeding:

"I always made...wanted for sure like to...to make sure that I uh I had to do and I wanted to do so I would...I didn't want to...to don't do because of other people and how they would. I...I wanted to make sure, no, no." (Gabriela, p. 1; line 28)

It appears within these mothers that once they had made their decision to breastfeed they were determined to drive this forward and continue. Many of the mothers referenced how knowing breastmilk would be the best option for their babies' needs, was one of the key reasons for initiation and continuation:

"I mean, I was in hospital for...we were in for a week altogether, which is about five days after she was born. And I had to have quite a bit of assistance with it. Um, and then, after having her home for probably about two weeks, and it was quite sore and everything like that, that we did buy some formula and we were doing the combination to give me a bit of a break. But then, we found to have an operation on her left kidney and uhm I suppose one of the things is to make it...the thing that's most easy for her to process is breast milk. Uhm, so, we went back to exclusively breastfeeding. And it was supposed to be kind of until you know, she'd had her operation and we knew everything was fine." (Olivia, p. 1; line 15)

Olivia addresses the difficulties she had feeding and the negative impact this had on her. Whilst being a challenge for her, the fact that it benefits her unwell baby makes it her priority as she possesses something that could improve her daughter's health during an uncertain time. Other mothers also discussed the challenges they faced when breastfeeding, to which they appeared to feel the need to defend themselves over, as if they were fearful of judgement:

"Physically, it was difficult. And I really don't think it was my fault or her fault. It was just that." (Sophie, p. 1; line 33)

Sophie deflects any blame initially from herself and then her daughter, implying an underlying fear of being judged for finding the process a challenge. This was reaffirmed by other mothers who felt the need to explain why initiating breastfeeding was a challenge:

“But I guess it’s something completely new, isn’t it, as well, anyway. And you know, I think she took a little while to get used to it. And you know, we got a lot of you should be feeding for around...I don’t know. Was it a minimum of 20 minutes or around 40? And she’s never stayed on for that long, but she’ll take as much as she needs. But then, you know, she’s only a little thing, which is you know, it’s not from lack of feeding. But she’s just never needed to stay on for that long.” (Olivia, p. 2; line 46)

Olivia’s use of “isn’t it” acts to indicate her desire to seek approval and obtain reassurance around the difficulties of breastfeeding to remove any perception of her as an incompetent mother. When discussing the size of her baby, again Olivia immediately feels the need to justify that her size is not indicative of a lack of feeding and her not meeting her baby’s needs. Mothers appear fearful of failure as well as the judgement they feel they will receive if they are deemed to not successfully meet the breastfeeding ideal. This may be a result of the perception that breastfeeding is a natural behaviour and therefore something that should come easily to mothers. It may also be exacerbated by the pressure placed upon mothers to do the best for their babies by breastfeeding. This is further implied by the frustration and failure felt when having difficulties establishing breastfeeding:

“I don’t think he was getting enough so he was just hungry. And then because I wasn’t well as well it was just, it was really difficult. And I was, “Oh, what’s wrong. Da, da, da.” Yeah. It made it difficult. Then when I gave him the bottle, he was fine. So that was quite hard. But it did get easier. (Ava, p. 3; line 117)

“Because you know it’s not worth it when I’m sat there in tears because I can’t feed my own baby. Yeah, you feel a failure.” (Olivia, p. 20; line 868)

It was clearly very difficult for Ava that while she was unwell after giving birth and unable to settle her baby, their needs could not be met by herself but instead they could by a bottle. Olivia also became very upset when facing difficulties in the early stages of breastfeeding by what she perceived as the inability to fulfil her biological potential and something she felt she should be able to do. As a result, she voiced feeling like she was failing in her ability to be a good mother. Such pressure and determination to breastfeed resulted in some guilt when considering terminating breastfeeding:

“It was just too difficult for me because everything was new, the baby, you know, and friends coming and everything was kind of upside down and then you have that sort of reaction and you feel okay now and obviously I managed longer, but um but I have to say that wasn't always the case. I have to be honest.” (Karolina, p. 14; line 563)

Karolina, when talking about disapproval she received from a friend, alludes to her struggle with continuing to breastfeed by using the word ‘manage’. She implies she only just got by through this period and does not give the sense that it was easy or enjoyable. Interestingly when alluding to her thoughts around giving up she speaks as if she is making a confession, particularly by saying “I have to be honest”. This illustrates the pressure she feels to breastfeed and the shame she feels when even considering to cease. Some of this pressure, certainly for one mother appears to have been exacerbated by pressure from health professionals:

“And it was strange because I felt under quite a lot of pressure in the hospital to breastfeed even though I was saying, “My baby is dehydrated and she's not getting enough milk. Can we give her something?” And you know, there was quite a lot, “Oh, no, no, you can do it.” And yeah, you know okay. In the end, it did and it was fine.” (Olivia, p. 1; line 36)

It is clear that Olivia found feeding very challenging in the beginning and felt her anxieties that her baby’s needs were not being met through breastfeeding were not fully considered. Instead the focus on initiating and continuing breastfeeding seemed paramount to the staff hence almost forcing her to carry on.

Even though it was apparent that mothers felt significant pressure to breastfeed their baby and many went through very challenging times with it, from initiating feeding to their experiences breastfeeding in public, many of the mothers acted to downplay these:

“It was...was...was really...and it is really easy actually and didn't hurt. So I think all the even in public or breastfeeding in general for me was a very, very positive experience.” (Gabriela, p. 12; line 496)

“No. I didn't think about it like that much. It didn't like stress me out, with worrying about it. But I did think about it. I think more the practicalities of it, yeah, yeah, like the situations where I'll be or yeah” (Ava, p. 5; line 178)

Gabriela shares her seemingly very positive experience of breastfeeding and breastfeeding in public. However, Gabriela does not breastfeed in public without her partner, is always alert for someone to make a comment and also researches places before visiting. Ava similarly downplays the negative implications and the extent to which public breastfeeding impacts on her when she has previously mentioned how she “*wouldn't even dream of going out*” (p. 3; line 112) in the beginning when she began breastfeeding. Both mothers appear to be attempting to minimise the negative implications of public breastfeeding, possibly in order to maintain their motivation to breastfeed and perceived control. This ensures they continue to do what they perceive as the best for their baby and what they should be doing.

These mothers evidently feel breastfeeding is something they are engineered for and their knowledge that it can improve the health of their baby strengthens their intentions to breastfeed and their continued engagement in public breastfeeding. This is despite the public's attitude that breastfeeding is a behaviour that is not a subjective norm.

ii. Confidence as a Process

All the mothers seemingly negotiated through a process where their experiences across time slowly increased their confidence with their new identity as a nursing mother and consequently with breastfeeding in public. Initially getting used to engaging in a behaviour that was significantly different from any behaviour they would have engaged with before having a baby, appeared to initially create a level of fear:

“I think when I was pregnant I didn't think about I forgot to think about how it would be when I had to breastfeed in public. Um...but so the concern just started when...when actually she was born and I had to do it and I went uh oh (laughter). Oh my goodness, you know?” (Gabriela, p. 16; line 658)

Gabriela expresses initial shock and panic when having to breastfeed for the first time in public, highlighting the unexpected lack of confidence she felt initially. It was evidently something she had thought very little about and had not concerned her until she was suddenly in that situation. A reason why mothers may find this particularly difficult initially may be due to a need for them to process this new behaviour:

“It was difficult at the beginning because I haven't done it before and I wasn't, I wasn't very confident at the beginning to be like oh I can just do it wherever whenever although

everybody was telling me, oh look, this is a natural thing, I kind of needed some time.”
(Karolina, p. 1; line 42)

Karolina attributes the challenges she had down to her lack of experience contributing to her lack of confidence. Her requirement for time implies there was a process she needed to go through to become fully confident and comfortable breastfeeding. This may be as a result of breastfeeding challenging societal perceptions of breasts as an intimate body part and her internalisation of this, making it difficult when suddenly engaging in the behaviour. Therefore initially she feels a strong sense of discomfort exposing herself which acted as a barrier:

“So that was always my kind of problem when entering let's say Costa Coffee, and I was always looking for a quiet corner with a tall chair that would screen me completely, which I think um, on one hand it's natural, but again it would be nice if I always, always wanted to have that confidence not to look for that sort of spot, but still I was always, you know rather looking for the tall armchairs in the corner.” (Karolina, p. 6; line 242)

Karolina identifying her choice of a private location to breastfeed in public as a problem alongside the repetition of 'always' when talking about her longing for confidence, could act to signify her desire to be able to possess the confidence to not seek the comfort of a secluded spot. It feels as if there is a disparity in how she would ideally like to be able to breastfeed publicly and the reality of what she feels comfortable doing thus showing how her lack of confidence leads to her seeking privacy and safety from society. Gabriela similarly talked about how she felt constricted by her confidence to breastfeed publicly during the early days:

“Um, my mum, for example, uh she came for when she was born. And then the day that she was...that she went to the airport we had to...to take the tube and I...I didn't go with her because it's so long a journey that I was like, well if she wants to feed (laugh) inside the train, how...how am I going to do it? So I didn't feel much...very comfortable. Although I wanted...I really wanted to...to do it.” (Gabriela, p. 1; line 20)

For Gabriela, the fear of needing to feed during the journey seemed to impact her freedom. However, for the majority of these mothers, time and experience appeared to enhance confidence breastfeeding in public:

"I think it's just, I think it is with experience. I think the more we go out and the more you do it, I've just yeah, got better and better, more confident at doing it. Yeah, I think it's just a personal thing as well most of the time." (Ava, p. 2; line 74)

"I think, um, because we struggled a little bit in the beginning as well. I think once it, um, became more established, my confidence in breastfeeding grew as well. So yeah." (Hettie, p. 5; line 170)

"Yes. I think with the second one I will have a little bit more confidence. With the first one you don't know what to expect. You don't know how to behave." (Karolina, p. 5; line 211)

Karolina stating the fact that first time breastfeeding mothers do not know how to behave and conduct themselves can act to highlight the uncertainty breastfeeding mothers initially feel when engaging in this unfamiliar behaviour. Hettie illustrates how once a mother feels confident with the behaviour of breastfeeding their baby, it is easier to translate this into feeding in public situations. This is enhanced with practice and as the behaviour becomes normalised, rather than when new and uncertain.

"Um, I knew I wanted to breastfeed but I didn't think as far as, um, but I was...yeah, even when I was pregnant I was already buying scarves, um, to prepare myself and thinking if I do, um, go out, um, probably express and feed him. Um, yeah. I couldn't see myself in a restaurant breastfeeding. (Chuckles)." (Hettie, p. 5; line 197)

Hettie appears very anxious prior to engaging in public breastfeeding. She had difficulty visualising herself breastfeeding in public, to the point the prospect was laughable and she questions whether she would even go out of the house. As Hettie subsequently does breastfeed in public there was obviously a shift in her feelings once engaging in the behaviour and establishing confidence. Ava similarly appears to exceed her expectations of public feeding once breastfeeding herself:

"Yeah. I'm going into work. I haven't done that journey yet but I'll be fine. Yeah. I'm not even worried about it actually." (Ava, p. 6; line 229)

Ava infers some level of surprise at her lack of concern around the journey into work she is going to have to undertake with her baby. Ava is implicitly indicating how far she has

progressed in confidence within her new role and how this has enhanced her freedom and comfort in public breastfeeding.

Unfortunately, one mother was an anomaly in not experiencing enhanced confidence in public breastfeeding across time. One factor that seems to impede her transition and confidence in public breastfeeding is her baseline level of self-confidence prior to birth:

“I think it's you know...it's just something that I do anyway I think. I suppose... Yeah. Having a baby and... I don't know whether I've used it as an excuse not to go out. I'm not (sigh) really sure. And that feels a bit like you know, I'm blaming the baby there. (Laughter). But which, you know, I suppose using her as an excuse not to go out. Yeah cos I do, I like my times when I'm at home with her. And I kind of think when she's that small anyway, she doesn't really know what's going on.” (Olivia, p. 11; line 468)

Talking about her reluctance to go out, Olivia appears to realise how her baby has provided a further excuse and rationale for her avoidance behaviours. Olivia's mental processing when considering leaving the house is evident through her attempts to justify to herself the benefits of staying at home for both her and her baby, thus successfully talking herself out of leaving the house. Olivia's prior anxieties appear to be sustained and reinforced within her new identity as a nursing mother and as a result, her progression of confidence in publicly breastfeeding is limited.

iii. Identifying with Other Breastfeeding Mothers

Mothers alluded to the strong sense of unity and connection felt between nursing mothers with the tendency to utilise each other for support, guidance and empowerment. This outlines the importance of being able to identify with someone with a shared identity, particularly when feeling uncertain with one's new identity as a nursing mother and needing guidance about how to engage in the new behaviour of breastfeeding. Identifying with other mothers may also be especially important for these mothers as they have become a minority group, ostracised for engaging in a taboo behaviour. Therefore, supporting each other acts to minimise the impact of this. Identifying with other nursing mothers appeared to begin as early as pregnancy for several mothers:

“I think I am actually surprised urm how well urm I was coping, I have to say, because um before I had a baby I spoke to my friends who had babies. Some of them just told me

a lot of negative things about breastfeeding, especially if you're breastfeeding in public. They said that... one of them, for example, mentioned that she was completely paralysed and that she wasn't able to do it at all in public, and that's why she didn't leave her home basically for the whole three months after the baby was born, and then she switched to the bottle and she said, oh I'm starting to feel like I'm living again a normal life. And I kind of got the sort of feel that this would be my case.” (Karolina, p. 1; line 4)

Karolina's friend's negative experience evidently remained poignant in her mind. From never having experienced breastfeeding herself and having little exposure to the experience of public breastfeeding, Karolina identified with someone close to her. Her friend appears to provide that insight, leading to her fearing the worst about breastfeeding in public. It seems Karolina made the assumption that she too would not be able to live a normal life and that breastfeeding would hinder her from that normality. Identification may be more likely to happen between mothers who have similar values and beliefs:

“She was coming from outside London so she just covered herself and just breastfed the baby. I was pregnant by then so I realised that well if I also did it and I'm in public like that then I would have to cover myself.” (Adia, p. 5; line 221)

Adia having witnessed a lady breastfeeding in church seems to immediately decide she would adopt an identical practice of covering herself when breastfeeding. Her determination to replicate this behaviour is illustrated through her use of 'would have to', implying that this other mother set a precedent she feels compelled to follow. This illustrates the power that identifying with others can have on new breastfeeding mothers' perceptions and resulting behaviour. Alongside learning how to conduct oneself from other mothers, they also appear to provide encouragement and empowerment for new mothers:

“Also, I think if a breastfeeding cafe is nearer it also helps because it kind of um made me kind of realise that, come on, so many other mums like me are doing exactly the same thing and feeling probably exactly the same, after having similar probably experiences and if they are doing, why shouldn't I. That helped a lot as well.” (Karolina, p. 9; line 368)

“Um...and when I see someone breastfeeding, like really breastfeeding in public today I feel happy. I feel like...oh that's good. Someone that is similar to me and is in the same situation. Yeah, it's a good example.” (Gabriela, p. 18; line 764)

Both mothers find reassurance in the similarities they can draw between themselves and other breastfeeding mothers through their repetition of 'same' and 'similar'. It is as if by being able to draw similarities, they can gain confidence in what they are doing and minimise the impact of the societal ostracism they face and by extension, feel less alone. Karolina appears to obtain motivation from other mothers publicly breastfeeding, enabling her to realise she is not alone with the difficulties she faces as a nursing mother. The fact they manage highlights to her she should also be able to manage. For some mothers, the unity and support was so powerful it impacted on their public feeding behaviours:

"In the beginning, I actually expressed and bottle-fed when I used to be out in public. Um, and then generally, I kind of became more relaxed about it. Um, the group of mums that I've been hanging out with I actually met at the breastfeeding café so we are all kind of just openly breastfeeding and that kind of made it easier I think." (Hettie, p. 1; line 9)

Hettie's attendance at the breastfeeding café appeared to enhance her confidence to such an extent that she transitioned from using a bottle in public to using her breast, as she would at home. Hettie seems to find reassurance in the camaraderie of breastfeeding behaviour, enabling her to normalise the behaviour and gain confidence feeding with the breast in front of other people. Initial support seems to empower mothers beyond the safe environments of places such as breastfeeding cafés.

One mother once having realised the positive impact other breastfeeding mothers had on her experience of breastfeeding in public, wished to act as a role model for others:

"There are some friends of mine, they were also expecting babies as well, and I felt, it's good to give an example at the time that you are not going into a dark corner, you are staying with everybody and I think it helped them as well." (Karolina, p. 5; line 193)

Karolina once again alludes to the solidarity between breastfeeding mothers, through her perceived importance of role modelling breastfeeding as a behaviour that does not need to be undertaken in a corner. Other mothers improving her experience and enabling her to breastfeed in public evidently had a lasting impact, resulting in her now hoping to provide a similar level of support to newer mothers.

Discussion

This study aimed to explore the experiences of public breastfeeding within London for a group of first time mothers, through the use of IPA. Two superordinate themes emerged from the data which encapsulated the difficulties these breastfeeding mothers faced and the processes they go through to maintain breastfeeding and public breastfeeding. Societal discomfort with breastfeeding and the expectation for breastfeeding to be a hidden behaviour appears to be transferred onto these mothers, often without the need for any explicit negative experiences, resulting in them becoming a socially excluded group. Due to the discomfort created when breastfeeding in public and the energy it requires to be a 'militant' mother and not conceal, mothers often choose to adhere to the expectations of concealment. Within this group of mothers their determination to breastfeed their babies and do what they believe is the best for their child, results in them not letting the negative influence of society impact on their decision to breastfeed. Over time these mothers gained increasing confidence with engaging in this new behaviour in public. An important part of this appears to be the ability to identify with other nursing mothers; providing guidance, support and empowerment. Within this chapter these findings will be discussed in line with wider theory and research.

Social norms are believed to have a powerful influence over individuals' behaviour. They can be defined as 'group identity-based codes of conduct that are understood and disseminated through group interaction' (Rimal & Real, 2003). The dissemination and adoption of these norms across individuals results in norms becoming something which governs behaviour. This is because, as highlighted by norm models, thought and behaviour are more strongly driven by shared social context rather than individuals themselves (Morris, Hong & Chiu, 2015). One of the key reasons as to why societies develop these complex rule systems is to create order and predictability and minimise the discomfort of uncertainty (Burns & Dietz, 1992). Social rule system theory consequently argues that these socially produced and replicated systems of rules are what organises the majority of social activity (Burns & Flam, 1987). They are rules which are universally made, interpreted, implemented, replicated and transformed over time. It is believed this process often results in rules that are not necessarily intended or expected (Burns & Machado, 2014). One norm that can help us to understand these mothers' experiences of a strong taboo around public breastfeeding is the injunctive norm, as defined by the focus theory of normative conduct (Cialdini, Kallgren & Reno, 1991). Injunctive norms are norms which define what is accepted and unaccepted within a culture (Reno, Cialdini & Kallgren, 1993). These informal norms systems frequently take precedence over official formal rules (Burns and Flam, 1987) and

can offer an explanation as to why these mothers experience ostracism for publicly breastfeeding, even though the law in this country provides them with the right to do so. They can also help us to understand why these mothers feel so uncomfortable, nervous and excluded when many have not had strong negative reactions from members of the public.

These mothers' perceptions of British society feeling uncomfortable with breastfeeding in public is a widely replicated finding. Breastfeeding is something to which the majority of the British public feel uncomfortable with, as they do not know where to look and believe it should be done in private to avoid any potential awkwardness or discomfort (Morris, Zarate De La Fuente, Williams & Hirst, 2016). One of the factors driving this, as reaffirmed by the mothers within this study, is aptly summed up by Sayers (2014) as, "Our cultures seem to struggle with the transference of ideas from breasts that you dress up to look attractive, by push-up bras, low cut-tops, and implants, rather than a maternal mammalian necessity to feed our young" (p.44). Female breasts in British society are something which are often associated with level of sexual attraction to a female, for example larger breasts enhancing attraction (Swami, 2013). This appears to be particularly prominent in heterosexual relationships, most likely due to the strong sexual perceptions men hold towards female breasts. Ward, Merriwether, & Caruthers (2006) found that men who more frequently read men's magazines, were more likely to perceive breasts in line with their sexual connotations rather than their biological functioning. Such divergence between men's perceptions of breasts as predominately sexual and these nursing mothers' perceptions of breasts as a functional body part can explain why mothers often feel more uncomfortable feeding around men, unless they were partners who they know understand and support breastfeeding.

Mothers' uncertainty and discomfort around business people is an interesting finding and acts to confirm the separation that remains between work and breastfeeding. Mothers have previously highlighted how the taboo surrounding breastfeeding has resulted in difficulty when trying to combine work and breastfeeding (Gatrell, 2007). They often have to cease breastfeeding due to the perceived need to conform to organisational expectations around suitable professional behaviour, with breastfeeding not aligning with these. This divergence between mothers and business people is something which may be exacerbated in large business cities, such as London. London is a leading centre for international business consisting largely of financial services making it a very important and significant business city. Something which makes it different from any other UK city along with the population being significantly greater. Aside from many businesses residing in London, it is also home to a large number of residents resulting in the business and residential elements being strongly intertwined. This is certainly the case within Southwark due to it being a borough that is residential but also has a large number of businesses situated within it, some of which

are major firms such as Pricewaterhouse Coopers, Ernst & Young and the head office of the Financial Times. Therefore during the weekdays there are residents enjoying local amenities along with those at work taking a break or entertaining clients. Given this context one can begin to understand why this dynamic arose as something influencing mothers' experiences. It can be understood in the context of social class and stratification. According to Marx's theory of social class there are the owners of the means of production who are dominant and wealthy and those who sell their labour to those owners (Rummel, 1977). Within this context the business people can be viewed as the means of production and the more dominant and influential individuals, creating a tension between the two. Furthermore for many years a perception has existed that high income jobs hold a level of prestige and power because of their importance and difficulty (Davis & Moore, 1945). Within this hierarchical context business people are perceived to have high social standing and authority, consequently making the mothers feel inferior to them and therefore uncomfortable when engaging in a behaviour that situates them very much with their identity as a mother rather than a woman at work.

Interestingly social class was something that these mothers appeared to think would influence the acceptance of public breastfeeding. It was as if the mothers expected high end expensive restaurants such as Claridges and the Ritz to be more accepting of breastfeeding, possibly because breastfeeding being more prevalent in mothers with higher socioeconomic status (Lupton, 2000) and those attending these venues frequently being of a higher socioeconomic status. Therefore leaving the mothers shocked and surprised when this seemingly was not the case within London and questioning where it was acceptable. Thus heightening their sense of not belonging anywhere when wishing to breastfeed in public within London.

Mothers' perception of culture and religion influencing levels of acceptance to public breastfeeding most likely results from the varying levels of acceptance around nudity and breastfeeding across different countries, cultures and religions. Within some countries such as India and Canada breastfeeding in public is widely accepted and welcomed (Spurles, 2011). However some religions such as Islam have stricter guidelines around nudity (Kahan, 2003) and accept and respect public breastfeeding so long as it is done with discretion (Morisky et al, 2002). A lack of knowledge and understanding of different cultures and religions is likely to create greater levels of anxiety, as evident within these mothers, particularly in multicultural areas like London.

The social norms surrounding breastfeeding appeared to be heightened by the media. This is likely because of the power the media has to disseminate information surrounding norms, creating common knowledge across a county (Chwe, 2001). It provides a platform to which new and existing norms can be shared and has a strong ability to persuade

individuals to accept such norms (DellaVigna & Gentzkow, 2010). A good example of this is how the media has been shown to alter beliefs by exacerbating misinformation, following terrorist events (Gentzkow & Sharipov, 2004). The many articles currently being published about mothers' negative reactions from the public, seem to increase the level of fear within these nursing mothers, possibly because they are reaffirming the injunctive norm that breastfeeding is not considered socially acceptable.

When one deviates from the social norms within society they lose their social status often becoming excluded and ostracised (Schachter, 1951). This has been happening in society for years with many prejudiced attitudes being driven by the need to conform to social norms (Addison-Wesley, 1954). As a result of the likely injunctive norm stipulating public breastfeeding as a taboo, these mothers have often ended up feeling wrongly excluded and as if they do not belong in public places. Nursing mothers feeling as if they are not part of a given collective is something that appears to be commonly experienced (Boyer, 2016). Given these norms are created by a society and very often not explicitly stated one can understand why mothers who did not grow up within British culture, as expressed by some of the mothers interviewed within this study, find it challenging to understand and navigate these norms. Consequently this makes them feel even more disconnected from society and increases their risk of isolation. This may be a particular challenge within London given in 2011 37% of people living within London were born outside of the UK (London Population, 2017), thus increasing the probability that the British culture and norms specific to London are not always familiar and instead are having to be learnt and understood.

Furthermore London is a very transient city whereby it has a younger population moving in and an older population moving out (Trust for London, 2018). This means attitudes and values may change more frequently than areas whereby the demographics and population remains the same over time. This can be further exacerbated by the ethnic diversity of London where around 41% are black and minority ethnic compared to an average of only 10% in other areas across England (London Population, 2017). This can help to explain why British born mothers, as highlighted within this group of mothers found the diversity with London a challenge, in the context of public breastfeeding. This may only be specific to London due to the unique demographics and nature. The fact that both mothers who are familiar with British culture and those who are not feel concerned over how to navigate culturally defined attitudes, illustrate the disconnect and lack of belonging within London for both individuals. Further reiterating the challenges one faces when breastfeeding within a diverse city such as London.

This social exclusion felt by mothers draws parallels with many other minority groups who are seen to sit outside the mainstream norms that British society has created. People with disabilities express experiencing significant discrimination and unequal treatment

(Mattila, 2016). Mental health issues withhold a longstanding stigma (Clement et al, 2015) which in some cases has been identified as having worse consequences than the mental health issue itself (Stona et al, 2015). Since some of the large scale terrorist attacks Muslims are believed to experience more discrimination than any other religious group (Pew Forum on Religion and Public Life, 2009; Sheridan, 2006). These all provide examples of how society creates stigmatising beliefs about certain groups and explicitly and implicitly excludes them. The health implications this has on individuals within a socially excluded group is enormous. Lesbian, gay, bisexual and transgender (LGBT) adults have been found to have a higher prevalence of mental health issues than heterosexual adults (Semlyen, King, Varney & Hagger-Johnson, 2016) which is believed to be linked to the prejudice and discrimination they experience (McLaughlin, Hatzenbuehler, Xuan & Conron, 2012). Furthermore perceived ethnic discrimination has been positively associated with depressive symptoms (Ikram et al, 2016). Given that women who publicly breastfeed appear to experience the exclusion and judgement these other marginalised groups do, greater consideration is required around the impact this is likely to be having on the health and wellbeing of nursing mothers and steps taken to ensure we support mothers and babies to be happy and healthy. Within this group of mothers their isolation, paranoia and fear when breastfeeding in public evidently has an immediate impact on them but may also have longer term implications on their health and wellbeing. This may be worsened by the fact there appears to be increasing pressure on mothers to breastfeed, thus creating a dichotomy whereby mothers are encouraged to breastfeed but this is not supported by society (Williamson, Leeming, Lyttle & Johnson, 2012). This has led to breastfeeding being termed the 'open secret' that is supposed to happen but not be seen (Boyer, 2016). This attitude results in a situation whereby whether mothers choose to bottle-feed or breastfeed, they will be judged either way. Furthermore, should they cease breastfeeding due to the struggles in public they are likely to experience guilt due to not engaging in the behaviour they feel they should be, which was evident within these mothers. Such judgement and guilt will inevitably impact on their health and wellbeing.

It appeared one of the main ways that mothers navigated the emotional and physical challenges of breastfeeding in public within London was to cover and conceal themselves when breastfeeding. This is often a compromise, enabling society to feel more comfortable and accepting whilst making the nursing mother feel more at ease. Mothers discussed the sense of expectation felt around covering and concealing which is likely to be a result of this being a descriptive norm, outlining how one should conduct oneself (Cialdini et al, 1991). Nursing mothers therefore have two norms which they have to navigate, the injunctive norm, as previously discussed, which defines public breastfeeding as largely unacceptable and the descriptive norm which defines how nursing mothers should behave

by concealing themselves. There is evidence to suggest a strong association exists between these two norms (Eriksson, Strimling & Coultas, 2015) with their prevalence being maintained by a mutual inference process. Within the context of public breastfeeding this means the unacceptance of public breastfeeding is perpetuated by mothers concealing themselves and vice versa. This can offer an explanation as to why the taboo has persisted across time.

For the majority of these mothers adhering to this descriptive norm of concealing themselves was evident with them often using muslins to cover their breasts, putting consideration into wearing certain clothing that would offer some concealment and placing themselves within areas of greater privacy such as behind big chairs or in corners. This behaviour is not surprising given individuals' preference to conform (Mackie, 1996) and behave in a way that they believe is expected of their role (Zimbardo, 1973). According to Social Identity theory this also acts to create a sense of belonging and when a greater need for belonging is felt, one is more likely to conform (Vignoles & Moncaster, 2007; Petriglieri, 2011). This explains why nursing mothers, who already feel as if they are a socially excluded group within London, are more likely to conform to expectations around how to publicly breastfeed, in order to increase their sense of belonging. Those mothers who choose not to cover are deviating from the norms as highlighted by them, referring to themselves as 'militant' mothers or engaging in a 'political act'. By doing this, they are differentiating themselves which takes energy, courage and strength. Similarities can be drawn to women wearing burkas in England who require strength and courage to wear something which goes against the norm and to deal with any repercussions they may face as a result of wearing something which is perceived by some as a threat to British values (Khiabany & Williamson, 2008).

Given the adversity faced by these nursing mothers along with suddenly becoming an ostracised group, one can begin to understand why the connection with other likeminded nursing mothers is so valuable. This power of unity between nursing mothers aligns with the principles of Social Learning Theory (Bandura, 1977). As mothers breastfeeding in public is rarely seen in the UK (Hamlyn, 2002) mothers seeing the behaviour provides reassurance that they are not alone in engaging in this behaviour. Witnessing other mothers breastfeeding with no serious repercussions also provides vicarious reinforcement that they too can engage in the behaviour with no negative implications. According to Social Learning Theory, we are most strongly influenced by those who are similar to ourselves, providing a further explanation as to why other nursing mothers have such a positive impact. Peer support is something a number of breastfeeding mothers have identified as valuable in enabling them to continue breastfeeding (Fox, McMullen & Newburn, 2015) and has been found to influence rates of duration (Moudi, Tafazoli, Boskabadi, Ebrahimzadeh &

Selehiniya, 2016). There is also evidence for social support improving mood in mothers who are experiencing low level anxiety and depression which subsequently enhances the relationship they have with their child (McMillan & Redshaw, 2009). Together, this highlights the need for nursing mothers to come together and provide the valuable support that can increase health outcomes for both mother and baby.

Within this group of first time mothers their determination to breastfeed their baby through the varying difficulties they faced both at home and in public was something that was very apparent. Their reasoning for this appeared to be largely centred on the benefits they felt breastmilk could provide their baby with leading to mothers consistently putting the needs of their baby before their own. This decision is something that Hays (1996) referred to as 'intensive mothering'. One factor that can encourage this is the moral minefield around 'breast being best'. This is something which has been identified as influencing mothers' decisions on whether to breastfeed or bottle-feed (Murphy, 1999). Within mothers there appears to be a perception that by successfully initiating and continuing breastfeeding they are withholding their identity as a 'good mother' as formula feeding is associated with 'not so good mothering' (Marshall, Godfrey & Renfrew, 2007; Knaak, 2010). Therefore, this increases mothers' desires and determination to breastfeed even when at times, particularly in public, it feels a challenging feeding method. This was also evident through the guilt felt at the prospect of giving up breastfeeding; something which many mothers have disclosed feeling when they have been unable to continue (McInnes, Hoddinott, Britten, Darwent & Craig, 2013) and can be exacerbated by health professionals setting unrealistic expectations (Fox, McMullen & Newburn, 2015), something a few of these mothers also experienced.

For many of the mothers once breastfeeding was fully established and they had normalised this new behaviour through experience, there was an increase in their confidence around public breastfeeding. This evidently shows that by achieving what they intended to, they begin to really establish their new identity as a mother. This self-efficacy in one's ability to successfully breastfeed is an important predictor of the continuation of breastfeeding (Marinelli, 2015) and did indeed appear to support these mothers, as evident from the mother who lacked confidence and found public breastfeeding more challenging than the other mothers.

All mothers interviewed experienced varying challenges around initiating and continuing breastfeeding and specifically public breastfeeding, yet all continued to breastfeed their babies in public. Their continuation of public breastfeeding can be understood according to the Theory of Planned Behaviour whereby one's attitude, perceived behavioural control and subjective norms surrounding the behaviour influence one's intention and level of engagement with the behaviour (Ajzen, 1991). This theory has been used to understand

breastfeeding behaviours in general but given the outcomes of this study, appears to also be applicable to public breastfeeding more specifically.

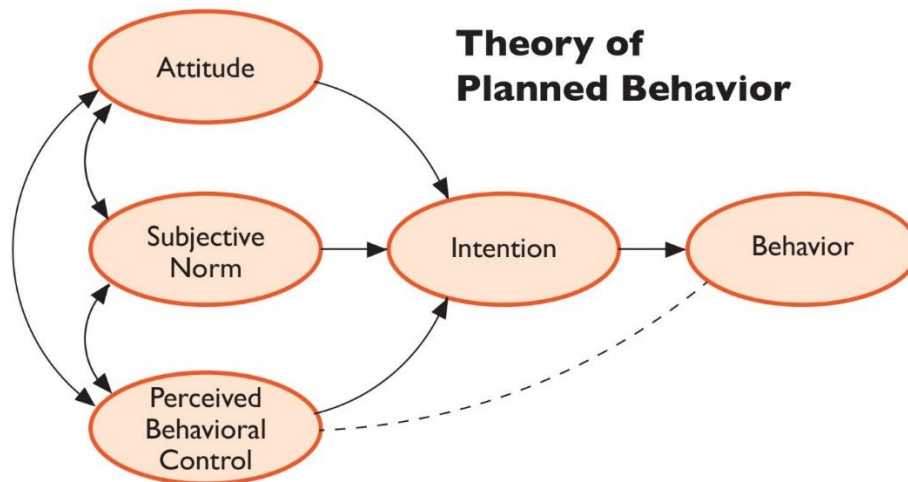


Figure 1: *The Theory of Planned Behaviour* (Ajzen, 1991)

When thinking about these mothers' attitudes towards public breastfeeding, all of them have very positive attitudes towards breastfeeding as a behaviour. There was a strong sense of it being something they felt they were meant for, was natural and could offer their baby substantial health benefits. Mothers also appeared to minimise the negative impacts and attempt to focus on the positives. Such positive attitudes towards breastfeeding is something which has been identified as a strong influencer of intention to breastfeed (Giles et al, 2014) and is likely to be a strong influential factor for these mothers. As for perceived behavioural control, mothers' increasing confidence in breastfeeding and subsequently public breastfeeding provides them with an increasing sense of control. The subjective norms surrounding public breastfeeding within London result in mothers being made to feel that they are abnormal and need to minimise the behaviour to make it acceptable. This is something which in some cases has been found to not predict intentions to breastfeed (Wambach, 1997) and in other cases strongly influence intentions (Swanson & Power, 2000). However, for this particular group of mothers both their attitudes and perceived behavioural control towards public breastfeeding, appear to supersede the subjective norms. This results in them maintaining their intentions to breastfeed and continuing to engage in public breastfeeding, thus showing how even though societal attitudes within London are impacting on them, this is not to the extent that they impact on their intention and desire to breastfeed. Instead they manage the adversity with compromising behaviours such as covering and concealing themselves. Therefore, the Theory of Planned behaviour can enable us to make sense of these mothers' experiences and the subsequent impact on

their behaviour. It may also provide a framework to which one can begin to understand why some mothers do not initiate or continue breastfeeding and public breastfeeding, turning to formula due to their fear of having to go out and breastfeed in public (Forster & McLachlan, 2010). If they did not have strong attitudes towards the behaviour or lacked confidence in their ability to breastfeed in public, this may result in the subjective norms having a greater influence and them subsequently choosing to bottle-feed. If there is evidence to suggest the Theory of Planned Behaviour can help us understand why mothers engage in public breastfeeding, it can then be utilised to inform appropriate interventions to improve mothers' experiences.

Implications for Practice

These findings outline some of the difficulties faced by this group of nursing mothers in London alongside aspects that improve their experience, providing some insight into what interventions could be delivered to enhance mothers' experiences. Interpreting these mothers' experiences and feeding behaviours has shown how society's informal social rule system has a substantial impact on how they feel and subsequently how they behave. Breastfeeding appears to continue to withhold its longstanding taboo status. If society had a different attitude to breastfeeding, mothers' experiences would probably be very different and many of the barriers shared by these mothers probably would not exist, thus implying that this would be the most effective aspect to focus interventions around. However, changing social norms is something that is incredibly difficult and can take years and years for any influential change to happen. One way attitudes may change is by breastfeeding becoming more prevalent within society, altering the descriptive norm and subsequently the injunctive norm. More mothers openly breastfeeding in public would help to normalise breastfeeding as a natural behaviour (Hauck, 2004) and increase exposure which can promote positive attitudes towards the behaviour (Marrone & Vogeltanz-Holm, 2008). Building up mothers' resilience and confidence could be one way to begin to change this, as hopefully more mothers would feel empowered to breastfeed regularly in public whilst also enhancing their ability to manage all the challenges they face during this period.

A way to increase mothers' confidence to publicly breastfeed and their resilience to the impact of societal ostracism could be to include information and support specifically around public breastfeeding in antenatal or postnatal sessions. This was something mentioned by one of the mothers who felt her antenatal sessions prepared her for breastfeeding but not public breastfeeding. This could include information such as their legal rights, sharing tips

or hearing testimonials from mothers who publicly breastfeed about what to do to improve the experience, information about how different cultures and religions perceive breastfeeding to minimise myths and fears and support around finding places to comfortably breastfeed. These are all areas to which these mothers either did not know about, for example, some did not know their legal right to breastfeed in public and were very uncertain around how to breastfeed in public certainly in the early days when everything was new. This could also be of substantial benefit to mothers who are new to the country or the area and may feel even less confident about publicly breastfeeding. These sessions could also act to increase peer support between mothers, particularly if they were delivered postnatally, which is something these mothers appear to be strongly influenced by. This could be particularly beneficial to mothers who feel more isolated. The empowerment as a result of unity and support between breastfeeding mothers also highlights the need to protect and increase support groups and ways for nursing mothers to meet such as in breastfeeding cafés.

Mothers' mixed responses to feeding rooms suggests they may be of real benefit to some mothers but have the opposite effect to others, making them angry at their existence. Due to mothers' focus on their desire to be prioritised and have their needs come before those of the general public, a positive middle ground could be to consider the creation of prioritised areas. These could be areas where they contain the right equipment to support nursing mothers such as comfortable chairs with arms, access to water and space. They need not be separate rooms but areas in public spaces where mothers can come together and breastfeed in a comfortable environment that first and foremost meets their needs.

This study has shown the vulnerability of these nursing mothers, especially in their early days of breastfeeding, and the additional difficulties faced when publicly breastfeeding. These mothers did not feel society particularly supported them to do something they were determined to do, thus making initiating and continuing breastfeeding even more of a challenge. Within health policy there has been recognition of a need to provide more mother centred support to mothers rather than promoting breastfeeding (Trickey, Newburn & Goals, 2014), to which this research supports the need for. Certainly within this group of mothers they had all the knowledge around breastfeeding, but more practical support with both initiating and publicly breastfeeding was lacking. Through investing in breastfeeding and relationship building this can be an important mechanism in promoting attachment and the mental health and wellbeing of both mother and baby (Oddy, Robinson, Kendall, Zubrick & Stanley, 2011) alongside the physical health implications breastfeeding can provide. Health professionals should therefore continue to work on supporting and empowering mothers, making a conscious effort to ensure they are not belittling or ignoring the challenges they face. This requires a substantial level of understanding and empathy towards the nursing

mothers' situation and the fact that within this country there is increasing pressure on mothers to breastfeed, whilst society still remains uncomfortable with it. This places nursing mothers in a challenging situation where if they feel uncomfortable publicly breastfeeding but want to continue to breastfeed, their choice is to either isolate themselves to minimise the need for public breastfeeding or to accept they cannot breastfeed.

Strengths and Limitations

This research has provided much needed insight into this group of first time nursing mothers' experiences of publicly breastfeeding within London. Its qualitative approach has enabled the researcher to explore their experiences at a deeper level, attempting to fully understand and interpret these. This has resulted in rich data providing insight into both positive and negative experiences, which is extremely important given research and the media are often centred on the negative aspects of public breastfeeding. This level of insight can be utilised to inform the design of interventions which support mothers in a way that meets their needs rather than assumed needs thus enhancing effectiveness over the long term and improving health outcomes for both mothers and babies. The ethnic diversity between the mothers interviewed was not initially intended but has provided a further interesting and extremely beneficial angle to the research, in being able to better understand the experiences of those mothers who were not born or did not grow up in the UK.

As a result of recruiting participants through their interest in participating and there being no reimbursement for participation to incentivise others, this resulted in a homogenous group of mothers who all had certain similar characteristics. For example, all were well educated, often to university level, with many having their first child slightly older between their thirties and forties. This bracket of slightly older mothers have been found to be more willing to participate in breastfeeding research (Fox, McMullen & Newburn, 2015) potentially increasing the representation of this age group in breastfeeding research. Attempts to reach a group of lower socioeconomic status mothers by recruiting from a GP surgery within a London borough with high levels of deprivation, did not happen exactly as hoped. This may be a result of the rates of breastfeeding being lower within these groups, like it is with younger mothers, and therefore harder to recruit. This may have also been influenced by the majority of the recruitment being initiated by the Health Visitor. Mothers that were recruited may have been mothers that the Health Visitor had a stronger relationship with and who she felt would be interested in taking part.

Given this research was conducted in London and geographical location has been found to influence public breastfeeding (NCT, 2009) had it been conducted in a small more rural town the findings may be very different, thus making this research more comparable to other larger cities rather than towns and villages.

Conclusions drawn from this piece of research cannot be assumed to reflect the experiences of all nursing mothers within the UK. However, by conducting research on different groups of nursing mothers this can create a clearer picture of what experiences are prevalent across mothers, and what differs between them (Smith, Harré & Van Langenhove, 1995).

Recommendations for Future Research

In order to further increase our understanding of experiences of public breastfeeding within different groups of mothers in an aim to improve health outcomes it would be beneficial to conduct similar research with different groups. This would include mothers from different demographics such as age, socioeconomic status, employment status and relationship status. Conducting research into mothers' experiences in different locations may also be of substantial benefit to ensure interventions are tailored to the specific needs of nursing mothers within that area. It would be interesting to explore experiences for those who may have increased vulnerability such as single mothers who may lack support from their partner, which was identified as important for these mothers. It would also be of benefit to conduct research, not only on those mothers who have continued to breastfeed but those who chose not to or gave up mainly due to the challenges around publicly breastfeeding. This research has highlighted the pressure and determination to breastfeed within these mothers raising the question of how mothers feel when they are paralysed by public breastfeeding and have to give up something which they wanted to do or alternatively minimise their freedom. This could provide further insight into how breastfeeding can be more effectively promoted and supported.

Given a number of the mothers alluded to how public breastfeeding is particularly challenging with a first baby due to not knowing how to conduct oneself and the uncertainty around what reactions they may experience from others, it would be interesting to explore how this changes, if at all, when mothers have a second baby. If confidence increases with a second child as alluded to by these mothers, consideration could be had around whether these mothers could provide peer support to first time mothers. Furthermore, given seeing other nursing mothers in public has been identified as important in influencing future

experiences of public breastfeeding, further research around the impact of initiatives such as the Breastfeeding Welcome scheme and Breastfeeding Cafés may be of benefit. This could help determine how effective intervening around social support is in enhancing mothers' confidence, overall experience and determination to continue breastfeeding.

Alongside researching mothers' experiences of public breastfeeding it is also beneficial to conduct further research into experiences and attitudes of the general public. This research is currently limited (Callagan & Lazard, 2012) but important in enhancing understanding of the experience for both parties involved, as the public's experience will likely also shed light on what could be done to improve the experience for all.

Reflexivity – Part 2

During the interviews my belief in the importance of breastfeeding may have influenced the emphasis mothers placed on breastfeeding, should they have been acting to please me as a health professional. This was something that came to my attention in one of my interviews when the mother asked me explicitly how I felt my positive attitude towards breastfeeding would influence the research. Interestingly when asking why she felt I was pro breastfeeding the answer was centred around the fact that the information sheet stated the work I had done around the Breastfeeding Welcome scheme and training to provide support to mothers. This made me reflect on the fact mothers may have felt a need to overemphasise their breastfeeding behaviours and how important it is. This may have also been exacerbated by being recruited in a health setting by health professionals. Most participants being recruited initially by the Health Visitor likely resulted in recruiting mothers who generally engage well with professionals and who have a positive relationship with the Health Visitor. Rather than mothers who are more challenging to engage and those who may have a slightly less positive relationship with the surgery due to aspects such as social care involvement. Given the way mothers were recruited and the nature of the research involving interviews mothers will have been those willing and wanting to talk about their own experiences.

In terms of my practice as a researcher I noticed a significant shift between the interviews I conducted for my Masters which quite closely followed the interview script and these interviews which felt more relaxed and less structured. I felt more comfortable as a researcher with letting the interview go to where the interviewee wanted to take it, which I believe enabled me to collect really rich data. I did find some of the interviews more challenging when mothers were less forthcoming with sharing their experiences requiring

me to probe more intensively and one when it felt as if the mother was deflecting her anger with British society's attitudes onto me. I managed this situation by being able to quickly realise this and not react to it in a defensive way but to listen and attempt to understand her experience and where this was coming from.

Initially, I was uncertain how having a baby present may impact on the interview but did not want to stop mothers from bringing them. I felt this may have had a slight impact on the level of detail shared at times when we were frequently interrupted but learnt how to best manage this by giving mothers time to attend to their baby and reminding them what we were discussing when returning to our conversation.

One aspect where I feel my prior assumptions may have influenced my research was within my interviews where I was attempting to seek information around the challenging experiences mothers had. As a result of this I was left feeling slightly concerned about my data and avoided analysing it for some time due to mothers having few explicit examples of negative reactions. Upon beginning to analyse the data what arose, even though it was often not always explicit, was extremely powerful and my prior assumptions were at this point disregarded.

Being a female with no personal experience of motherhood and breastfeeding, inevitably will have had some impact on my interviews and interpretations of the data. Even though I perceive myself to have good relational abilities, had I been through the experience myself I may have been able to more closely relate to the data and better understand exactly what these mothers were experiencing. In turn, there may have been aspects where I missed the full meaning. If I had gone through the experience myself, this may have also enabled myself and the interviewee to develop a stronger rapport where they may have been even more open or discussed other aspects that we did not cover. However, I personally felt not having experienced breastfeeding myself was beneficial for me as I fear I could be in danger of imposing my own experiences onto those of these mothers, and viewing their experiences in line with mine. Another factor that further enabled me to have a very open mind and limited prior assumptions and expectations was by doing minimal research around the topic before analysing my data and writing my introduction last. This enabled me to remain strongly with the data and being led by the data itself when analysing it rather than trying to make the data fit what could have been strong prior preconceptions. As a result, I found this research turned out to be something I had not imagined it being at the beginning.

In engaging with IPA as a method I found the methodological flexibility extremely beneficial in the sense of being able to decide the extent to which I adopted its underlying assumptions within the analysis. For example its idiographic assumptions were important to me as I wanted to ensure that whilst attempting to analyse the data collectively and determine overarching themes I also did not lose the individual voice and differences. Yet

in terms of hermeneutics I did not want to adopt an overly interpretative stance when analysing the data. Therefore seeing its flexibility as one of IPAs strengths, rather than criticisms as it often viewed as by critics. One aspect of IPA that I believe does limit its ability in terms of fully accessing meaning and ones experiences is the fact it relies so heavily on language. Therefore participants need to be able to process and articulate their experiences and feelings which requires a substantial level of emotional literacy. Through the act of talking some of their subconscious may become conscious but it is unlikely to be all their unconscious, meaning we cannot claim to have full access to their experiences. This is something as a researcher I had to be aware of and acknowledge within this research.

One of the most challenging aspects of the process for me was interpreting the data due to the difficulties I faced. I spent a long time analysing the data and attempting to include everything in my analysis. I ended up over interpreting my data and losing sight of the mothers' experiences by overcomplicating the analysis. This was to the point that I felt uncomfortable at the prospect of the mothers reading my analysis, which alongside feedback, helped me to realise I was moving too far beyond the data. Something which is easily done with IPA, and needs to be monitored with supervision due to the flexibility of the method. I also began to realise how powerful the data was and the level of insight it provided around their experiences, that it did not require or in any way benefit from over interpretation. Stripping my analysis back to the data led me to what I felt were two strong themes which fully and appropriately encapsulated these mothers' experiences. This in turn led me to feeling very positive about the research and the level of insight it has provided us. It has also made me think beyond breastfeeding in terms of the sheer power of society in socially excluding groups and the impact this has on those individuals. This has empowered me to attempt to do more to improve experiences of marginalised groups and breastfeeding mothers in particular, as the impact on health can be enormous. I also hope this research can be utilised by others to enhance mothers' experiences and improve physical and emotional health outcomes. Traditionally within Public Health research like this which is small scale and focused on a specific area is likely to have been perceived as holding less value than a large scale quantitative study. However over the past few years there does appear to have been a shift in valuing the importance of qualitative data to the point it is influencing commissioning decisions. I do believe this research would be of benefit to Public Health teams within London, especially when considered alongside similar research. Similarly if it was combined with other localised research it could be valuable in other contexts which bear similarities to London. This is especially because of the ethnic diversity of the mothers, meaning the sample was not homogenous to the extent that it lacks generalisability. Taken together these points act to illustrate the value of this research and the need for the findings to be shared widely.

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Appendix A
Expression of Interest Form



Do you have experience breastfeeding in public?

My name is Lucy and up until September last year I was based here at the surgery. I am currently conducting research into mothers experiences of breastfeeding in public in order for people to better understand exactly how mothers feel and what can be done to support them breastfeeding in public.

I would be extremely grateful if you would be happy to take part as you will be contributing to something which aims to help improve the experience for mothers. All that will be involved is meeting with myself and sharing your experiences. Confidentially will be maintained through your name being changed when the research is written up.

If you think you may be interested in taking part and meet the criteria below please complete your details or email me and I will be in touch.

Criteria:

- **Having a child currently between 0-12 months**
- **Being a first time mother**
- **Living in London**
- **Having experience of breastfeeding in public**
- **Having a good grasp of the English language**

Full Name:.....

Telephone Numbers:.....

Email Address:.....

My email: lucyhawkin2@gmail.com

Appendix B

Information Sheet



London Metropolitan University
166-220 Holloway Road
London
N7 8DB

Email: LUH0152@londonmet.ac.uk

INFORMATION SHEET

Mothers Experiences of Public Breastfeeding in London: An Interpretative Phenomenological Analysis.

About the researcher:

I am currently working full time whilst also a student at London Metropolitan University studying for my Professional Doctorate in Health Psychology. This study is being conducted as part of the research element of my doctorate. I have a strong personal interest in breastfeeding and have assisted in the delivery of a breastfeeding support group and actively promoted the Breastfeeding Welcome scheme in Hackney.

Purpose of research:

Due to many health benefits being associated with breastfeeding it has been identified as one of the key indicators for improving health (Department of Health, 2012). The UK has some of the lowest long term breastfeeding rates in the world (La Leche League, 2003) making it comparably poor to other European countries (Cattaneo, Burmaz, Arendt et al, 2010). The latest annual rates to be published in England for 2012/2013 found an average of 73.9% of mothers starting breastfeeding after birth and 47.2% continuing to breastfeed at 6-8 weeks (DoH, 2013). Discomfort of breastfeeding in public has been found to be one of the reasons mothers stop breastfeeding (Smyth, 2008) and consequently may be a factor contributing to the UK's low breastfeeding rates.

There is currently a lack of in depth research exploring mother's experiences of breastfeeding in public within the UK and specifically London. Therefore this study aims to enhance understanding of mother's personal experiences of breastfeeding in public around London and the effect it has on them and their decisions to breastfeed. Such research will provide the opportunity for appropriate interventions to be developed to best support mothers breastfeeding in public.

Why you have been chosen:

You have been chosen because you fulfil the criteria of this particular study. These criteria are:

- Having a child currently between the age of 0-12 months
- Being a first time mother

- Having experience of breastfeeding in public within London
- Speaking English fluently

What will be required of you:

If you decide to take part you will be required to meet myself for an interview at a time and place convenient for you. This interview will consist of a series of questions based around your personal experiences of breastfeeding in public within London and will last around 60 minutes.

Your data:

All interviews will be audio recorded and subsequently typed up. Upon being typed up all interviews will be anonymised through participants' names being replaced by pseudonyms and all recordings will be destroyed.

Consent & Withdrawal

Your participation in the study is entirely voluntary therefore it is your decision as to whether you would like to take part. Due to participation being voluntary you are free to withdraw from the study up until a month after the interview and consequently have your data removed. You do not have to provide any reason for this.

Ethical Approval

This study has been reviewed and approved by the NHS Research Ethics Committee and SoP Research Ethics Review Panel (RERP) at London Metropolitan University.

Thank you for taking the time to read this information sheet. If you have any questions about this study and your participation, please do not hesitate to get in touch at LUH0152@londonmet.ac.uk. For any further issues which you feel unable to discuss with myself please contact my supervisor Joanne Semlyen at J.Semlyen@londonmet.ac.uk.

Kind Regards,
Lucy Hawkin (Researcher)

Appendix C Consent Form



London Metropolitan University
166-220 Holloway Road
London
N7 8DB

Email: LUH0152@londonmet.ac.uk

CONSENT FORM- Mothers Experiences of Public Breastfeeding in London: An Interpretative Phenomenological Analysis.

Thank you for your interest in this study exploring mothers experiences of breastfeeding in public within London. If you have read the information sheet and are interested in participating then please complete this consent form and return it via post. I will then contact you to arrange an interview at a time that is convenient for you.

	YES	NO
DO YOU CONFIRM THAT YOU:		
- Have a child aged between 0-12 months	<input type="checkbox"/>	<input type="checkbox"/>
- Are a first time mother	<input type="checkbox"/>	<input type="checkbox"/>
- Speak English fluently	<input type="checkbox"/>	<input type="checkbox"/>
- Have experience breastfeeding in public in London	<input type="checkbox"/>	<input type="checkbox"/>
- Are happy for interviews to be audio recorded	<input type="checkbox"/>	<input type="checkbox"/>
 HAVE YOU:		
- Been given information explaining about the study?	<input type="checkbox"/>	<input type="checkbox"/>
- Had an opportunity to ask questions and discuss this study?	<input type="checkbox"/>	<input type="checkbox"/>
- Received satisfactory answers to all questions you asked?	<input type="checkbox"/>	<input type="checkbox"/>
- Received enough information about the study for you to make a decision about your participation?	<input type="checkbox"/>	<input type="checkbox"/>
 DO YOU UNDERSTAND:		
that you are free to withdraw from the study and to withdraw your data:		
• at any time up until a month after the interview?	<input type="checkbox"/>	<input type="checkbox"/>
• without having to give a reason for withdrawing?	<input type="checkbox"/>	<input type="checkbox"/>

I hereby fully and freely consent to my participation in this study

I understand the nature and purpose of the procedure involved in this study. This has been explained to me on the information sheet accompanying this form and through the opportunity to ask any questions.

I understand and acknowledge that this study is aimed to enhance scientific knowledge and that London Metropolitan University will use the data that I provide for no other purpose but research.

I understand that the data I provide will be kept entirely **confidential**, and that my data will be **anonymised** when formally written up by replacing my name with a pseudonym.

Participant's signature: _____ Date: _____

Name in BLOCK Letters: _____

Yours Sincerely,

Lucy Hawkin (Researcher)

Appendix D

Interview Guide

1. Tell me a bit about how you are finding breastfeeding in general?
2. How often have you/do you breastfeed in public?
 - *Why is this the case?*
3. Tell me about your personal experiences of breastfeeding in public
 - *Positive/negative experiences*
 - *What was going on in your mind*
 - *How confident do you feel?*
 - *How comfortable do you feel?*
 - *How relaxed and at ease are you?*
4. What are the challenges you face when breastfeeding in public, if any?
 - *Practical challenges?*
 - *Emotional challenges?*
5. What, if any, actions do you take to improve your experience of breastfeeding in public?
 - *Why do you choose those?*
 - *What impact does that have on you and your baby?*
 - *How important do you think it is to be discrete?*
6. How does your ability to breastfeed in public impact on you?
 - *Impact on your day to day life?*
 - *Impact on freedom?*
 - *Impact on your emotional health and wellbeing?*
 - *Impact on your child?*
 - *Impact on desire to breastfeed altogether?*
7. What reactions have you experienced from others when breastfeeding in public?
 - *Have others been supportive or unsupportive?*
 - *How did that make you feel?*
 - *How did that impact on you?*
 - *What do you think other people think when you are breastfeeding in public?*

8. How supported do you feel to breastfeed in public?

- *By society*
- *By the government*
- *By the media*
- *By friends/family*
- *By facilities*
- *Why is that the case?*

9. What public environments do you feel most comfortable breastfeeding in?

- *Why is that the case?*

10. What public environments do you feel least comfortable breastfeeding in?

- *Why is that the case?*

11. What influence does access to appropriate places to breastfeed have on breastfeeding in public?

- *Influence on willingness to breastfeed in public?*
- *Influence on ease of breastfeeding in public?*
- *How does it affect your decisions to go out and where to go?*
- *How does it affect your confidence when breastfeeding in public?*

12. What do you know about your rights when breastfeeding in public?

- *What impact do you think this has on your confidence and ability to breastfeed in public?*

13. What changes do you think are needed in London to better support mothers breastfeeding in public?

- *Practical?*
- *Societal?*

Appendix E
Data Monitoring Form



London Metropolitan University
166-220 Holloway Road
London
N7 8DB
Email: lucyh@participle.net

DATA MONITORING FORM

Please complete all sections of the form and where appropriate circle the option you feel best applies to you.

Title
Full Name
Address
Home number
Mobile number
Email Address
Your date of birth
Baby's date of birth
Ethnicity
White Additional Info..... Mixed/multiple ethnic groups

	Additional Info..... Asian/Asian British Additional Info..... Black/African/Caribbean/Black British Additional Info..... Other ethnic group.....
Relationship Status	Single Cohabiting Married Civil Partnership Separated Divorced Widowed Other.....
Education	None School Up to GCSE Up to A Level Up to University Other.....
Employment Status	Employed full time but currently on maternity leave Employed part time but currently on maternity leave Employed full time Employed part time Unemployed Other.....
Occupation	
Housing	Council Accommodation Private Rented Accommodation Own property Other.....
Breastfeeding Status	Currently Exclusively Breastfeeding Currently Mixed Feeding Terminated Breastfeeding Other.....

Appendix F
Debrief Sheet



London Metropolitan University
166-220 Holloway Road
London
N7 8DB
Tel: 020 7423 0000
Email: LUH0152@londonmet.ac.uk

DEBRIEF SHEET

Mothers Experiences of Public Breastfeeding in London: An Interpretative Phenomenological Analysis.

Thank you very much for taking part in this study exploring mothers experiences of breastfeeding in public within London. The study's main aim was to explore and thus enhance knowledge of mother's experiences as breastfeeding in public has been highlighted as problematic for mothers (Smyth, 2008) yet little in depth analysis currently exists, especially within London. Exploring personal experiences of breastfeeding in public can help enhance understanding of factors that can both hinder and support breastfeeding in public and breastfeeding altogether. Consequently this will enable the development of appropriate interventions supporting mothers to breastfeed in public and feel as comfortable possible whilst doing so. As only a small number of mothers were interviewed the aim is not to claim to represent the breastfeeding experiences of all women but rather provide greater in depth understanding of some women's experiences.

The next step in this research process is for all the interviews to be analysed. Confidentiality will be maintained throughout this process with real names being changed to pseudonyms. Due to your participation in this study being voluntary you have the right to withdraw your data at any point up until a month after the interview. If you decide that you would like to withdraw your data please contact me at LUH0152@londonmet.ac.uk. I will not require any explanation as to why you have come to that decision.

If at any point you have any further questions or anything arises for you from this study please feel free to contact me or utilise the contacts provided below.

Once the study is completed a summary of the findings can be sent to participants if requested. Please let me know if you would like to receive this information.

A small selection of contact details are provided below in case you would like more information about where to seek support for breastfeeding related issues:

National Breastfeeding Helpline

Independent, confidential, mother-centred, non-judgemental breastfeeding support
and information

Tel: **0300 100 0212 – 9.30am – 9.30pm daily**

Web: www.nationalbreastfeedinghelpline.org.uk

National Childbirth Trust (NCT)

For any questions, concerns or support required around breastfeeding

Tel: 0300 330 0771 – 8am – 12pm daily

Web: www.nct.org.uk

Association of Breastfeeding Mothers (ABM)

Support from trained breastfeeding counsellors to support you in your
breastfeeding journey

Tel: 0300 330 5453 - 9.30am – 10.30 pm daily

Web: www.abm.me.uk

Mothers for Mothers

Support and advice from mothers who understand what you are going through in
terms of the challenges of bringing up a baby

Tel: 0117 975 6006

Web: www.mothersformothers.co.uk

Samaritans

Emotional support for anything that may be affecting you

Tel: 0845 790 9090

Web: www.samaritans.org

Support and advice specifically for breastfeeding in public:

Breastfeeding Network - www.breastfeedingnetwork.org.uk/breastfeeding-help/out-about/

NHS Choices - www.nhs.uk/Conditions/pregnancy-and-baby/Pages/breastfeeding-in-public.aspx#close

Once again I would like to thank you for taking part in this study. Your participation is greatly appreciated.

Best Wishes,

Lucy Hawkin (Researcher)

Appendix G
London Metropolitan University Ethical Approval



London Metropolitan University,
School of Psychology,
Research Ethics Review Panel

I can confirm that the following project has received ethical approval by one anonymous Reviewer, the Head of School of Psychology and the Dean of the FLSC to proceed with the following research study (Professional doctorate):

Title: **Mothers Experiences of Breastfeeding in Public within an Urban Area: An Interpretative Phenomenological Analysis.**

Student: **Ms Lucinda Hawkin**

Supervisor: *Dr. Joanna Semlyen*

Ethical clearance to proceed has been granted providing that the study follows the most recent Ethical guidelines to dated used by the School of Psychology and British Psychological Society, and follows the above proposal in detail.

The researcher and her supervisor are responsible for conducting the research and should inform the Ethics panel if there are any substantive changes to the project that could affect its ethical dimensions, and re-submit the proposal if it is deemed necessary.

Signed: 

Date: 13 May 2015

Prof Dr Chris Lange-Küttner
(Chair - School of Psychology Research Ethics Review Panel)

Email c.langekuettner@londonmet.ac.uk

Appendix H

NHS Ethical approval



Clinical Research Network
South London

16th Floor, Tower Wing
Guys Hospital
Great Maze Pond
London, SE1 9RT

Tel: 020 7188 0494
Email: crnsouthlondon@gstt.nhs.uk
Web: www.crn.nihr.ac.uk/slondon

Lucinda Hawkin
London Metropolitan University
166220 Holloway Road
London
N7 8DB

01 December 2015

Dear Lucinda,

Study title: Mothers Experiences of Public Breastfeeding in London
REC Ref: 15/NW/0794
CSP/R&D Ref: 179467

NHS Research Governance (RG) assurance for the above research has been given for all **CCG's within London South CRN**. The activities described in the application form and supporting documentation approved by an NHS Research Ethics Committee (REC), subject to the conditions listed below and overleaf. RG assurance is given on the understanding that the study is conducted in accordance with the Research Governance Framework. RG assurance covers the sites listed above.

The study team must get written agreement from each participating site confirming their decision to take part in this study. Please give a copy of this letter to each participating site.

Please note that one of the DH/NIHR objectives for UKCRN portfolio projects is for the first patient to be recruited within 30 days of the date of this letter. A CRN: South London Research Officer will be working closely with the study team to enable this objective to be achieved. If you have any queries about this please contact Simon Davies at Simon.Davies@gstt.nhs.uk.

If you require any further information or advice, do not hesitate to Clare Gillott.

Delivering research to make patients, and the NHS, better

Yours sincerely,



Clare Gillott
Industry & RM&G Operations Manager

c.c. Primary Care PI/LC
Mr Simon Davies, CRN: South London
Ms Ana Guerra: South London CRN Primary Care Lead Facilitator
Chief Investigator
Clinical Studies Coordinator

Research Governance assurance is given subject to the following conditions:

There will be no call upon NHS resources other than any mentioned in the application and agreed with the R&D Office and the Primary Care site.

The research sponsor or the CI or the local PI at the research site may take appropriate urgent safety measures in order to protect research participants against any immediate hazard to their health or safety. The R&D Office should be notified if any such measures have been taken. The notification should also include the reasons why the measures were taken and the plan for further action. The R&D office should be notified within the same time frame as the REC.

The Sponsor organisation must have in place procedures for detecting and dealing with misconduct and fraud. All researchers must be aware of these procedures and any instances must be reported to the R&D Team.

Unless the Study Team requests otherwise, we will include details of this project on the Primary Care database.

We will ask the Study Team to send us a copy of the final report and/or a summary of the findings.

Delivering research to make patients, and the NHS, better

Appendix I

Written confirmation from the GP surgery

15th February 2016

Clinical Research Network
South London
16th Floor,
Tower Wing Guys Hospital
Great Maze Pond
London, SE1 9RT

Dear Sirs,

Re: **Study title:** Mothers Experiences of Public Breastfeeding in London
REC Ref: 15/NW/C794
CSP/R&D Ref: 179467

I confirm that we have received and read sufficient documentation in order to make an informed decision about agreeing to participate in the research titled: Mothers Experiences of Public Breastfeeding in London. Based upon this information we agree for the researcher to recruit within the surgery, as long as the research is conducted according to the approved protocol.

Yours sincerely

Appendix J

Summary of Interview Themes

Interview 1 themes

1. Societal Attitudes as Ostracising

a. Breastfeeding as a taboo

Disconnection between identities increasing potential for unacceptance (702)
Discomfort in close connections (411, 428)
Racially defined judgments (377)

b. The unwritten rule of concealment

Need for justification (219, 230, 304, 315, 530)
Cover as a necessity (184, 191, 325)
Others as the priority (19, 345, 348)

c. Discomfort in visibility

Discomfort as a dictator of feeding behaviour (14, 143)
Comfort in avoidance (30, 80, 464)
Breastfeeding as a last resort (28, 86, 114, 123, 477, 503, 560)
Preference for minimisation (336, 367)
Breastfeeding as an attention drawing behaviour (242)
Breastfeeding as performance (330)
Location and duration as determinates of feeding behaviour (485)
Location as determinate of feeding choice (536)
A need for prior planning (514)
Vulnerability in unknown places (668, 687)
Environment determining appropriateness (186)
Suitable spaces as a challenge (205)
Discomfort in attention (347, 353, 598)
Discomfort in visibility (6)
Discomfort in confined spaces (165, 171)
Comfort in privacy (146)
Vulnerability in busy places (179)
Fear of exposure (209, 580)
Fear of judgement from exposure (93)
Discomfort in exposure (203, 322)
Muslin as an enabler (33, 90, 97, 101, 158, 462, 466, 507, 558, 564, 574, 584, 589, 624)
Comfort as unobtainable (197, 299)
Freedom in anonymity (442, 448, 525)
Time as a determinate of attention received (605)
Bottle enabling freedom (149)

2. Becoming a nursing mother

a. Determination superseding challenges

Pressure to breastfeed (548)
A need to focus on the outcome (618)
Babies preference as an influencer of behaviour (130)
Baby as priority (364)
Breastfeeding as a bonding experience (152)

b. Confidence as a process

Desire for prior knowledge (275, 280, 285)
Reassurance in prior knowledge (292)
Importance of preparation (267)

c. Identifying with other breastfeeding mothers

Learning from similar others (210, 628)
Inappropriateness of exposure learnt from similar others (224, 234, 248)

Dropped themes:

Restricted freedom of motherhood (498)
Anxiety as a driver of feeding behaviour (48)
Milk flow as a driver of feeding choice (72)
Urgency of feeding (36)
Public feeding as time restricted (613)
A need for direction (651, 657)
Guidance and support easing the challenges (675)
Fear of judgement of parenting ability (39, 389)
Formula as a provider of satisfaction (65)
Internet as a valued source of information (252, 255)
Fear of judgement over feeding duration (358, 370, 382, 397, 404, 446, 452)

Interview 2 Themes

1. Societal Attitudes as Ostracising

a. Breastfeeding as a taboo

Fear of negative implications (50) (527)
Fear as disproportionate to reality (480)
Reframing of the breast (586)
Societal understanding as a process (664)
Concern of the impact on others (76)
Society as perception driven (603)
Unacceptance of breastfeeding (607)
Breastfeeding perceived as unnatural (610)
Society as a limiting factor (656)
Need for defensiveness (696)
Societal understanding as priority (705) (726)
Understanding as an enabler to acceptance (730)
Breastfeeding as defying normality (13)
Public breastfeeding as brave (95)
Sex as barrier to understanding (154) (286)
Men as a source of discomfort (59)
Acceptability defined by culture (576)
Culture influencing acceptance (162)
Importance of respecting culture (166)
Comfort depending on others comfort (80)
Disapproval as hurtful (68)
Self doubt as a result of others (135) (518)
Perceptions as the biggest barrier (96)
Discomfort in front of businessmen (378)

b. The unwritten rule of concealment

Internalisation of societal unacceptance (678)
Cover as a means of control (452)
Uncertainty of social conduct (54)
Resentment of imposed restrictions (243) (314)
Frustration with imposed restrictions (329)
Importance of prioritisation (713)
Isolation as discrimination (41)
Isolation as protection (597)
Isolation instilling fear (616)
Separation as a means of avoidance (184)
Resentment of social isolation (628)
Something to be ashamed of (268)
Fear of creating discomfort (92) (221)

c. Discomfort in visibility

Fear of exposure (583)
Fear impacting on freedom (446)
Vulnerability in open spaces (650)
Comfort in invisibility (27) (641)
Comfort in strategies (401)

The scarf as an enabler (410)
Experiences instilling fear (361) (462)
Husbands comfort vs babies needs (263)
Covering the breast as respect to husband (436)
Empathising with husbands discomfort (292)

2. Becoming a nursing mother

a. Determination superseding challenges

Reassurance in defining an end point (562)
Mothers comfort vs benefit to the baby (17)
Public & baby before self (407)
Benefits to baby as a driver (558)
Guilt at the prospect of giving up (568)
Pressure to breastfeed superseding discomfort (470)
Mothers will as a driving force (394)
Women as strong and determined (21)

b. Confidence as a process

Confidence as a process (24) (44)
Resentment to empowerment (190) (319)
Empowered by experience (579)
Importance of time (327) (456)
Confidence as a barrier (498)
Longing for confidence (246)
Confidence building as a priority (718)
Reinforcement of experience (396)
Positive behaviour as reinforcement (333)
Vulnerability of self as a first time mother (204) (211) (565)

c. Identifying with other breastfeeding mothers

Fear fuelled by other mothers (7)
Importance of role modelling (193)
Empowerment through role modelling (620)
Identifying with similar others (270) (299) (369) (378) (536) (637)
Learning through identifying with others (425)
Reassurance obtained from other mothers (512)
Breastfeeding mothers as role models (673)
Power of unity (237)
Experience enabling understanding (229) (540)
Experience illicitating empathy (546)

Dropped themes:

Inappropriateness of advice giving (219)
Social isolation of motherhood (115)
Disappointment in close relationships (172) (274)
Importance of protecting close relationships (105)
Balance between friendship and motherhood (122)
Friend vs mother (148)

Guilt vs disappointment (355)
Invasion of place of comfort (351)
Social support as an influencer (500)

Interview 3 Themes

1. Societal Attitudes as Ostracising

a. Breastfeeding as a taboo

Experience influencing understanding (84, 563)
Public breastfeeding as rare (760)
Process of understanding British culture (6, 171, 641)
Expectation of disapproval (126)
Persistent fear of criticism (206)
Fear as disproportionate to reality (539)
Public breastfeeding as an issue (163)
Frustrations in sexual perceptions (33, 74)
Improvement in perceptions (88)
Acceptance as status driven (433, 439)
Culture as pivotal to breastfeeding freedom (730)
Male superiority as justification for disapproval (150)
Sense making of contradictory society (94, 101)

b. The unwritten rule of concealment

Reassurance in explicit acceptance (313, 677)
Need for reassurance (363)
Positive impact of consideration (680, 701)
Covering as a British behaviour (367)
Questioning the need to conceal (69)
Defying social conduct (33)
Defying social conduct in an attempt to normalise (62)
Initial uncertainty around breastfeeding rules (164)
Fear of conflict (414)

c. Discomfort in visibility

Discomfort in confined spaces (23, 192, 197, 453)
Importance of some protection (185)
Safety in prioritised areas (222, 344)
Feeding rooms as an enabler (724)
Fear of the unknown (265, 305, 309, 356, 376, 471, 477)
Importance of the environment (272, 278)
Rumination around location suitability (50)
Fear over suitability of the environment (16, 460)
Comfort in avoidance (257, 420)
Comfort in hiding behaviour (190)
Comfort in invisibility (601)
Confidence in discreetness (613)
Vulnerability of self as a driver of behaviour (594)
Discomfort in exposure (321, 331, 616)
Fear of exposure (506, 513)
Importance of concealing the breast (519)
Importance of self-expression rather than conformity (587)

d. Need for protection from society

Media as a powerful influencer (432, 442)
Need for partner as protection (40, 199, 251)
Realisation of the need for protection (241)
Reassurance in the law (77, 438)

2. Becoming a nursing mother

a. Determination superseding challenges

Criticism as empowerment (631)
Initial uncertainty around conduct as an erased memory (166)
Denial surrounding restriction (391, 405, 498)
Determination superseding others perceptions (29)
Bonding superseding comfort (298)
Baby as dictator of duration (288)

b. Confidence as a process

Confidence as a process (27, 35, 59, 525, 666)
Empowered by experience (412, 550, 626)
Challenging inner self (353, 385)
Longing for confidence (26)
Panic at initiation (660)
Uncertainty during initiation (12)
Society diminishing self-confidence (108)
Proud of independence (492)
Achievement in gradual independence (533)

c. Identifying with other breastfeeding mothers

Identifying with similar others (234)
Happiness through identifying with similar others (765)
Power of unity (344, 743)

Dropped themes:

Antenatal preparation as beneficial (753)
Adapting changing environment as inappropriate (697, 715)
Freedom superseding comfort (360)
Lasting impact of negative perceptions (146)
Fear of the self (214)
Urgency of feeding (57)
Confidence in friend's acceptance (571)
Support in health professionals (123, 154)
Social support as a source of power (210)
Social support as a pacifier (214)
Discomfort in seeking help (399)

Interview 4 Themes

1. Societal Attitudes as Ostracising

a. Breastfeeding as a taboo

Changing role of the breast (129)
Need to justify breastfeeding (100) (199)
Dissociation with sexual connotations (363)
Expectation of disapproval (311)
Acceptability defined by culture (186)
Culture defining rules (273)
English as unaccepting (154) (222)
Avoidance in British culture (226) (230)
Societal discomfort in nudity (238)
Nudity as a taboo (393)
Nipples as a taboo (372) (388)
Sense making of contradictory society (246)
Dissociation with British culture (252) (259)
Nationality influencing conformity (269) (277) (285)
Discomfort with male relations (133) (137)
Sex influencing understanding (170) (221) (513) (515) (547)
Surprise at naivety of others (174, 181)
Experience enabling understanding (511)
Acceptance dependent on generation (107) (125) (149)
Discomfort with relations (127)
Need for justification in front of relations (144)

b. The unwritten rule of concealment

Muslin as an warning sign (75)
Depersonalisation of the muslin (86)
Cover enabling attainment of a compromise (329)
Expectation to conceal (283) (290) (317) (336) (342)
Obligation to cover (89) (92) (192) (327) (351)
Obligation to respect others (482) (496)
Defying the expectation to conceal (294)
Anger at expectation to conceal (413)
Rights vs respect (95)
Submission into concealing (424) (433)
Desire to normalise vs ease in conforming (347)
Exposure enabling normalisation (355)
Cover as reinforcing sexual perceptions (361)
Requirement for benefits to self to outweigh benefits to society (530) (557)
Isolation as discrimination (526) (595)
Isolation as detrimental to health (605)
Isolation as detrimental (643)
Expectation to conceal (158)
Implicit cultural expectations to conceal (301)
Power of transference from society (305) (451)
Others as the priority (115)
Fear of creating discomfort (324)

c. Discomfort in visibility

Vulnerability in open spaces (71)
Importance of a sense of space (575)
Importance of the environment (491)

d. Need for protection from society

Mothers vs society (211)
Reliance on others for defence (190) (195)

2. Becoming a nursing mother

a. Determination superseding challenges

Challenges of motherhood (631)
Rarity of self as priority (464)
Baby as priority (38)
Ease superseding perceptions (203) (207)
Ease of public breastfeeding (46)
Pressure to breastfeed (247)

b. Confidence as a process

Confidence as a process (658)
Reliance on others for guidance (26)

Dropped themes:

Pain as a barrier (5)
Breastfeeding as a complex process (13)
Breastfeeding enabling freedom (660)
Fear of blame (33)
Urgency of feeding (55)
Maintaining an identity beyond motherhood (614)
Vulnerability of self as a mother (507) (519) (601)
Importance of mutual respect (119)
Disruption as a barrier (41)
Physical discomfort greater than emotional (453)
Disengagement from the environment (458) (470)
Environmental design disregarding mothers (543)
Anger at disregard for mothers (579)
Importance of socialisation (624)
Anger at unexpected judgement (160)
Preparation as beneficial (608)
Babies as a source of happiness (646)

Interview 5 final themes

1. Societal Attitudes as Ostracising

a. Breastfeeding as a taboo

Behaviour as culturally defined (73)
Multicultural society as a barrier (541)
Demographics influencing safety (557)
Experience enabling understanding (423)
Understanding as a barrier to acceptance (538)
A need to emphasise the natural nature (578)
Defeated by societal perceptions (532)
Improvement in space as the only hope (534)
Inability to alter perceptions (548)
Discomfort as an implication of disconnection between identities (136)
Men as a source of discomfort (15, 70)
Guilt at breastfeeding in public (458)
Awareness of mens discomfort (427)
Importance of respecting men (86)
Self as a priority over men (452)

b. The unwritten rule of concealment

Importance of prioritisation (521, 527)
Invisibility as the only option (571)
Public as priority (115)
Prioritisation of others (265)

c. Discomfort in visibility

Discomfort in attention (92)
Discomfort in visibility (112, 128, 130)
Comfort in invisibility (230, 334, 432)
Discretion as an enabler (162)
Discomfort in confined spaces (67, 153)
A need for space (257, 339)
Safety in prioritised areas (106, 236)
Comfort determined by external attributes rather than internal (320)
Location suitability as a challenge (329)
Environment dictating comfort (275)

d. Need for protection from society

Determining reality of media perceptions (39)
Media instilling fear (116)
Media determining location safety (565)
Power of the media (490)
Importance of safety (559)

2. Becoming a nursing mother

a. Determination superseding challenges

Vulnerability of self as a breastfeeding mother (259)
Expectation to sacrifice self (478)
Establishing breastfeeding as the primary challenge (583)
Importance of breastfeeding (195)
Importance of reaching self set targets (353, 399, 409)
Achievement in avoidance of the bottle (387)
Breastfeeding benefits superseding challenges (312)
Distorted perception of comfort (316)
Perceived ease at dissociating with negativity (493)
Self comfort a priory over setting acceptance (380)

b. Confidence as a process

Fear diminishing over time (6)
Confidence increasing over time (9, 50)
Breastfeeding as a process (598)
Breastfeeding as a learning process (589)
Confidence as a process (57, 165, 171, 176, 290)
Breastfeeding anxiety prior to birth (198)
Exceeding self-defined expectations (189)
Confidence influencing duration (402)
Prior uncertainty around new identity (200)
Confidence in new identity as an enabler (181)
Increasing self-confidence facilitating socialisation (419)
Confidence enabling freedom (294)
Time facilitating confidence in transitioning identity (368)

c. Identifying with other breastfeeding mothers

Experience increasing awareness of breastfeeding (36)
Identifying with similar others (12, 29, 61)
Power in unity (51)
Support assisting process of normalisation (214)

Dropped themes:

Urgency of feeding (343)
Importance of preparation (331)
Attitude as important as space (506)
Support illustrated within media (487)
Confidence in a variety of locations (471)
Ease determined by practicalities (304)
Society as respectful of privacy (186, 444)
Socialisation vs breastfeeding (248)
Importance of socialisation (43)

Interview 6 themes

1. Societal Attitudes as Ostracising

a. Breastfeeding as a taboo

Frustrations with comparisons to nudity (268)
Confusion over exposure failing to normalise (174)
Environment culture influencing acceptability (461)
Expectation of disapproval (256)
Fathers as different to men (356)
Lack of support from society (328)
Low level expectations of public support (272, 360, 520)

b. The unwritten rule of concealment

Importance of prioritisation (482)
Dissociation with negative reactions (257)
Rights enhancing power (448)
Others comfort influencing self comfort (434)

c. Discomfort in visibility

Comfort in concealment of the breast (78, 138, 146)
Clothing choice determined by ability to conceal (151)
Discretion as an enabler (101, 108)
Comfort in privacy (53)
Total privacy enabling relaxation (349, 368)
Safety in prioritised areas (92, 352)
People as a source of discomfort (133, 407)
Comfort in others disinterest (208)
Parent rooms enabling freedom (96)
Reassurance in presence of a baby room (525)
Acceptability of large changing rooms (390)

d. Need for protection from society

Media instilling fear (263, 265)
Husband as protection from society (40, 65)

2. Becoming a nursing mother

a. Determination superseding challenges

A need for perseverance after a challenging birth (6)
Breastfeeding as the priority (13)
Breastfeeding as a comforter (205)
Termination as a result of natural life events (19)
Baby as the priority (48)
Expectation of strength & resilience (531)
Public breastfeeding as fine (34)
Low threshold for comfort (160)

A need to illustrate no impact on freedom (196, 213, 219)
Denial surrounding prior anxiety (178)
Minimising the impact of discomfort (475)
Upset at inability to meet babies needs (117)
Emotions determining ease (121)
Denial of societal influence (277)
Defiance at the prospect of judgement (67, 163, 417)

b. Confidence as a process

Time facilitating confidence in transitioning identity (38, 42, 181, 188, 234, 259)
Confidence as a result of experience (74, 195, 280)
Surprise at own self confidence (229)
Proud of independence (60)
Achievement in self dependence (336)
Anxiety as disproportionate to reality (198)
Freedom enhancing over time (223)
Ease of location suitability (339)
Fear to disengagement with expectations (82)
Positive reactions instilling confidence (251)

c. Identifying with other breastfeeding mothers

Experience enhancing awareness of breastfeeding (454)
Peer support as a determinate of duration (513)
Powerful impact of socialisation with similar others (290)
Reassurance in other mothers difficulties (301)
Power of unity (366, 401, 501)
Importance of enhancing mothers socialisation (486)
Cafes as a means of reducing social isolation (493)

Dropped themes:

Condition minimising privacy (426)
Surprise at ease of feeding outside London (393)
A sense of being ignored (246)
Importance of initial support (61)
Socialisation diminishing self pity (311)
Support in Health professionals (295)
Support influencing duration (315)
Husband as a confidence builder (281)
Positive impact of reliable support (309)
Negative associations with changing facilities (378)
Accessories enhancing comfort (471)

Interview 7 themes

1. Societal Attitudes as Ostracising

a. Breastfeeding as a taboo

Strength of relationship determining ease (352)
Discomfort in crossing the friendship boundary (132, 363)
Others comfort instilling self comfort (640)
Naturalness failing to create acceptance (177)
Misinterpretation of breastfeeding reducing support (688)
Desire for normalisation (821)
Power of transference from society (231)
Frustration to see beyond perceptions to purpose (825)
Anger around acceptability of perceptual judgement (832)
Acceptance as lucky (629)
Men as a source of discomfort (373)
Socioeconomic status indicating likelihood of confrontation (561)
Culture influencing pressure (720)
Age determining understanding (572)
Acceptance dependent on venue status (758)
Shock at disapproval from upmarket venues (683)
Affinity towards the negativity surrounding public outings (250)
Acceptance dependent on environment (151)
Transient nature of public places as a barrier (773)
Extended family as a source of discomfort (303)
Fear as disproportionate to reality (620, 670)

b. The unwritten rule of concealment

A need to seek others approval (329)
Defeated as a result of disregarded effort (210)
Covers as a hindrance (525)
Fear of the self (161)
Limited awareness minimising the impact of the law (689)
Comfort in avoidance (137, 227, 432, 630, 785)

c. Discomfort in visibility

Breastfeeding as performance (539)
Bottle enabling the maintenance of dignity (497)
Fear of exposure (520, 559)
Fear of disapproval (407)
Fear of confrontation (426, 444)
Fear of confrontation driving avoidance (457)
Public feeding as the last resort (135, 239)
Comfort in concealment of the breast (321)
Vulnerability in busy places (155)
Comfort in privacy (554)
Importance of tranquillity (341)
Fear of the unknown (228, 409)
Comfort in familiarity (551, 594)
Importance of a comfortable space (412)

d. Need for protection from society

A need for protection (760)
Partner as protection from society (216)
Media instilling fear (677)
Breastfeeding jeopardising safety (214)
Kids jeopardising safety (777)
Guilt at inability to defend (280)

2. Becoming a nursing mother

a. Determination superseding challenges

Benefits to baby as the driver (22)
Baby as priority (117, 189, 508, 803)
Baby's needs superseding the self (237)
Frustrations at recommendations to cease (182, 504, 601)
Resistance to family recommendations (717)
Breastfeeding as a mutually beneficial behaviour (510, 513)
Satisfaction from dependence (804)
Connection improving ease (394)
Self blame as a result of feeding difficulties (729, 868)
Anxiety around successful establishment (873)
A need for continual reassurance (64)
Need to justify initial difficulties (46)
Breastfeeding expectations instilling pressure (51, 98)
A need to defend feeding routine (122)
Inability to please within motherhood (233, 693)
Anger at judgement of parenting ability (261)
Continuation providing a sense of achievement (819)
Breastfeeding a fulfilling a woman's purpose (541)
Health professionals raising expectations (861)
Staff encouragement instilling pressure (37, 725)
Pressure as a determinate of duration (841)

b. Confidence as a process

Experience defying expectations of ease (84, 90, 387, 392)
Self-confidence as a determinate of ease (129, 224, 381, 417)
Longing for self-confidence to facilitate ease (204)
Confidence as a necessity to protect baby (816)
Concern around insecurities impacting the baby (451)
Fear of instilling insecurities (480)
Confidence as a process (326)
Confidence as a result of experience (721, 798, 877)
Time facilitating confidence in transitioning identity (367)
Vulnerability of motherhood impacting confidence (243, 315)
Self-confidence as an ideal not reality (812)
Lack of confidence in self discretion (144, 405)
Long lasting impact of judgement (289, 699)
Insecurities prior to parenthood (587)
Vulnerability enhancing paranoia (168)
Avoidance as a detrimental behaviour (634)
Failure of society to encourage less confident mothers (839)
Breastfeeding as a justification for isolation (469)
A need to justify isolation (475)

c. Identifying with other breastfeeding mothers

Reassurance in others low confidence (383)
Fear of judgement from other mothers (580)
Learning through identifying with others (739)

Dropped themes:

Health as impeding breastfeeding (12)
Desire to bottlefeed (31)
Formula enabling rest (18)
Bottlefeeding enabling shared responsibility (610)
Hospital controlling feeding behaviours (71)
Uncertainty as a result of conflicting advice (193, 898)
Support of health professionals determining duration (101, 866, 880, 885, 905)
Relationship discontinuity as a barrier to support (748)
Differing life stages minimising support (663)
Others support and knowledge facilitating comfort (298)
Success of support influenced by understanding (743)
Importance of parental acceptance (108)
Lack of jealousy as encouragement (602, 607)
Pressure from family as prevalent (712)
Reinforcement from friends acceptance of privacy (655)
Importance of acceptance dependent on regularity of contact (624)
Inability to determine reactions (709)
A desire to be accepted (441)
Pressure to control oneself (422)
Self comfort as a determinant of babies comfort (352)
Comfort superseding practicalities (489)
Distraction as a barrier (308, 345)
Inability to prepare mothers for breastfeeding challenges (852)
Need for character assessment (534)
Anxiety arising from inability to judge character (158)
A need to avoid judgemental people (270)
Potential judgement activating defences (174, 200, 221, 704)
Babies needs as an excuse for seeking privacy (645)

**How mindfulness during pregnancy can
impact on mothers, their birthing partners and
their infants: A systematic review of
quantitative and qualitative research**

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Abstract

Background: Pregnancy and birth can be a particularly challenging time for mothers and those surrounding them, making support during this time invaluable. Mindfulness, due to its increasing evidence of effectiveness across multiple domains such as reducing pain, anxiety and depression, has recently begun being applied to pregnancy. This review attempts to provide further insight into the impact mindfulness during pregnancy can have on mothers, their birthing partners and infants.

Method: A number of databases were searched using terms defining pregnancy and mindfulness. Studies were included if they assessed levels of mindfulness or delivered a mindfulness based intervention, capturing relevant outcomes.

Results: Of the 965 identified titles, 15 studies met the review criteria. Studies fell into four categories: impact on mental health of mothers, the birth experience, the infant and impact on partners and relationships. Reductions in depression and anxiety were apparent yet mindfulness based interventions did not appear to impact on the physical aspects of birth. Mindfulness in the mother is associated with better emotional regulation and response to sounds in the infant. Men appeared to find attending a mindfulness based intervention particularly valuable, with partners finding it helpful in bringing them together and learning strategies to manage the challenges of parenthood.

Conclusion: Current research indicates that mindfulness in pregnancy can have some positive influence on mothers' mental health, the labour experience, the infant and relationships with partners, highlighting its potential to be an effective multifaceted intervention. However, before any strong conclusions can be reached more methodologically rigorous studies are required.

Introduction

Mindfulness is defined as ‘the awareness that arises from paying attention in a particular way: on purpose, in the present moment, and non-judgementally’ (Kabat-Zinn, 1999). It has been described as consisting of two steps, the first a mental state of awareness whereby one becomes aware of the cognitions, sensations, perceptions and emotions in the present moment. This is followed by acceptance of such states, responding to them in a non-judgemental manner (Kohls, Sauer & Walach, 2009). Acceptance of current mental and physiological states is proposed to remove the need to alter or avoid unacceptable states and instead encourage one to learn how to sit with their emotions (Woolhouse, Mercuri, Judd & Brown, 2014). Some common techniques are the three-minute breathing space and the body scan.

Mindfulness is distinguishable from relaxation due to the purpose of relaxation being achievement of a relaxed and calm state, through slowing down the body and quietening the mind (University of Maryland Medical Centre, 2013). In mindfulness the primary purpose is not to relax the individual but to simply foster observation and acceptance of one’s state. Relaxation, however may be a side effect of mindfulness for some individuals. Mindfulness is based upon some of the same principles within meditation, but differs for the reason that meditation is a method with the intention of facilitating one to relax quickly and consciously (Perth Meditation Centre, 2015). Meditation often requires time for one to sit still focusing solely on the task in hand, whereas mindfulness can be incorporated into any daily activity at differing levels of intensity.

The use of mindful approaches within healthcare was instigated in the USA in the late 1970’s by Jon Kabat-Zinn. A mindfulness based stress reduction (MBSR) programme was designed initially for those suffering with illnesses including pain, hypertension and heart disease, but it was soon found to also be effective for psychological issues such as anxiety and stress (Kabat-Zinn, 1990). This finding has been validated over the years with mindfulness more recently being found to be as effective as continued antidepressant use in those with repeated episodes of depression (Kuyken, Byford, Taylor, Watkins, Holden, White et al, 2008). Its ability to substantially improve people’s wellbeing is what has rapidly increased its popularity (Baer, 2003). Mindfulness has since been combined with cognitive therapy, with such positive outcomes the National Institute for Health and Clinical Excellence (NICE, 2009) now recommend mindfulness based cognitive therapy (MBCT) for those with three or more episodes of depression. Mindfulness has been associated with better emotional regulation (Goodall, Trejnowska & Darling, 2012) and an increased ability to recover from emotionally unpleasant experiences (Brown, Ryan & Creswell, 2007). It also

has links with increased optimism, competence and overall life satisfaction (Keng, Smoski & Robins, 2011). As well as supporting the individual, mindfulness can increase relationship satisfaction for couples, potentially as a result of promoting greater levels of empathy (Barnes, Brown, Krusemark, Campbell & Rogge, 2007). Due to the great success mindfulness has been found to have within differing domains, it has recently been incorporated into antenatal classes to produce mindfulness-based childbirth and parenting (Hughes, Williams, Bardackle, Duncan, Dimidjian & Goodman, 2009).

Pregnancy is a particularly challenging time, consisting of a period of rapid physical and emotional change with a large element of uncertainty (Duncan & Bardacke, 2010). Labour similarly brings challenges with many women reporting it as something that happens to them rather than with them (Waldenstrom, 1999). It is believed as many as 20% of pregnant women experience depression (Marcus, Flynn, Blow & Barry, 2003). Leaving depression and anxiety untreated, or not receiving adequate support, can put the mother at risk of postpartum depression once the baby is born (Austin, Tully & Parker, 2006). High stress levels also increase risk throughout the pregnancy due to being associated with chromosomally normal spontaneous abortion (Boyles, Ness, Grisso, Markovic, Bromberger & CiFelli, 2000) and the delivery of preterm or low birth weight babies (Dunkel Schletter & Lobel, 2012). Effects on the child extend beyond birth with increased anxiety during pregnancy being proposed to lead to a 10-15% risk of emotional or behavioural problems (Glover, 2014). Prenatal anxiety has also been associated with slower child developmental rates (Davis & Sandman, 2010) and mental health problems in adolescence and early adulthood (Graignic-Philippe, Dayan, Chokron, Jacquet & Tordjman, 2014). Alongside impact on the child and mother, perinatal mental illnesses have been estimated to cost the NHS around £1.2 billion for each annual cohort of births (Centre for Mental Health, 2014). Together these outcomes illustrate the importance of supporting mothers to manage their health and wellbeing during pregnancy.

One of the most common ways to treat anxiety and depression is through the use of medication. Psychopharmacological treatments, such as medication, have however been associated with abnormal sleep patterns and increased motor activity in the foetus (Mulder, Ververs, de Heus & Visser, 2011). Risks associated with medication has led many pregnant women to be fearful of taking anything during pregnancy (Bonari, Koren, Einarson, Jasper, Taddio & Einarson, 2005). Mindfulness' brief and non-pharmaceutical nature is one of the reasons why it has the potential to be such an effective and popular intervention during pregnancy (Vieten & Astin, 2008).

Due to the range of positive effects mindfulness has currently been found to have, it seems plausible that it could provide a helpful and low risk way for mothers and their families

to cope with all the challenges pregnancy and birth entails. However greater insight and understanding of the impact mindfulness during pregnancy can have is required, due to it being a relatively newly developed and researched area, with few reviews currently published. Recently it was concluded that yoga was an effective intervention during pregnancy with questioned raised as to whether it was the mindful element of yoga that was so effective (Weinrib & Katz, 2012). Weinrib & Katz (2012) subsequently recommended for a review to be conducted on mindfulness in pregnancy. Therefore this review aims to provide further insight into the potential effects mindfulness can have in pregnancy and consequently help to establish whether it is a therapeutic method that should be more frequently encouraged and delivered during the pregnancy period to benefit mothers, their children and their partners.

Method

Eligibility Criteria

It was a requirement for the research to focus on mindfulness during the pregnancy period, which excluded any research focusing on mindfulness after birth. Follow ups could however have been conducted after birth. Both research that delivered a mindfulness based intervention or assessed the impact of mindfulness during pregnancy were considered for inclusion, due to both types of research providing insight into the impact of mindfulness during pregnancy. Where an intervention was delivered, the intervention had to be mindfulness based, incorporating mindfulness techniques and ideally explicitly identifying these as mindfulness. Where other components were included in the intervention, such as yoga or relaxation, mindfulness was either required to be the primary intervention component or the impact of mindfulness had to be measured separately to the other components. This was to minimise the possibility of the reported outcomes being a result of other components rather than the mindfulness. As a review has recently been conducted exploring yoga in pregnancy, research exclusively on mindfulness based yoga or interventions where a large component of the intervention was yoga, were purposefully excluded. This was in order to avoid unnecessary replication alongside increasing the likelihood of assessing the impact of mindfulness itself, rather than yoga. No restrictions were placed around required outcome measures due to the review wishing to determine the overall impact of mindfulness during pregnancy. Due to the small number of studies exploring mindfulness in pregnancy no limit was placed on the year of publication. Similarly, all research methods and all populations were included to increase the variety of outcomes obtained, thus providing as thorough insight as possible into the impact mindfulness can have in pregnancy. Therefore, the impact of mindfulness in pregnancy was not limited to mothers but extended to other family members and included clinical and non-clinical populations. Only studies reported in English were included due to translating papers being deemed unreliable. Research that had not been published in an academic journal was excluded due to not having been through the peer review process.

Table 1:

Inclusion and exclusion criteria

Inclusion Criteria	Exclusion Criteria
<ul style="list-style-type: none"> - Research exploring the impact of mindfulness or mindfulness based interventions during pregnancy - Interventions delivered during pregnancy - Quantitative, Qualitative or Mixed Methods - All years - Clinical or non-clinical populations 	<ul style="list-style-type: none"> - Not written in English - Interventions whereby mindfulness yoga was the primary or large component - Unpublished research such as Dissertations and Theses

Search Strategy

Search terms were created and reaffirmed through the use of a thesaurus to ensure all potentially related terms were included. Boolean searches were conducted using the specified search terms (Table 2) on the 29th March 2015. Databases searched were The Cochrane Library, psychINFO, Science Direct, PubMed, MEDLINE, Web of Science and EMBASE. Google scholar was also searched. Contact was made with some of the key research departments across the world, conducting research within this area, to ensure no systematic reviews around mindfulness in pregnancy with similar parameters were underway and requesting any further relevant information (Appendix A). These were researchers at the Osher Centre in California, Amsterdam University and Bangor University, who were recommended from a midwife specialising in delivering mindfulness based interventions during pregnancy. Relevant research papers were forwarded to me from these institutions. Lead authors were contacted when access to their research paper could not be gained or when conference extracts had been published, to determine whether a research paper had been published. However, no additional research papers were obtained from making direct contact. Reference lists of incorporated studies were also reviewed to ensure no relevant research papers had been missed during the search. No new studies were obtained using this method, thus confirming the thoroughness of my search strategy.

Journals were searched individually with all titles considered potentially relevant to the research question saved in a word document. This method enabled duplications to be determined and ensured an accurate record of papers retrieved from each journal was obtained.

Table 2:
Search Terms

Mindfulness Search Terms	Pregnancy Search Terms
Mind Body Interventions	Pregnan*
Mindful*	Perinatal
Mindful* Meditation	Antenatal
Mindfulness Based Interventions	Maternal
Mindfulness Based Stress Reduction	Gestati*
Mindfulness Based Cognitive Therapy	Expectant
Mindfulness Based Childbirth Education	Prenatal
Present Centeredness	Childbirth
	Labo*

Results

In total, 965 titles were retrieved as a result of the search. From these, 835 were excluded based upon the title, 25 after reading the abstract and 105 were duplications of the 24 papers deemed relevant based upon their title and abstract. These 24 papers were retrieved and read. Three were excluded based upon being dissertations and not having been through the peer review process and one was not included due to being a summary article. Three studies were excluded based upon the intervention either not distinguishing the outcomes of the mindfulness component separately from other components, being conducted after birth or delivering yoga as a primary component. Two studies received a weak critical appraisal rating and were excluded. Fifteen studies met the inclusion criteria and were included in the review.

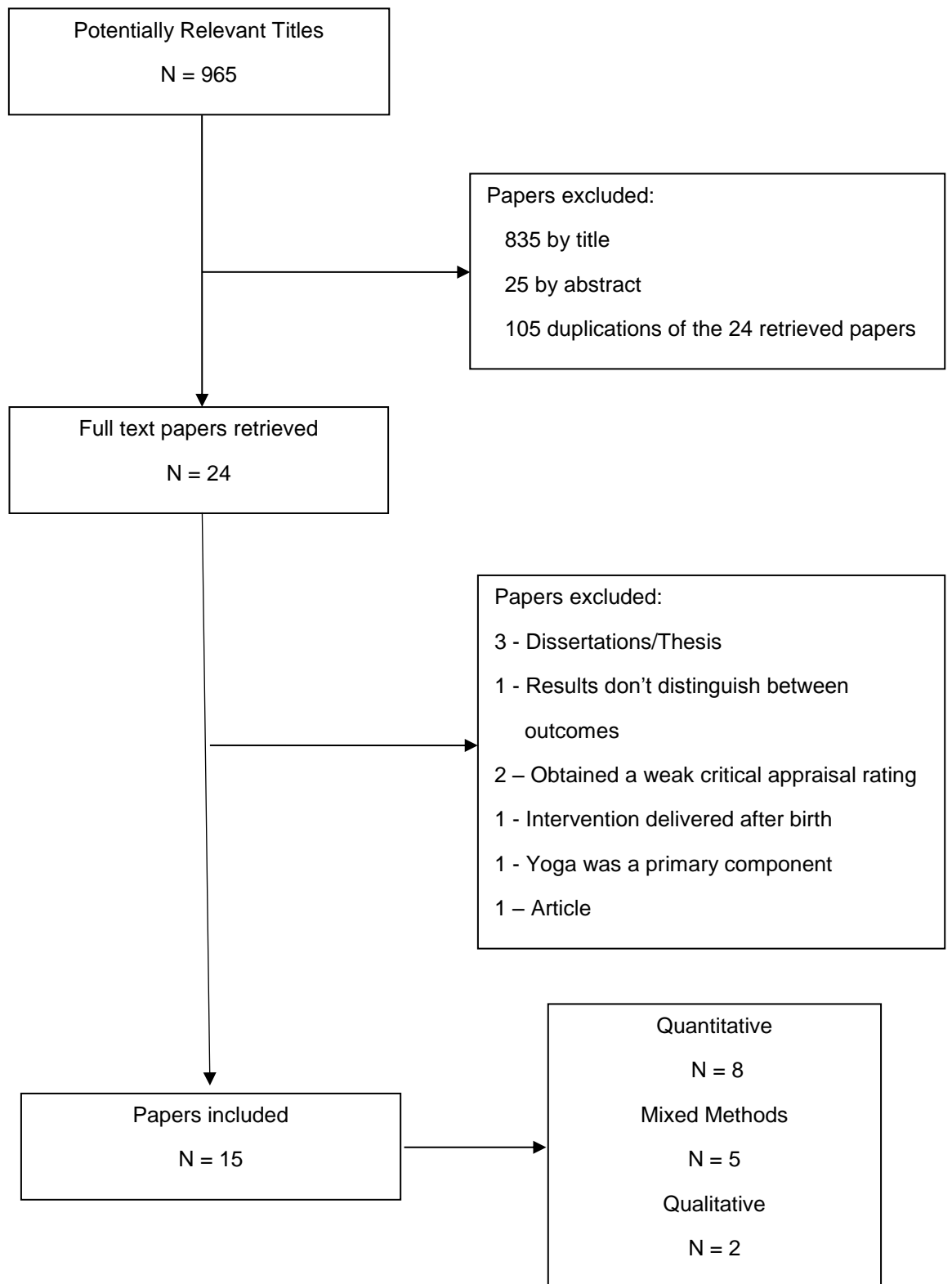


Figure 1: Flow chart of the research retrieval process

Quality Appraisal

Quality appraisal was carried out using two tools. The Effective Public Health Practice Project Quality Assessment Tool for Quantitative Studies (Thomas, Ciliska, Dobbins & Micucci, 2004) was used to assess the quality of the quantitative papers, including those which sought some qualitative feedback. This scale was selected due to its high reported reliability (Armijo-Olivo, Stiles, Hagen, Biondo & Cummings, 2012). Scores for subsections were obtained and combined to form an overall rating of either weak, moderate or strong (Appendix B). Any papers with a weak rating were not included in the review. Overall many of the research papers scored lower ratings for selection bias, yet all obtained a strong rating for the validity and reliability of their data collection methods. There were mixed responses for the remaining measures of quality.

Quality of the qualitative research papers was assessed using the Critical Appraisal Skills Programme Qualitative Research Checklist (CASP, 2014), selected due to its proposed effectiveness in systematically assessing qualitative research (Masood, Thaliath, Bower & Newton, 2011). Over half of the responses were required to be 'yes' alongside the reviewer needing to be confident the research had considered, to some extent, the majority of the key aspects highlighted by the appraisal tool. Both research papers obtained 56% and above in 'yes' scores (Appendix C).

Table 5:

Included Studies

Author, Year & Country	Design	Research Question	Intervention/Method	Participant Sample	Outcomes of Interest
Dimidjian et al (2015) USA	- Open trial - Mixed Methods	To examine the feasibility, acceptability and clinical outcomes of depression severity & relapse/reoccurrence associated with MBCT adapted for Perinatal women (MBCT-PD)	- MBCT - 8 2hour classes with the option of a monthly follow up - Consisted of formal mindfulness e.g. body scan, informal mindfulness e.g. mindfulness of daily activities, and cognitive behavioural skills e.g. identifying thoughts and beliefs and their relationship to emotion - Home practice required	N = 49 women - Mean age 31 - Had to meet the criteria for prior major depressive disorder	- Self-reported depressive symptoms & relapse/reoccurrence (Edinburgh Postpartum Depression Scale & Longitudinal Interval Follow-up Evaluation) - Satisfaction with MBCT (Client Satisfaction Questionnaire)
Goodman et al (2014) USA	- Open trial - Mixed method	To examine the feasibility, acceptability and clinical outcomes of coping with anxiety through living mindfully (CALM) intervention on pregnant women's anxiety	- CALM pregnancy group intervention - 8 2hour sessions - Consisted of psychoeducation, mindfulness practices, cognitive exercise and home practice	N = 26 women - Mean age 34 - Elevated anxiety symptoms	- Self-reported levels of worry (Penn State Worry Questionnaire), - Self-compassion (Self Compassion Scale - Anxiety (Gad-7 & Beck Anxiety Inventory) - Depression (The Patient Health Questionnaire-9 & Beck Depression Inventory) - Mindfulness (Mindfulness Attention Awareness Scale) - Qualitative feedback regarding participant's experiences

Vieten & Astin (2008) USA	RCT	To explore the effect of a mindful motherhood intervention on stress and negative mood in pregnancy	<ul style="list-style-type: none"> - Mindful Motherhood intervention vs wait list control - 8 2hour sessions - Mindfulness of thoughts and feelings through breath awareness and contemplative practices - Mindfulness of the body through body awareness meditation and mindful yoga - Presentation of psychological concepts incorporating mindfulness e.g. acceptance and cultivation of an observing self - Disc provided for daily meditation practice 	<p>N = 31 women</p> <ul style="list-style-type: none"> - Mean age = 34 - A history of mood concerns for which they had sought treatment 	<ul style="list-style-type: none"> - Perceived stress (Perceived Stress Scale) - Depression (CES-D) and anxiety (State-Trait Anxiety Inventory) - Positive and negative affect (Positive and Negative Affect Schedule – Extended) - Affect regulation (Affect Regulation Measure) - Mindfulness (Mindful Attention Awareness Scale)
Guardino et al (2014) USA	RCT	To explore whether a Mindful Awareness Practices (MAPS) programme would decrease anxiety, perceived stress and pregnancy related anxiety and increase mindfulness compared to a reading control group	<ul style="list-style-type: none"> - MAPS vs Reading control group - 6 2hr sessions - Entered into existing sessions with public - Covering what is mindfulness, embodiment and obstacles, working with pain, difficult emotions, thoughts and mindful interactions. - Homework assignments - Control Group: You and your baby: Pregnancy book 	<p>N = 47 women</p> <ul style="list-style-type: none"> - Mean age = 33 - Experiencing elevated levels of perceived stress or pregnancy specific anxiety 	<ul style="list-style-type: none"> - Mindfulness (Five Factor Mindfulness Questionnaire) - Perceived stress (Perceived Stress Scale) - Prenatal stress/anxiety (Pregnancy Specific Anxiety scale and PRA scale) - General Anxiety (State Anxiety Scale)
Woolhouse et al (2014) Australia	<ul style="list-style-type: none"> - Mixed methods – RCT - non randomised trial - IPA 	To explore the feasibility of a randomised controlled trial of a mindfulness intervention to reduce antenatal depression, anxiety and stress	<ul style="list-style-type: none"> - MindBabyBody programme - 6 2hour sessions - Sessions included formal meditation practice, discussion of home mindfulness practices, the mindful movement sequence, a weekly discussion topic e.g. self-compassion and a breathing space. - Care as usual 	<p>N = 20 women (non randomised trial)</p> <ul style="list-style-type: none"> - Mean age = 33.70 - At risk of anxiety and depression 	<ul style="list-style-type: none"> - Depression (Centre for Epidemiological Studies Depression Scale Revised) - Anxiety (State subscale of the 40 item State-Trait Anxiety Scale) - Stress (Perceived Stress Scale)

				= 32 women (RCT)	- All of the above (The Depression, Anxiety and Stress Scale-21)
				- Mean age intervention group = 30.82	- Mindfulness (Five Factor Mindfulness Questionnaire)
				- Mean age care as usual group = 34.08	- Experiences of the intervention (Interviews)
Duncan & Bardacke (2010) USA	Mixed methods observational pilot study	To describe the changes in the dimensions of the stress and coping process observed in pregnant women participating in MBCP with their partners during their third trimester.	<ul style="list-style-type: none"> - Mindfulness-Based Childbirth and Parenting Education (MBCP) - 9 3hour sessions - 7-hour silent retreat day - Reunion class after birth - Meditation DVD's for home practice - Included addressing stress levels, concerns, body scan, present moment awareness in labour, mindful movement/yoga, pain practices e.g. ice meditation and ways the partner can use mindful touch, lovingkindness meditation, how mindfulness supports breastfeeding and attachment. 	= 27 women	<ul style="list-style-type: none"> - Stress (Perceived Stress Scale) - Anxiety (Revised Pregnancy Anxiety Scale) - Frequency (The Differential Emotions Scale) - Intensity (Positive and Negative Affect Schedule) - Mindfulness (Three subscales from the five factor mindfulness questionnaire) - Coping (Ways of coping) - Depression (Centre for Epidemiologic Studies Depression Scale) - Open ended questions
Byrne et al (2014) Australia	Single arm pilot study with a repeated measures design	To determine the acceptability and feasibility of the Mindfulness Based Childbirth Education protocol for mothers and their partners	<ul style="list-style-type: none"> - MBCE - 8 2.5hour sessions - Included pre-natal education and mindfulness exercises they could apply during pregnancy, labour and early parenting 	N = 18 women	<ul style="list-style-type: none"> - Mindfulness (Mindful attention awareness scale) - Depression, anxiety & stress (Depression Anxiety Stress Scales) - Prenatal depression (Edinburgh Post Natal Depression Scale)

			- Books and CD's with homework practice		- Self-Efficacy (Childbirth Self Efficacy Inventory) - Fear of childbirth (Wijma Delivery Expectancy questionnaire)
Fisher et al (2012) Australia	Qualitative, data analysed thematically	To explore participants' experiences of MBCE	- Focus groups four months after completion of the MBCE programme (detailed above)	N = 19 - 12 mothers - 7 birthing partners	- Experiences of the MBCE programme (Focus groups)
Gambrel & Piercy (2015a) USA	Mixed Methods Randomised Clinical Trial	To evaluate a mindfulness based relationship enhancement program for couples expecting their first child	- Mindful Transition to Parenthood Programme - 4 2hour sessions - Incorporated mindfulness of self, partner, relationship and of the family	N = 66 - 32 men (Mean age = 31.78) - 34 women (Mean age = 31.56)	- Relationship Satisfaction (The Couple Satisfaction Index) - Mindfulness (The Five Facet Mindfulness Questionnaire) - Empathy (The Interpersonal Reactivity Index, The Self-Dyadic Perspective-Taking Scale, The Other-Dyadic Perspective-Taking) - Emotionality (The Depression Anxiety Stress Scale, The Positive and Negative Affect Schedule) - Adherence (Attendance and diary of practice) - Experiences (Interviews)
Gambrel & Piercy (2015b) USA	Phenomenological quantitative investigation	To explore participants lived experiences of the mindful transition to parenthood program and what changes they made	- Semi Structured interviews after completing the Mindful Transition to Parenthood Program (detailed above)	N = 26 - 13 heterosexual couples	- Experiences (semi structured interviews)

van den Heuvel (2015) Netherlands	Prospective Cohort Study	To address the association between maternal mindfulness during pregnancy and socio-emotional development and temperament in 10 month old infants and whether this association was mediated by anxiety	<ul style="list-style-type: none"> - Mindfulness and anxiety assessed at the beginning of the second trimester - Infant socioemotional development assessed at 10 months 	<p>N = 90</p> <ul style="list-style-type: none"> - Mean age of mothers = 32.13 - Infants = 44 girls & 46 boys 	<ul style="list-style-type: none"> - Maternal mindfulness (Freiburg Mindfulness Inventory-Short Form) - Maternal anxiety (Anxiety subscale of the symptom checklist-90) - Infant socio-emotional development (Ages and Stages) - Infant temperament (Infant Behaviour Questionnaire)
van den Heuvel (2014) Netherlands	Prospective Cohort Study	Investigating the effects of the mother's mindfulness and anxiety during pregnancy on the infants neurocognitive functioning at 9 months old	<ul style="list-style-type: none"> - Tests administered 3 times during pregnancy - Post-natal observations at 2 or 4 and 9 months after birth 	<p>N = 79</p> <ul style="list-style-type: none"> - Mean age of mothers = 32.09 - Mean age of infants = 43.90 weeks 	<ul style="list-style-type: none"> - Maternal mindfulness (Freiburg Mindfulness Inventory-Short Form) - Maternal anxiety (Anxiety subscale of the symptom checklist-90) - ERP's (passive auditory oddball paradigm)
Werner et al (2013a) Denmark	Randomised controlled single blinded trial	To evaluate the effects of self-hypnosis on the childbirth experience	<ul style="list-style-type: none"> - Hypnosis group – 3 1hour sessions - Relaxation Group - 3 1hour sessions of mindfulness - Usual care group 	<p>N = 1, 222 women</p> <ul style="list-style-type: none"> - Mean age of mothers = 29.8 	<ul style="list-style-type: none"> - Childbirth experience (Wijmas Delivery Expectancy/Experience Questionnaire) - Emotional wellbeing (10 item perceived stress scale, WHO-5 Well-being questionnaire)
Werner et al (2012) Denmark	Randomised controlled single blinded trial	To estimate the use of epidural analgesia and experienced pain during childbirth after a short antenatal training course in self-	<ul style="list-style-type: none"> - Hypnosis group – 3 1hour sessions - Relaxation Group -3 1hour sessions of mindfulness - Usual care group 	<p>N = 1, 222 women</p> <ul style="list-style-type: none"> - Mean age of mothers = 29.8 	<ul style="list-style-type: none"> - Pain (Use of epidural analgesia during birth, self-reported pain & pain experience) - Emotional wellbeing (10 item perceived stress scale, WHO-5

		hypnosis to ease childbirth			Well-being questionnaire)
Werner et al (2013b) Denmark	Randomised controlled single blinded trial	To examine the effect of a brief course in self-hypnosis for childbirth on duration of the labour and other birth outcomes	<ul style="list-style-type: none"> - Hypnosis group – 3 1hour sessions - Relaxation Group -3 1hour sessions of mindfulness - Usual care group 	<ul style="list-style-type: none"> N = 1, 222 women - Mean age of mothers = 29.8 	<ul style="list-style-type: none"> - Maternal outcomes (duration of labour, mode of delivery) - Neonatal outcomes (birthweight, apgar score at 5 min, pH & admission to neonatal unit) - Emotional wellbeing (10 item perceived stress scale, WHO-5 Well-being questionnaire) - Ability of applying the skills learnt at birth - Lactation success and care for the child - Preference for future mode of delivery

Study Characteristics

Seven of the included studies conducted Randomised Controlled Trials. Other studies conducting trials, were either controlled, randomised or open. Two studies were prospective, with further studies adopting a repeated measures or mixed methods design, incorporating some additional qualitative feedback. Two qualitative papers were included, both of which linked to quantitative papers which were also included. Most studies delivered a mindfulness based intervention with only four not delivering any form of intervention, two of which were qualitative papers. Six of the studies delivering a mindfulness intervention, delivered a mindfulness intervention commonly covering the benefits of mindfulness, how it can be utilised in pregnancy and birth and techniques with space to practice these. Of the remaining interventions, two delivered mindfulness based cognitive therapy which includes cognitive behavioural practices and two delivered mindfulness based childbirth education which includes skills based childbirth education. One delivered mindfulness based relationship education which contained interpersonal activities to develop skills of internal and interpersonal attunement within the relationship. Duration and intensity of interventions varied with the shortest consisting of one hour sessions delivered across three weeks and the longest consisting of three hour sessions across nine weeks with an additional retreat day. The majority of interventions entailed two hour sessions delivered across four to eight weeks. A variety of outcomes were assessed with measures predominantly being mindfulness along with depression, anxiety, worry and stress. A range of measurement tools were utilised across studies. Number of participants ranged from 18 to 1,222 with the majority recruiting between 18 and 70 participants. Studies were conducted between 2008 and 2015 and predominantly conducted in the USA, followed by Denmark, The Netherlands and Australia. Due to the variation in interventions, reported outcomes and study design it was deemed inappropriate to conduct a meta-analysis.

Population

Ten studies collected data from mothers alone. Three assessed outcomes and experiences of partners and two assessed the impact of mindfulness in pregnancy on infants at 10 months. The mean age of parents participating ranged from 30 to 35 years with mothers being recruited between 1 to 34 weeks gestation. The majority of mothers and their partners were white, well educated individuals. A proportion of studies purposefully selected clinical populations or those at risk for mental health issues. Others attempted to

recruit a random sample, yet many participants did experience elevated levels of anxiety or depression or met criteria for mental health issues.

Results Synthesis

Within the included studies the impact of mindfulness in pregnancy has been explored across four key areas:

1. Impact on Mothers' Mental Health

Most studies with anxiety, depression or stress as primary outcomes recruited populations with elevated levels of these factors or those already meeting criteria for anxiety or depression. For what was intended to be a universal population, Woolhouse et al (2014) found attending the MindBabyBody programme resulted in a significant decrease in DASS anxiety scores from pre ($M=8.62$, $SD=7.72$) to post intervention ($M=4.62$, $SD=3.95$) $t(12)=2.63$, $p=.02$ and a significant increase on two of the mindfulness (FFMQ) subscales for mothers. Depression and stress scores decreased in both the intervention and control groups but failed to reach significance. Duncan & Bardacke (2010) delivered a mindfulness based childbirth and parenting education programme for mothers and their partners which led to significant reductions in mothers' anxiety ratings from pre ($M=2.49$, $SD=.58$) to post intervention ($M=2.09$, $SD=.41$) $t(26)=-6.36$, $p<.0001$, depression ratings from pre ($M=1.63$, $SD=.45$) to post intervention ($M=1.48$, $SD=.34$) $t(9)=-2.59$, $p=.016$ and negative affect from pre ($M=2.03$, $SD=.58$) to post ($M=1.83$, $SD=.47$) $t(26)=-3.35$, $p=.003$. After completing the intervention 85% of the mothers reported using mindfulness to cope with a stressful aspect of their pregnancy compared to only 37% pre intervention.

For those mothers deemed at risk of mental health problems and experiencing elevated levels of stress most studies found a reduction in depression after attending a mindfulness based intervention. Woolhouse et al (2014) in their non-randomised trial found significant improvements in depression scores from pre ($M=13.80$, $SD=7.74$) to post intervention ($M=9.60$, $SD=6.10$) $t(9)=3.37$, $p=.01$. Goodman et al (2014) similarly found statistically significant improvements in depression from pre to post intervention ($p<.001$). These two studies attempted to research those at risk of mental health issues, yet some mothers did score above clinical cut offs for depression, anxiety or stress. Two participants in Goodman et al (2014) met criteria for major depressive disorder pre intervention but no longer met this at post intervention. Evidence to suggest that this reduction did result from mindfulness itself

was the emerging correlation between depression and mindfulness at week 7 of the intervention $r = -0.54$, $p = .01$.

Within the at risk population mindfulness interventions also appeared to be effective at reducing levels of anxiety. Woolhouse et al (2014) found reductions in STAI anxiety scores from pre ($M=49.67$, $SD=15.22$) to post intervention ($M=39.33$, $SD=8.26$) $t(8)=2.42$, $p=.04$. Goodman et al (2014) found significant improvements in anxiety ($p<.001$) with only one of the sixteen mothers who met psychiatric criteria for generalised anxiety disorder at baseline, still meeting this post intervention. Guardino et al (2014) also found a larger decrease in pregnancy specific anxiety in the mindfulness group ($b = -4.25$, $p <.05$) compared to the control group ($b = -1.61$, $p <.05$). However, reductions in anxiety generally did not appear to be sustained over the long term. At the 6 week follow up there was a significant decrease in pregnancy specific anxiety in both the intervention group ($b = -2.62$, $p <.05$) and the control group ($b = -1.90$, $p <.05$) suggesting levels of anxiety may fall naturally after birth. Guardino et al (2014) also found a significant decrease in mothers worries and concerns in the mindfulness group ($b = -2.08$, $p <.05$) but not the control group ($b = -.44$) between pre and post intervention. However similar to levels of anxiety these effects were not sustained as both the intervention ($b = -3.90$, $p <.05$) and control group ($b = -3.92$, $p <.05$) experienced significant reductions from baseline to 6 week follow up.

Two studies were conducted with mothers who either had a history of mood concerns or met criteria for major depressive disorder. Vieten & Astin (2008) reported significant decreases in anxiety ($F(2,24) = 4.32$, $p = .04$) and negative affect ($F(2,24) = 4.84$, $p = .03$) compared to the wait list control. However, at three month follow up the differences between the two groups was no longer significant. Dimidjian et al (2015) was the only study to find the effects around mental health were maintained over the long term. Mindfulness based cognitive therapy caused a large decrease in depressive symptoms $F(1,49) = 8.55$, $p = 0.0037$, $d=0.84$, with a low level of relapse at 18.37% throughout pregnancy and six months after.

Three studies sought qualitative feedback regarding the interventions delivered. One particularly strong theme running across all three studies was mothers' perceived increased ability to stop, step back and respond to their feelings or thoughts in a more positive way (Woolhouse et al, 2014; Goodman et al, 2014; Dimidjian et al, 2015). This involved increasing their insight in order to learn their warning signs and respond to them in a less reactive manner. Mothers felt they had learnt new skills to cope with anxiety (Goodman et al, 2014), improve their mood (Dimidjian et al, 2015) and to be kinder and more accepting of themselves (Goodman et al, 2014). Two themes from Woolhouse et al (2014) were

improvements in interpersonal relationships such as with their husbands and criticism at work and improvements in quality of life due to generally being more relaxed.

2. Impact on the Birth Experience

Three studies were conducted with the primary aim of exploring the impact of self-hypnosis in childbirth. Their active control group was given a brief 3-week relaxation intervention which predominantly consisted of mindfulness techniques. Werner et al (2013b) found no significant difference in mean childbirth experience scores between the relaxation group (47.2) and the care as usual group (47.5). The expectations of birth also did not differ between the relaxation and care as usual group (Wald's test, $p=0.97$). When exploring pain during childbirth the use of epidural analgesia did not significantly differ between the relaxation group, 29.8% (95% CI 25.7–33.8) and the care as usual group, 30.0% (95% CI 24.0–36.0). Levels of pain intensity and pain influence on the birth experience also did not significantly differ between groups (Werner et al, 2012). The mindfulness intervention did not appear to have any significant effect on the duration of labour, as the duration from arrival at the birth department until the beginning of the expulsive phase was 5.8 hours in the relaxation group and 5.5 hours in the care as usual group and the duration of the expulsive phase was 0.6 hours across all groups (Werner et al, 2013a). No significant differences were apparent beyond birth between lactation success and difficulties caring for the child between the relaxation and care as usual groups.

Byrne et al (2014) delivered a mindfulness based childbirth education intervention for mothers and their birth support partners. Mothers experienced an increase in self efficacy from pre ($M=171.69$, $SD=41.10$) to post intervention ($M=224.54$, $SD=25.88$) $p<.001$ and a large decrease in fear of birth from pre ($M=61.42$, $SD=13.62$) to post intervention ($M=38.92$, $SD=14.84$) $p<.001$. Qualitative research was utilised to enhance understanding of mothers' and their birth support partners' experiences of attending the mindfulness based childbirth education intervention (Fisher et al, 2012). Results showed they felt a more informed and active participant in the birth process, questioning different aspects. Mothers expressed feeling more prepared and one mother after having a difficult labour experience felt empowered by it, which she attributed to the intervention. A few women felt this was not always positive as they believed their questioning of health professionals decisions strained the relationship and perhaps scared health professionals from making the correct medical decisions. For both mothers and their partners there was a sense of using the mindfulness

skills to stay calm during the birth and continuing to utilise the skills after birth when trying to remain calm when the baby was unsettled and in other situations.

3. Impact on the Infant

Two studies assessed levels of mindfulness in the mother during pregnancy and whether this was associated with the baby's socio-emotional development and neural responses to sounds at 9 or 10 months. Van den Heuvel et al (2015) found higher maternal mindfulness during pregnancy to be associated with lower infant self-regulation problems ($r=-.273$, $p<.01$), negative affectivity ($r=-.213$, $p<.05$) and higher scores on effortful control ($r=-.228$, $p<.05$). The significant association between maternal mindfulness and infant self-regulation problems ($\beta=-.253$, $p>.01$) and maternal mindfulness and negative affectivity ($\beta=-.360$, $p>.05$) were no longer significant when adding maternal anxiety to the model ($\beta=-.176$, $p>.05$; $\beta=-.217$, $p>.05$). Thus suggesting that mindfulness has a positive effect on the infant through reducing anxiety in the mother.

Van De Heuvel et al (2014) explored mindfulness and infant's auditory Event Related Potential's (ERPs), focusing specifically on the P150 and N250 amplitudes which are two components of the ERP waveform resulting from the brains response to auditory stimuli. P150 amplitudes are believed to be an indicator of peripheral attention to the auditory input and suppression of unattended information and N250 amplitudes have been associated with the orienting response and target selection (Key, Dove & Maguire, 2005). Maternal mindfulness was positively associated with the babies P150 amplitude $F(1,77)=10.476$, $p=.002$ which indicates infants from mothers with higher levels of mindfulness may have more elaborate feature extraction. In terms of the N250 amplitude a significant negative association was found between this and mindfulness $F(1,77)=8.504$, $p=.005$. This may be due to infants forming more accurate pre-attentive representations thus not needing to process repetitious sounds. Such influence is most likely to have happened in pregnancy as postnatal maternal anxiety was not associated with either of the ERP amplitudes.

4. Impact on Partners and Relationships

Gambrel & Piercy (2015a) delivered a mindful transition to parenthood intervention and found men receiving the intervention scored significantly higher on relationship satisfaction ($F(1,29) = 4.17$, $p<.05$) and mindfulness ($F(1,29) = 6.22$, $p<.05$) and lower on negative affect

($F(1,29) = 4.55, p < .05$) than those in the control group. There were however no significant differences in empathy, positive affect and negative emotional states. Women on the other hand did not significantly differ between groups on all outcomes implying the intervention was more effective for their partners.

Gambrel & Piercy (2015b) also conducted a phenomenological study resulting in four themes. The first theme being positive changes for self, which included being more present, accepting and compassionate. These changes were also confirmed by partners. The second theme encapsulated improvements in couple relationships which included connecting more deeply and working together. The third theme captured both partners feeling more prepared for the baby with greater excitement and less fear. The final theme addressed male involvement, illustrating how women felt supported by the fact their partners attended. The benefits of men attending were reiterated in Duncan et al (2010) with the women expressing how beneficial it was to have their partners there to learn how to better manage situations together. There was a feeling that initially partners were not always willing to attend the sessions, as many mothers and their partners used the term 'drag' to describe the partners' attendance (Fisher et al, 2012). However, in the end the partners were pleased they had attended. Gambrel et al (2015) were able to explain their greater outcomes for men through their qualitative data, as they found men highly valued the opportunity to meet other fathers, yet women felt meeting other mothers was less of a need. This suggests it may not have been the mindfulness intervention itself but rather the space it created, that was the most beneficial aspect.

Discussion

Summary

Overall across the four different areas mindfulness appeared to have a positive impact on the specified population. Multiple studies found mindfulness based interventions were somewhat beneficial at reducing anxiety, depression and stress for both clinical and non-clinical populations. Whether these effects are maintained over the long term and in a variety of populations, however is less clear. Mindfulness appeared to have little effect on the physical aspects of birth but did appear to support the mother and partner with their ability to cope and manage the birth. As for the impact on the child levels of mindfulness in the mother being associated with lower self-regulation problems and different responses to sounds implies there may be benefits for the unborn child. As well as benefits to the child,

men's relationship satisfaction improving and both mothers and their partners feeling more connected and working together highlights the importance of including partners in mindfulness interventions. Combining current research around mindfulness in pregnancy, it suggests that mindfulness may have the potential to be a beneficial and cost effective, non pharmaceutical intervention during pregnancy, particularly due to the impact it can have on not only the mother but also her child and partner. However strong conclusions cannot be drawn at this stage due to the limitations of the current research.

Implications of the Findings

Positive preliminary findings of the effect of mindfulness on the mother, birth, the infant, her partner and their relationship suggest that it may be beneficial for health professionals to recommend mindfulness during pregnancy, in order to support mothers and their partners through the challenges of pregnancy, birth and beyond. Mindfulness' ability to impact on and benefit multiple individuals increases its reach, providing it with the potential of being a cost effective intervention and consequently one commissioners would be more likely to consider. Consideration by health professionals may consist of the provision of mindfulness interventions for mothers and their partners, incorporating it into existing antenatal classes or simply recommending mindfulness practice to expectant parents. The delivery of interventions may be particularly beneficial for mothers who are at risk or taking medication for mental health issues as mindfulness can offer an alternative lower risk intervention to medication.

Strengths and Limitations

This review included a variety of mindfulness based interventions in pregnancy, which is helpful for enhancing overall understanding around the impact of mindfulness in pregnancy. However, mindfulness was frequently included alongside other techniques such as Cognitive Behavioural Therapy and childbirth education, making it difficult to distinguish the effect of mindfulness as a stand-alone intervention. It may therefore be that for a few studies some of the other aspects of the intervention may have influenced the results, and consequently the conclusions drawn.

A number of the studies did not perform an RCT with a sufficient comparison group. This is particularly important when measuring stress, depression and anxiety as levels of these

have been found to vary across the nine months (Roesch, Dunkel Schetter, Woo & Hobel, 2004) with levels tending to be highest at the start of the pregnancy and decreasing across time and into postpartum (Bowen, Bowen, Butt, Rahman & Muhajarine, 2012). Therefore, in those studies with no comparison group significant reductions in anxiety and depression may not be fully attributable to the intervention but rather natural reductions across time and should be interpreted with caution. A further reason many of the results should be interpreted with caution is due to their 'moderate' critical appraisal scores. Only three studies were considered methodologically strong with the majority falling into the 'moderate' category.

Many of the papers minimise their reliability and generalisability due to their small sample sizes and unrepresentative samples. Small sample sizes can result in inadequate power (Cohen, 1994), increasing the chance of a significant finding not being a true effect. It also fails to provide evidence of mindfulness being effective for a variety of individuals. Many studies recruited their participants through self-selection which resulted in a selection of mothers and partners with similar demographics. Mothers were predominately white, around the age of 30 years, relatively well educated and often married or with a long term partner. Therefore, the conclusions drawn about the impact mindfulness can have are somewhat limited to this population.

Recommendations for Future Research

In order to enhance the evidence for the impact of mindfulness in pregnancy further randomised controlled trials with active control groups are required. This would enable one to more confidently conclude the outcomes are as a result of the intervention rather than aspects such as the ability to engage with other parents and natural reductions or increases in outcomes across pregnancy. Longer term follow ups would also be beneficial to determine the long term impact of mindfulness interventions as the more beneficial they are across the long term, the more cost effective they are. Attempts need to be made to recruit larger samples of mothers and partners and those with a wider range of demographics. Particularly minority ethnic groups, younger mothers and those who are less educated and of a lower socioeconomic status. These minority groups are especially important to research due to their health outcomes often being poorer and may require more support during pregnancy.

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Appendix A

Example email sent to researchers

From: Lucy Hawkin <lucyh@participle.net>

Date: Sunday 15 March 2015 20:49

To:

Subject: Mindfulness in pregnancy

Dear ,

I have been reading about your work and all the research you have been involved with, it all sounds fascinating.

I am currently completing my Health Psychology Doctorate in London and as one of the five competencies I have to conduct a systematic review. For this systematic review I have chosen to focus on the impact that mindfulness can have in pregnancy, as currently there does not appear to be any systematic reviews on this specific topic. I chose this topic because I personally find it a really interesting and developing area where the evidence so far seems to suggest it can be very beneficial for mothers especially around stress reduction. I have spoken to a midwife who specialises in mindfulness and she has advised me to get in touch with yourself and your research team as she felt you may be able to advise me of any research you know of that could be included in my review but also importantly any research that you know of that might be currently underway or has been conducted but not published? I would be extremely grateful for any advice or recommendations.

Kind regards,

Lucy Hawkin

Appendix B

Ratings of papers assessed using the Effective Public Health Practice Project Quality Assessment Tool for Quantitative Studies

Study	Overall Rating
Dimidjan et al, (2015)	Moderate
Goodman et al, (2014)	Moderate
Vieten & Astin (2008)	Moderate
Guardino et al, (2014)	Moderate
Woolhouse et al (2014)	Strong
Duncan & Bardacke, (2010)	Moderate
Byrne et al, (2014)	Moderate
Gambrel & Piercy, (2015)	Strong
van den Heuvel, (2014)	Moderate
Van den Heuvel et al, (2015)	Moderate
Werner et al (2013)	Moderate
Werner et al (2012)	Moderate
Werner et al (2013a)	Moderate

Appendix C

Ratings of papers assessed using the Critical Appraisal Skills Programme Qualitative Research Checklist.

Study	% of yes responses	% of can't tell responses	% of no responses
Fisher et al (2012)	56%	33%	11%
Gambrel & Piercy (2015b)	78%	11%	11%

Section C

Professional Practice

Generic Professional Competence
Competency 1.0

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Introduction

My professional doctorate training coincided with a number of changes in my job role, one of which included a relocation. I began my training as a Public Health Trainer working alongside the Public Health Coordinator for Children's Centres. I subsequently moved on to delivering a health and wellbeing intervention in a GP surgery which enabled me to work more closely with the local community predominately on a one to one basis. Following this I moved back into Public Health, focusing on childhood obesity and oral health. This led me into my current role as a Schools Health Hub Coordinator supporting schools to identify and address the health and wellbeing needs of pupils with a focus on emotional health. Changing roles a number of times and relocating has definitely brought its challenges in finding new roles and settling into new positions whilst progressing with my doctorate. However, more importantly this brought great opportunities, enabling me to develop myself professionally and personally due to different roles developing my skills in different competencies.

One model I have utilised to support and conceptualise my professional development is the 'Cube Model' (Rodolfa et al, 2005).

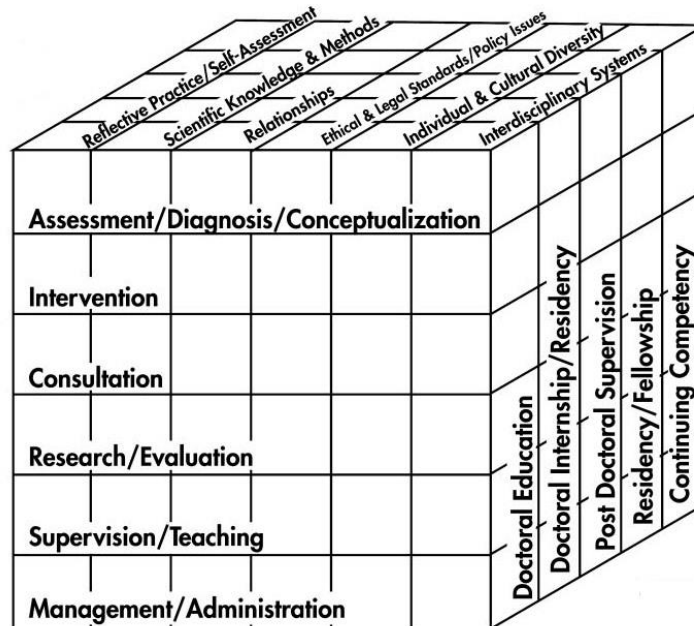


Figure 1: The Cube Model (Rodolfa et al, 2005)

A substantial proportion of this cube maps onto the Health Psychology competencies enabling me to more effectively conceptualise how my skills and knowledge influence the work I deliver as a Trainee Health Psychologist. Outlining the stages I need to go through in order to develop myself as a professional has also enabled me to process the journey I am on. When focusing more specifically on the meaning of competence, Epstein and Hundert's (2002) definition strongly resonated with me. They defined it as the "habitual and judicious use of communication, knowledge, technical skills, clinical reasoning, emotions, values, and reflection in daily practice for the benefit of the individual and community being served" (p. 226). Therefore acknowledging the importance of the wider processes beyond knowledge and skills and the dual purpose of developing competence; both of which I felt were very important.

Professional Autonomy and Accountability (1.1 a, b)

Working within one's skillset and ability is extremely important and something that can be challenged when in a position where others turn to you for advice. Our human nature also naturally wants us to solve things and provide people with the solutions they are seeking. Throughout my training I became very conscious of this initial drive to solve or answer everything and over time became more comfortable in admitting when I do not know or have the skills to deal with certain situations. In my current role this is extremely important and I have been very clear and firm in discussions with management about where my role ends and where a school needs to be supported by a mental health practitioner who is trained in providing therapeutic interventions for young people. Reflecting back a few years I do not think I would have had such confidence to express where I feel my skill set ends and be firm with what I feel competent and confident with, and not feel like I was in some way inadequate or lacking the skills to effectively fulfil my job. Furthermore, one of the ways we aim to build trust with schools is openly stating we do not have the answers to everything but will be honest and open when we do not know or their request is beyond our capabilities and support them as much as we possibly can. I have also realised the importance of knowing professionals around you who may be able to provide that support more effectively and safely. Therefore in my current role I have built up strong relationships with these individuals, meaning if I received a query from a school that was beyond my remit I could offer advice and connect them with a suitable professional.

Working in mental health inpatient settings prior to beginning the doctorate I was initially advised to set clear and strong boundaries between myself and patients which included

distancing myself. Over time and by undertaking the professional doctorate I began to realise this approach did not suit me and actually acted to increase the power imbalance. Instead I prefer an approach such as what has been argued within social work of mutually agreed boundaries that promote connection rather than separation and defy the concept of professionalism requiring one to maintain distance (O'Leary, Tsui & Ruch, 2013). This consequently enables a collaborative relationship to be developed and enables the professional and individual to be equals. It was really refreshing to subsequently deliver a health and wellbeing programme which challenged traditional advice giving services and instead through conversation acted to empower individuals to determine their own journey to making changes, as empowerment has for many years been recognised to have a big influence on one's health (Wallerstein, 1992). Initially I found this approach challenging especially when individuals were actively asking for advice about what they should be doing and I would find myself slipping into that advice giving mode. However over time and with practice I became much more comfortable and could see the benefits for those who engaged with this approach as everything was driven by them with my support. This concept has remained with me and is the approach and ethos we are trying to take forward with schools.

One aspect of power imbalance I feel I still need to develop further is my relatability to young people and teenagers. Recently, when delivering a consultation with students around the child sexual exploitation resources they had been utilising in school I found myself using language which was too formal and complex. However within my current role I should have further opportunities to continue to work in minimising power imbalances in all the work I deliver and adapting my language and style to different audiences.

During the initial stages of my training I was fortunate to work alongside a trainee Health Psychologist and a colleague with a Health Psychology background. I believe this helped me to identify with the skillset we possess and how these can be utilised within a variety of settings, alongside supporting me in the initial stages of developing these skills. Given the health and wellbeing programme, Wellogram, was being delivered by myself and a colleague with a Masters in Health Psychology we were able to bring our Health Psychology skills into the programme such as designing a capabilities measure based upon the Stages of Change (Prochaska & DiClemente, 1983). I feel this work provided me with a strong foundation to raise awareness of Health Psychology when moving into Public Health departments where Health Psychology was a relatively new concept. I have since taken opportunities to teach my current colleagues about Health Psychology and the variety of behaviour change theories.

During my doctorate I faced one incident where my professional ability was judged and questioned as a result of what appeared to be an individual making assumptions about my experience and abilities based upon my presentation as a young female. I was then included in derogatory emails in which I was being spoken about. At the time I found this incredibly difficult and given this happened at the start of my role delivering Wellogram it had a significant impact on my confidence and made me doubt my own abilities. However, in the long run it helped me to develop both professionally and personally. After being in this situation where this individual was attempting to create and reinforce the power imbalance I realised exactly how that felt and the negative impact it had. I believed I handled the situation in a very professional manner with support from my manager and team. Importantly, I bounced back and chose to return and present to the group that the individual sat within, with the outcomes and stories of what Wellogram had supported individuals with. For me, this demonstrated my professionalism to not react impulsively and my resilience to not be defeated by one individual but instead using that situation as a learning and development opportunity.

Professional Development and Self Reflection (1.1 c)

Reflecting on my practice is something I have always done but not to the extent or level that the doctorate engaged me with. I began to think further about the process of reflection and its parallels to research (Dewey, 1916), enabling learning to happen. Gibbs' Reflective Cycle (1988) was one of the first models of reflection I came across at the beginning of my training and it was one which remained with me throughout. One of the reasons I think I found it so helpful was the focus on the process of reflection and ongoing learning. It also initially provided me with questions to guide my reflections. I feel as my reflective practice progressed I began being able to reflect not just on a specific situation but the wider context and the transferability of skills. Reflecting on my practice and being able to have the "reflective conversation with the situation" (Schön, 1983) is not something I have always found easy and sometimes would avoid because of my self-critical nature. I would find it very easy to focus on areas for improvement and ended up with the negative frame of mind reflection can instil (Finlay, 2008) and self-rejection (Quinn, 2000). When I did not want to think about an event in detail I would then avoid reflecting on that situation. I therefore had to teach myself some self-compassion in my reflections and consciously focus on the positives. I also sometimes found it helpful to reflect on a situation a few days later when there was less initial emotion attached. Subsequently I found reflection an extremely

powerful tool that has helped to me to be more self-aware and develop as a professional. It is a process I will definitely continue beyond completing the doctorate as I have seen how important and helpful it is for professional development.

Reflection has also been a useful tool in supporting me to identify gaps in my skills and address these. This, alongside the competencies, has challenged me to push myself out of my comfort zone and develop myself both personally and professionally. I have learnt a lot about myself and how I work, enabling me to effectively support myself to work to my potential. I will no longer shy away from aspects of my role I am not so confident about to which I realised a few weeks ago when I actively put myself forward to support a colleague with some training around healthy relationships with sixth form students. This is something two years ago I probably would not have done due to my anxiety over training. Within my roles I have also identified gaps and attempted to address them, such as setting up a walking group in a GP surgery and currently attempting to identify any gaps in training around emotional health and wellbeing. I also actively attempt to address gaps in my knowledge with training and conferences and any other learning opportunities.

Communication and Interpersonal Skills (1.2 a, c)

Communication and building relationships is fundamental to the work we do within Health Psychology due to the impact it can have on health outcomes (Meyer et al, 2009). In order to develop effective relationships we need to first focus on understanding, before attempting to be understood (Covey, 1989). This is something I have increasingly realised the importance and power of as too often we have our own agendas that we are driven by. Building relationships with both professionals and communities is something that has always been fundamental to being successful in my roles and has given me the opportunity to work with a variety of people including Health Visitors, Councillors, Teachers and General Practitioners. I have also worked with many different communities and learnt a great deal from the different opportunities this has provided. For example working with both the Gypsy Traveller and Orthodox Jewish communities, I learnt a substantial amount about their cultural norms and values which are extremely important to understand and respect when trying to effectively work with these communities (Gurung, 2013). I feel my interpersonal skills are one of my strongest assets and throughout my training have received positive feedback from my managers but also I have been able to see the implications of this in my own work. I supported a father to stop smoking by simply having a brief conversation and referring him on to the local stop smoking service. He wrote an article which was later

passed on to me, emphasising how it was the friendly face and conversation that supported him to take those initial steps. My communication skills have been tested in circumstances where there has been language barriers between myself and an individual I have been working with, and together we have worked to overcome this. I have also become much more confident in having challenging conversations with people, for example, refocusing individuals on what we were using our Wellogram sessions for, and being able to do so in an effective way that did not have implications on our relationship.

Collaborative Working and Leadership (1.2 b, c, d)

Collaborative working is fundamental to both my current and previous roles. Since beginning my role as a School Health Hub Coordinator I feel this is an aspect of the role I have excelled at over the past six months, and has been confirmed by the positive feedback I have received from my manager and senior colleagues. I have noticed the impact of regular networking on my confidence in meeting new professionals. When I now attend conferences I actively attempt to meet and engage in meaningful conversations with people and feel much more comfortable doing this than I ever used to. I have also realised that I work best when working within a team where I can share ideas and seek support and guidance as different perspectives and skills are so valuable. This became very apparent when I was involved in an oral health steering group with a variety of professionals all bringing their ideas to the table into the design of an oral health pack for 0-5 year olds. Co-production is something which is gaining increasing interest and support (Bovaird & Loeffler, 2012) and something which I would like to be doing more of in my current role with young people. In my last position I facilitated a session with young carers discussing their health needs, realising the benefits of those conversations as often a lot of assumptions about needs are made. True co-production with the communities we are working in can be a very time consuming task but I think it would be helpful for me to continue to develop my skills in working with young people.

By collaborating on pieces of work with my team and reflecting on this, I have become much more aware of my leadership style and the impact this has. I have identified my style as aligning quite closely with the democratic style of leadership and therefore focus on building consensus through collaboration (Goleman, 2000). However recently I have noticed how some of my colleagues are very different and do not always engage in this process leaving me developing work largely on my own. Also, given my team player nature I take on a number of our team responsibilities sometimes at the detriment of my own

responsibilities. From having recognised this I am actively addressing and saying no when necessary. I have also gained confidence in following up colleagues when they agreed to do something and feel I can now do this in a non-critical way but rather providing a gentle reminder. This has enhanced my team working abilities.

Working within a number of different teams with different personalities, learning styles and ways of working, I have become much more in tune to this and can recognise how different people work and how to best manage and utilise members of a team. For example I would like to create a database of all the contacts we have made including details of what they can offer schools. Even though my colleagues are keen to do this I can predict it is unlikely to happen unless we create the time to populate it together. Therefore, I have set up some time where we can focus on this together which probably would not be my preference but feel that it will be the best way, given our different styles of working.

Summary

Reflecting back over the past few years I feel I have significantly enhanced my skills as a professional. This is as a consequence of progressing in my career within a variety of positions which have given me different opportunities, and the professional doctorate challenging me to develop myself further. Working towards all the competencies and reflecting on these has given me guidance and direction and consequently made me more confident in my skills and abilities. What is really important for me now is that I do not see this as the end of my journey but the beginning, as illustrated by the cube model (Rodolfa et al, 2005). Referring to this model has helped me to see how the doctorate can provide strong foundations but the continuing professional development and supervision beyond the doctorate is extremely important in order to continually develop and progress as a Health Psychologist. I strongly believe the skills I have learnt and the engagement with tools such as self-reflection has put me in a great position to build on this and I am excited to continue my journey of professional development beyond the doctorate.

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**Behaviour Change Intervention
Competency 2.0**

**Behaviour Change Intervention Write up of a Workshop Designed and
Delivered for Members of Wellogram**

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Introduction

This report outlines the assessment, formulation, implementation and evaluation of a behaviour change intervention delivered for members of Wellogram, a health and wellbeing service delivered in Southwark, London (Appendix A). From my time spent as a Guide delivering Wellogram it became apparent that maintaining motivation to pursue one's goals was something members often found difficult. I therefore designed and conducted a formal assessment, aiming to assess this and based upon the outcomes subsequently designed and delivered an intervention with the aim of enhancing self-efficacy and subsequent behaviour change. This process was informed by two Health Psychology models, the Stages of Change model (Prochaska & DiClemente, 1983) and the Protection Motivation Theory (Rogers, 1983).

Background (2.1a)

Lifestyle related diseases in the UK are on the increase placing substantial strain on both the National Health Service and the wider economy through, for example, working days lost and increased benefit payments. Britain is now the most obese nation in Europe (Department of Health, 2010) with sixty-two percent of adults classified as overweight or obese (Public Health England, 2015). Obesity substantially increases the risk of one developing a variety of chronic diseases including type 2 diabetes, coronary heart disease and a range of cancers (World Health Organisation, 2016a). Smoking similarly entails negative implications, accounting for approximately 96,000 lives each year in the UK (Health and Social Care Information Centre, 2016). In 2011 to 2012 hospital admissions for stress increased by seven percent, with rates highest amongst those of working age (Health and Social Care Information Centre, 2012). Stress can significantly impact one's physical health due to weakening the immune system and increasing the likelihood of engaging in unhealthy behaviours such as consuming unhealthy food and alcohol (Cohen et al, 2012). Experts believe through tackling poor mental health, this could reduce the overall disease burden by nearly a quarter (DOH, 2010). Addressing unhealthy behaviours would similarly reduce the prevalence of chronic diseases, due to many of the most prevalent diseases being caused by unhealthy lifestyles.

Implementing lifestyle changes can be incredibly difficult, requiring time and dedication. Support is often very important throughout this process as exemplified by smoking quit rates doubling when Nicotine Replacement Therapy is used alongside specialist support (West

et al, 2000). General practitioners (GP's) in England are increasingly having to provide support around lifestyle and social issues such as stress and housing. As a result, GP's are spending a fifth of their time on what they consider 'social issues' rather than purely medical (Citizen's Advice, 2015). This is a challenge for GP's as many admit they lack the skills needed to deliver effective health promotion (The Kings Fund, 2010) and do not have the time to accommodate preventative healthcare into clinical visits, due to the expanding list of existing requirements (Gervas et al, 2008). However, it is extremely important that individuals are supported to make lifestyle changes due to primary prevention being considered the most cost-effective, affordable and sustainable course of action to manage the chronic disease epidemic worldwide (World Health Organisation, 2016b). This highlights the importance of health and wellbeing services, in providing sufficient space and support for those health and wellbeing conversations to take place. Wellogram runs 1:1 sessions within the GP surgery, supporting people to increase their capabilities through focusing on wellness as opposed to illness and action over education. The Guide's role is to facilitate a structured conversation supporting members to set actions that are important to them and feel manageable and achievable. Members most frequently use Wellogram to discuss eating well, exercising more, managing stress, improving sleep or quitting smoking. The initial consultation is an hour long, followed by as many thirty minute follow up sessions as the member requires. Throughout members engagement with Wellogram they are encouraged to utilise existing local services where relevant.

Health and wellbeing services such as Wellogram are particularly beneficial in Southwark due to the borough having high rates of premature deaths from cancer and cardiovascular diseases and a high prevalence of mental illness (Lambeth and Southwark Public Health, 2013). One in five adults are classified as obese with half the population engaging in less than 30 minutes a week of moderate activity. As a result, Southwark's priority is to reduce long term health conditions, through the minimisation of risk factors such as smoking, alcohol and poor diet (Lambeth and Southwark Public Health, 2013).

Assessment & Formulation (2.1 a, b, c)

After a number of months supporting a range of Wellogram members ranging from eighteen to eighty years old, and reflecting on my sessions, it became apparent to me how many members were aware of the need and importance of making lifestyle changes. Members also possessed ideas of how to begin making intended changes, but many found it a challenge to reach their goals, due to what appeared to be a lack of confidence, in many

circumstances. Many of my sessions involved discussing motivation and ways to maintain this alongside confidence when things got in the way or made it difficult to achieve goals over the long term. I therefore questioned whether we as a service could do more to enhance motivation and self-efficacy. These thoughts were further influenced by the Department of Health's (2010) proposal that we need new approaches which empower people to make healthy choices alongside giving communities the tools to address their own needs. I felt Wellogram was successful in empowering people, due to the Guide not advising members what to do, but rather having an open conversation leading to members answering their own questions and breaking their goals down into manageable steps. However, our approach is very implicit, including our use of tools, leading me to consider whether it would be helpful for us to share some of those tools that we utilise in sessions. One of the important ingredients identified for sustaining change within healthcare is whether processes can be maintained once individuals or organisations who initiated change dissociate themselves (Maher, Gustafson & Evans, 2010). Therefore by providing the local community with tools for making sustained change, we could hopefully empower them further whilst also encouraging self-utilisation of the tools, decreasing the possibility of dependence on a Guide.

Based upon my observations and discussions with my Guide colleagues, I decided to design a formal needs assessment (Appendix B) to more accurately determine my predictions, and if correct, utilise this to inform the design of an intervention. Two health psychology models, the Stages of Change model (Prochaska & DiClemente, 1983) and the Protection Motivation Theory (Rogers, 1983) were selected to inform the design of the assessment and subsequently the design and evaluation of the intervention. The Protection Motivation Theory (PMT) was originally designed to test how fear influenced behaviour change, yet is now considered a persuasive means of changing health behaviours, through a focus on the cognitive processes required for change. According to the theory information initiates two cognitive processes, threat and coping appraisal (Figure 1).

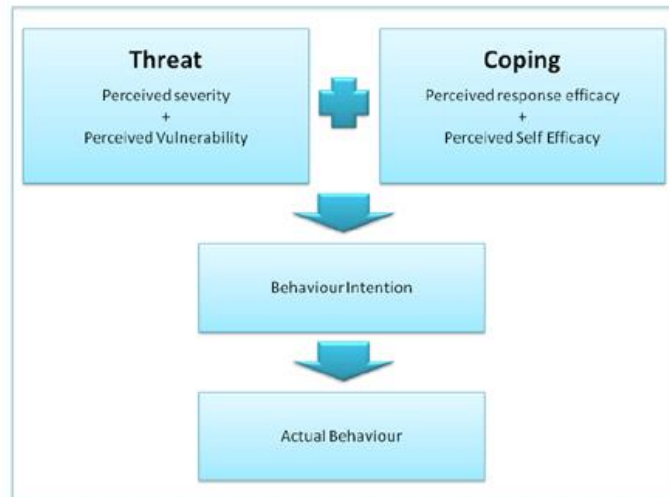


Figure 1: The Protection Motivation Theory (Rogers, 1983)

A maladaptive or adaptive behavioural response is believed to depend on the perceived severity of a threatened event (diabetes), the perceived vulnerability (chance of developing diabetes), the efficacy of the recommended preventive behaviour (how effective exercise could be in preventing diabetes) and lastly the perceived self-efficacy to undertake the recommended preventative behaviour (confidence in ability to exercise). One also evaluates the costs and rewards of certain behaviours. The Stages of Change model (SCM) identifies six stages of change that one proceeds through when making and subsequently maintaining change (Figure 2).

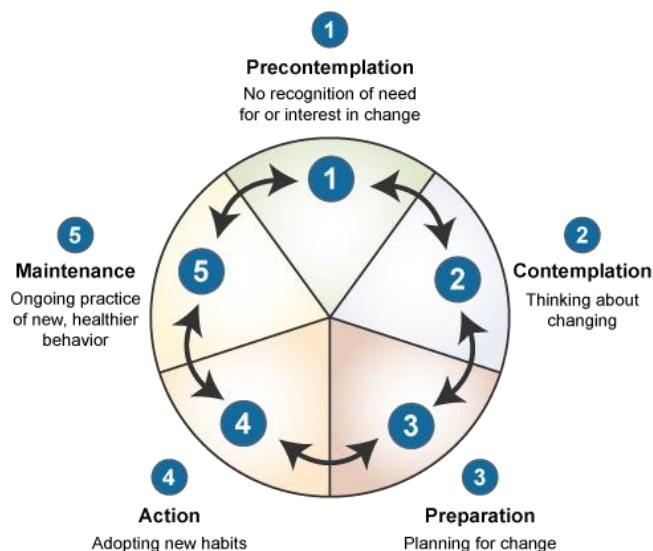


Figure 2: The Stages of Change Model (Prochaska & DiClemente, 1983)

Precontemplation is the starting point whereby one doesn't intend to take action in the foreseeable future, which is often considered the next six months. One then can move into the contemplation stages whereby they intend to make changes in the next six months and the preparation stage in which they are preparing to take action usually within the next month. Once one begins making changes they move into the action stage and subsequently the maintenance stage which is estimated to last from six months to five years (Marks, Murray, Evans & Estacio, 2011). Throughout this process one can move both forwards and backwards and revert to previous behaviours. The duration it takes for individuals to pass through these stages vary from person to person, often depending on the behaviour they are attempting to change.

Both the SCM and PMT were developed within the same year but have significant differences. The PMT is considered a continuum theory whereby the resulting behaviour lies along a continuum rather than in stages, as seen in the SCM, which is a stage model. The PMT, as illustrated in its name, outlines a theory of behaviour and subsequently can provide an explanation as to why one behaves in a certain way and what facilitates and impedes change. On the other hand, the SCM provides a model of behaviour and thus enables us to categorise one's behaviour into stages, depending on where the individual is in the change process. It has been proposed that when someone is in the early stages of the SCM they evaluate the rewards and negative consequences, tapping into response efficacy in the PMT (Velicer, Prochaska, Fava, Norman & Redding, 1998). However, in the later stages of the SCM, that is where self-efficacy and assessing options for engaging in healthier behaviours are believed to be more important (Prochaska, DiClemente & Norcross, 1992). As exemplified, this model and theory can be extremely compatible and effective, due to the PMT being able to provide guidance of how to move people through the stages in the SCM (Prentice-Dunn, McMath & Cramer, 2009). Such compatibility informed my decision to use these models in close collaboration throughout this process. I envisioned the PMT informing my assessment of need, in terms of identifying cognitions that appeared to be potentially inhibiting change in members and subsequently highlighting where to intervene in order to attempt to alter this and resulting behaviour. As I had informally identified self-efficacy as an area I perceived members to be lacking in, this model also enabled me to formally assess this assumption. Due to the SCM providing a clearer idea of where individuals reside along the change trajectory, compared to the PMT, I utilised this model for evaluating the intervention and assessing stages individuals fell within both before and after the intervention.

I based the assessment questions on those developed by Greening (1997) and Norman, Boer, & Seydel (2005) using these as a guide to ensure I incorporated questions

assessing each aspect of the PMT, such as response efficacy and self-efficacy. Further additional questions were incorporated in an attempt to determine workshop topics considered most appealing and useful. A seven-point scale was utilised to measure responses due to five to seven points being considered optimum for reliability (Krosnick & Fabrigar, 1997), and seven allowing for small changes to be more easily detected. Assessments were completed anonymously by ten Wellogram members. These included individuals who had recently started using the service to those who had been attending sessions for a number of months. Attempts were made to include a mix of males and females and a variety of ages. Outcomes from the assessment (Appendix B) illustrated that overall members appeared to be aware of the consequences of their unhealthy behaviours and were generally relatively fearful of the negative consequences. However, as expected what appeared slightly lower in a proportion of members was their self-efficacy to reach and maintain their goals. A further interesting outcome was members perceiving the long term consequences to be greater than the short term consequences, suggesting the long term benefits might provide greater motivation. This assessment also evidenced how those attending Wellogram are often already in the contemplation stage, if not further along the trajectory, as all members reported intending to make changes soon.

Reflecting on how my process influenced the assessment, I designed the assessment based around my prior perceptions of where there was a gap in the service. Identifying potential areas for improvement through first-hand experience as a practitioner can be extremely valuable and accurate. However it is important to be aware how this influenced the assessment and possibly the subsequent design of the intervention. A larger sample completing the assessment would have been beneficial in more accurately assessing current change related cognitions in the local community, rather than relying on my prior perceptions alongside relatively small assessment outcomes.

Design & Implementation (2.1d)

Based upon the outcomes of the assessment, one potential area for intervention appeared to be around self-efficacy, particularly around maintaining one's goals. I therefore decided to design an intervention based around this, alongside the sharing of tools. Through doing this I hoped the intervention alongside the tools could help to improve self-efficacy and subsequently increase the likelihood of positive behaviour change as implied by the PMT. An increase in member's self-efficacy to reach and maintain their goals would hopefully also enable them to reach the action and maintenance stages of the SCM. There

was consensus from my colleagues that such a workshop would complement the work we were already doing within Wellogram (Figure 3) and if successful could be something we continue to deliver for members.

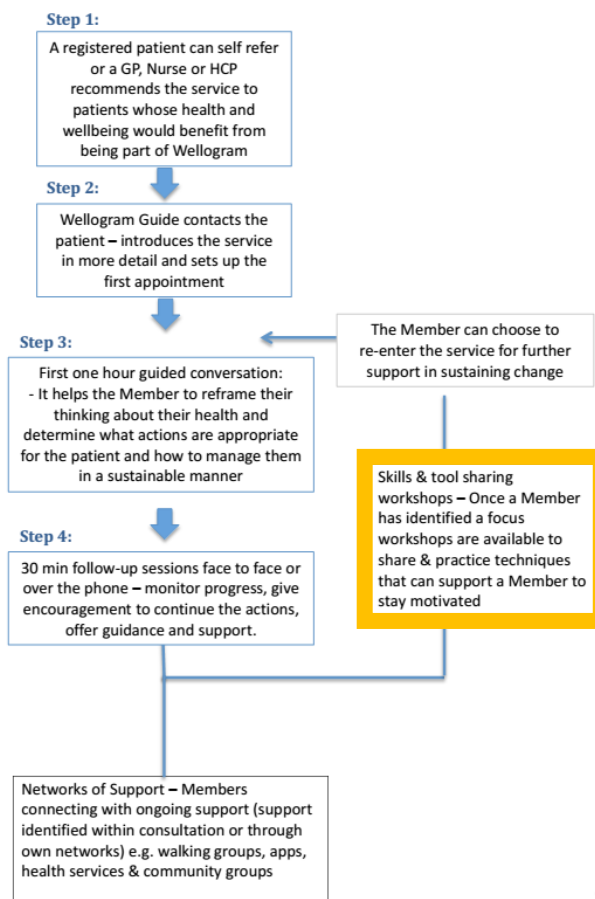


Figure 3: Member Pathway through Wellogram, including the workshop

Members who completed the assessment expressed that a workshop focusing on motivation would be beneficial. Mixed responses were received around the content, with goal setting appearing the most favourable. This left myself, along with my colleagues input, to decide what content to include in this workshop aimed at increasing self-efficacy and confidence to reach and maintain one's goals. After conducting research into this area and combining findings with topics we cover in 1:1 sessions and existing tools we utilise, I formulated eight topic areas to be covered in the workshop. These eight topics began with the coast of South America analogy (Appendix C), which can be used to illustrate change as a challenging process with highs and lows, as illustrated by the coastline, until one reaches a certain point (Chile) whereby change begins to become an easier process (Waller

et al, 2007). This bears similarities with the SCM model, but explains the process of change in more simplistic and less academic terms. Awareness of impact was covered secondly. This is important because the more factors we are observing and reviewing throughout the process, the more likely we are to recognise change in some form, which can help enhance confidence. The next topic to be covered was utilising support. Social support is extremely important as it can act a buffer to stress, increase self-efficacy and influence positive health behaviours (DiMatteo, 2004). This was followed by goal setting, which was identified by members as a topic that would be helpful to discuss. It was also a priority due to goal setting being found to have a strong positive effect on lifestyle changes (Shilts, Horowitz & Townsend, 2004). We need to set goals that are personally important to us and that we feel confident we can achieve (Locke & Latham, 2006). One tool that is particularly helpful in guiding us to set effective goals is the SMART goal checklist (Blanchard, Zigarmi & Zigarmi, 1985). Therefore, this was incorporated into the goal setting section. Goal setting was proceeded by discussing triggers and barriers. This was considered important because in order to develop a successful strategy for change one needs to understand barriers faced and be able to develop a tailored approach to overcome these (National Institute for Health and Clinical Excellence, 2007). This was followed by a visualisation practice, chosen due to the powerful impact visualisation has been found to have on performance (Graham, Sonne & Bray, 2014). When designing the visualisation practice guidance was provided from a mindfulness coach. Maintaining this psychological focus, visualisation was followed by positive thinking, selected due to optimism having long been recognised as having a strong influence on success (Strack, Carver & Blaney, 1987). The penultimate topic was rewarding achievements, included due to the importance of acknowledging progress alongside the evidence that incentives can be effective in driving health related behaviour change (Lynagh, Sanson-Fisher & Bonevski, 2013). These eight different topics can be considered different tools for one to utilise when addressing their health and wellbeing goals. Hopefully through the effective use of these, increases in self-efficacy would be apparent, subsequently assisting one to reach and maintain their goals.

Once the topic areas were decided a script was designed to begin to address how each of these topics could be delivered effectively. Initial ideas of how to deliver each topic were produced and feedback provided from my colleagues in order to produce the final script (Appendix D). An estimation of three hours was made, as to the amount of time required to deliver the workshop. Ideally the workshop would have had a longer duration due to the large amount of content, however I was concerned about attendance and engagement for a long period. Having recently attended facilitation skills training I utilised what I had learnt from this, alongside my teaching and training skills in order to deliver this workshop in an

interactive and visual way, ensuring I was meeting the needs of the different learning styles (Honey & Mumford, 1982). Each topic had a corresponding flip chart page, which were placed upon the walls around the room after completion of the topic. Therefore, by the end of the workshop everything we had covered was illustrated upon the walls and individuals could refer back to previous topics throughout if required. Photos were taken of these in order to capture the session and the input provided from members. These were compiled into a PDF and emailed to the members afterwards in order for members to have the personalised content to refer back to (Appendix E).

Due to the session covering a variety of tools, it was decided to begin the session discussing our toolbox and explaining how every topic covered in the workshop was to be added to this. In order to conceptualise this, I designed a picture of a toolbox and after each section we added a summary of this topic, to the toolbox. This provided a conclusion to each topic whilst hopefully acting as a helpful summary, particularly for the serialist learners (Pask, 1976). In order to effectively explain the different topics, we introduced an imaginary member alongside their story, who we referred to for all our examples throughout the workshop. A booklet was also designed for members attending. The content of this booklet was determined, based upon the topics covered and including tools we used within Wellogram. I worked closely with a designer to formulate the required information into an effective and visually appealing design (Appendix F). Overall the workshop was designed to be extremely interactive due to the length of the session and discussions being helpful in prompting the analysis and reflection of information (Carnell, 2007). I ensued when designing the workshop that none of the discussions or tasks required members to share personal information should they not wish to.

Initially members were recruited through the three Guides discussing the workshop in a session or over the phone. There were no restrictions around who could attend, with the invitation open to any members interested. We did however attempt to keep numbers below fifteen attendees in order to avoid creating a large and less intimate atmosphere. It was agreed that for the first workshop we would invite people who had attended at least one Wellogram session. This was in order to ensure they had an initial level of understanding of the service and we had some understanding of where they were at in their change process. At the end of the recruitment process we had a sign up rate of nine people, five of whom attended the workshop.

As a variety of members from three GP surgeries in South London were invited to the workshop we booked a room in a location that was easily accessible for all, as from my experience location can be a barrier to attendance. To deliver the session we decided myself and the lead Guide would deliver alternating sections, with the remaining Guide

observing the session and inputting where necessary. We chose to deliver it this way due to the continual switching of facilitators aiming to keep people engaged.

Reflecting on the design and implementation of the workshop I realised afterwards how I had based the design around the proposal within the PMT that self-efficacy is one of the strong influencers of behaviour change. I subsequently designed the content with the intention of increasing self-efficacy, with the SCM intentionally having little influence on the design. Using a closer combination of these models to inform the design may have been beneficial due to evidence such as high coping appraisal information having a greater influence on intentions for those in the precontemplation or contemplation stages (Prentice-Dunn, Mcmath & Cramer, 2009). Instead of aiming for a broad design, applicable for people in all stages of the SCM, tailoring it for those within certain stages may be more effective. Unintentionally the design may also have been more effective for those in the contemplation or action stages, as self-efficacy may be more influential at these stages (Velicer, DiClemente, Prochaska & Bradenburg, 1985). Sharing all the tools, may have been informed by this approach being something I would find helpful and my preference for information I can return to, reflect on and utilise in my own time. I did however attempt to ensure my prior experiences informed the design in a positive way as much as possible, using my facilitation skills and tools such as the hierarchy and the Coast of South America example, which I had learnt from delivering a preparation for change group for adults with eating disorders.

Recruitment was a challenge and something I should have anticipated due to members attending a workshop around enhancing motivation being unlikely to have high levels of motivation to attend in the first instance. Inviting more members due to the dropout rates and perhaps making the session shorter would have been a benefit. Conducting the session one morning also meant those working were unlikely to attend, meaning workshops delivered at different times could be of benefit. During the workshop members were sitting for a long time and one member suffering with chronic pain found this a challenge. Having a shorter session and more breaks would have made the experience more enjoyable for members in similar circumstances.

Evaluation (2.1e)

In order to evaluate the success of the workshop at increasing self-efficacy and subsequently facilitating positive behaviour change a variety of questionnaires were designed. A baseline questionnaire was delivered before the workshop, aiming to assess

approximately which stage according to the SCM members were currently in, current healthiness of their lifestyle and how motivated and confident they felt in reaching and maintaining their health related goals (self-efficacy) (Appendix G). In order to assess the current healthiness of their lifestyle questions were asked around areas individuals most frequently utilised Wellogram for support with, such as smoking and exercise. Immediately after the workshop members completed another questionnaire assessing confidence and motivation (self-efficacy) again and asking a range of questions about the usefulness of the workshop (Appendix H). A further questionnaire was administered approximately two weeks after the workshop in order to measure any resulting behaviour change (Appendix I). This questionnaire repeated the questions asked initially in order to determine the stage members were currently in and those asked to assess current healthiness of their lifestyle. Both the SCM and PMT were used to inform the design of the evaluation questionnaires, with the SCM providing a greater contribution, due to its ability to measure behaviour change, to which the PMT is unable to do.

Results from the questionnaires (Appendix J) revealed that before attending the workshop there were mixed levels of motivation and confidence within the five members, with scores ranging from two to seven. Members also appeared to fall into a range of stages according to the SCM, from precontemplation to maintenance. After attending the workshop there appeared to be slight increases in motivation to reach (8.3%) and maintain (22.7%) one's goals and confidence to reach (3.7%) and maintain (7.7%) one's goals. Thus implying the intervention had some impact on self-efficacy for some members, even if it was very small. Those who expressed higher levels of confidence and motivation beforehand experienced no real increase in these areas as a result of attending the workshop. However, the most significant increases were apparent in those starting with lower levels of confidence and motivation suggesting the intervention may be more effective for those in the contemplation or preparation stages. Overall motivation to maintain one's goals increased more than motivation to reach goals suggesting the intervention may have been more helpful in supporting the maintenance of change rather than the initiation.

In terms of any subsequent behaviour change four people completed the second evaluation questionnaire administered approximately two weeks after the workshop. Results implied some very slight changes in behaviour and movement through stages in the SCM for a few members (Appendix J). The slight changes appeared to be predominately around setting health related goals with fewer changes around actually achieving these goals. Interestingly one member expressed making changes but this wasn't captured by the questions assessing which stage of the SCM he fell into, implying the questions may not have been accurate enough to detect all changes in behaviour. This member also

expressed making changes around gambling highlighting the ability for the workshop content to apply to a variety of areas one wishes to make changes around. Unfortunately, feedback couldn't be obtained from one member due to challenges with engaging with that member and feedback being returned to us. We attempted to reduce any chances of this happening by providing stamped, addressed envelopes which helped to ensure we received most feedback.

Qualitative feedback from members highlighted how each member found different sections of the workshop most beneficial, which confirmed the importance of including a larger number of topics and tools. However, the downside of this was, as mentioned by most, the duration and the speed to which we covered so many topics. This was something I was very conscious of from the beginning and when delivering the session realised how we did not have enough time to sufficiently cover each topic area. I wanted the session to be useful for all and in doing that I perhaps jeopardised the quality. We covered a lot very briefly when covering less in greater detail may have been more effective and helpful. This may be especially the case due to members being of different intellectual abilities, to which I hadn't fully accounted for beforehand. As a result, we spent longer than anticipated explaining different topics such as the goal setting in order to ensure members were confident in how to turn a goal into a SMART goal. More time would also allow for members to draw from the discussions and make the topics more personally applicable to them, rather than having to do that afterwards by themselves or in a 1:1 with a Guide.

Aspects that myself and my colleagues felt worked well with the workshop was having members at different stages of the SCM, as they influenced and supported each other. For example, one member began discussing his depression and how he had coped with it, providing support to a lady who expressed her struggles with depression. This open discussion also exemplifies how the group had a relaxed, open and informal feel to it which is what we aimed to create. There were a lot of discussions and sharing of ideas, showing how members engaged with what we were discussing. Furthermore I felt the visual aspect made the content much more interesting and engaging.

Overall the feedback implied that the session did have some positive benefits in terms of increasing both motivation and confidence to reach one's goals. However due to the small numbers of members attending the workshop and the small changes in behaviour it is very difficult to determine the effectiveness of the workshop and draw any definitive conclusions about the impact it can have. It is also difficult to determine whether the behaviour change was as a result of attending the session or other factors. Additionally, all facilitators having relatively close working relationships with the members may have resulted in them, in some instances, acting to please us with their feedback. Otherwise

known as the Hawthorne Effect (Landsberger, 1958). In order to improve the evaluation a larger sample size would be beneficial and ideally a longer follow up period. Questions asked around goal setting were kept very broad due to members attending the workshop working on different things such as stopping smoking or exercising more. As a result this made it difficult to determine where the member was in terms of the SCM model as they may have been in the action stage for healthy eating and the pre contemplation stage in regards to exercise. In order to improve this workshops could be tailored more specifically to certain areas of health and wellbeing or members encouraged to focus on one area of their health and wellbeing when answering the questionnaires.

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Appendix A

Summary of Wellogram

'Wellogram, the result of our innovation work, was delivered across three GP practices with over 450 people. The focus of Wellogram was the Wellogram Guide- someone who takes time to really understand the person's motivation for change and facilitates and supports them to take meaningful actions that are important to them – building in the support of their network.

In this work we have been testing the 'Relational Worker' role, working one to one with patients in the heart of GP practices. It is both the relationship with the guide and their way of working which starts with the patient's goals that drives the continuous process of action and reflection that supports people to make changes and develop their capabilities and ultimately take ownership for their own health and wellbeing.

Building on our body of work, including our youth work, we developed a Capability Measurement Tool so members' could plot changes in the areas of Relationships, Health, Work & Learning and Communities. We have seen how growth in these areas has directly supported people's wellness and their continued motivation.

Wellogram has made a significant impact on the lives of those worked with. Participants improved their health status as shown by standardised measures such as weight loss, which 75% of members experienced. Seventy seven percent of members had healthy blood pressure levels, and 22 percent of members were able to bring their blood pressure down from risky levels. Of those members who smoked, 75% quit successfully.

Capability measures also improved, for example by 72% for health & vitality and 76% for work & learning. This was a finding of interest to colleagues working on our employability project, Backr.

Wellogram was presented at the 'Transforming Primary Care for London' event in 2014, as an exemplar of what "Great Primary Care could look like in the future".

Taken from: <http://www.participle.net/health>

Appendix B
Formal Needs Assessment & Outcomes

1. How would you currently rate the healthiness of your lifestyle?

Very Unhealthy	
Fairly Unhealthy	11
Slightly Unhealthy	1
Mixture of healthy and unhealthy	1111111
Slightly Healthy	
Fairly Healthy	
Very Healthy	

2. When do you intend to make positive changes to your health? (Intention)

In the next month	1111111111
In 6 months	
In 1 year	
Sometime in the future/never	

3. How likely do you think it is you could become very unwell as a result of your current health behaviours you wish to change?
(Threat Appraisal/vulnerability)

Impossible that I will become very unwell	
It's very unlikely I will become very unwell	
It's unlikely I will become very unwell	1
I may or may not become very unwell	111
It's likely I will become very unwell	111
It's very likely I will become very unwell	111
I will defiantly become very unwell	

4. The thought of becoming unwell as a result of unhealthy behaviours makes me feel: (Fear)

Very frightened	11111
Frightened	11
Slightly frightened	11
Neither frightened nor not frightened	
Not particularly frightened	1
Not frightened	
Not frightened at all	

5. How severe do you think the short term consequences of (your weight/exercise levels/stress/smoking) are? (perceived severity)

Not at all severe	
Minor and not noticeable	1111
Somewhat severe and noticeable	111111
Serious	
Leaves me unable to function	
Deadly	

6. How severe do you think the long term consequences of (your weight/exercise levels/stress/smoking) are? (perceived severity)

Not at all severe	
Minor and not noticeable	1
Somewhat severe and noticeable	1111
Serious	1111
Leaves me unable to function	1
Deadly	

7. How much do you believe that if you were to exercise more/lose weight/eat healthier/not smoke/be less stressed this would reduce your chance of illness? (Response efficacy)

0%
 10%
 20%
 30%
 40% - 1
 50% - 1
 60%
 70% - 11
 80% - 1
 90%
 100% - 11111

8. How confident are you that you can reach your health related goal/s? (self efficacy)

I am not confident at all	
I am not confident	
I am not particularly confident	11
I am not confident/not unconfident	1111
I am slightly confident	111
I am confident	1
I am completely confident	

9. How confident are you that you can maintain your health related goal/s?
(self efficacy)

I am not confident at all	
I am not confident	11
I am not very confident	111
I am not confident/not unconfident	11
I am slightly confident	11
I am confident	1
I am completely confident	

10. Will changing your health behaviours have negative implications?

Definitely might	
Probably might	
Possibly might	
It might do or might not	
Relatively unlikely	1
Unlikely	1111
Not at all	11111

11. How helpful would you find it to attend a group session around maintaining motivation?

Not helpful at all	
Not helpful	1
Unsure	11
Helpful	111111
Very helpful	1

12. Please tick areas you may be interested in:

Goal Setting	1111111
Managing triggers	11
Noticing Impact	11
Positive Thinking	111
Utilising Support	111
Rewarding achievements	111
Tip sharing	11

Appendix C

Coast of South America Analogy

A trek along the coast of South America

This is one way in which we think about the process of treatment and recovering from an eating disorder. Often, when people start treatment, they think that they are at their worst point and that the situation is going to improve in a straightforward linear style.

However, it does not work like that. Instead, the process of recovery can best be likened to a trek along the coast of South America. Often, people will find that the situation tends to get a bit worse at the beginning (equivalent to being in southern Chile and then dropping down to the southernmost tip of South America). This is to be expected, as you have spent a long time trying to avoid thinking about your difficulties, and now we are asking you to focus on your eating, cognitions and other behaviors. Also, your eating disorder has been helping you in some ways, and now we are talking about taking this away.

After you have been in treatment for a while, you will begin to see positive changes (beginning to trek up the coast of Argentina). However, these will not be in a straight line. You will have good weeks and more difficult weeks. This is perfectly normal. Sometimes people plateau for a while and then continue upwards. Overall, the trend will be improvement. Sometime external factors such as relationships or work will flare up, affecting your eating disorder treatment.

You are likely to be coming to the end of your treatment when you are about halfway up Brazil. As you can see from the map, this means that your progress does not stop here. We believe that you will continue your recovery – or trek along the coastline – by putting into place all the work that we have done together, such as challenging your negative thoughts and keeping to your eating plan, and you will reach the top tip of the coast of South America.

Waller et al (2007)

Appendix D

Workshop Script

Topic	Time	Minutes	Overview
Intro	10.00 – 10.20	7 mins	<ul style="list-style-type: none"> ▪ Good morning, thank you all for coming along today. We would like to start by introducing ourselves. It would then be great if we can go around the room and you can say who you are and one thing you enjoy doing. We will finish with us. ▪ Some of you already know me from seeing me 1:1 at X but for those of you who don't I'm X and am a guide in X. Our role is slightly different today from our usual role in the 1:1 sessions as we are going to be coming from a more advice giving approach. This group setting also won't provide the same space, as the 1:1's do, to discuss individual plans/experiences etc in such depth. We are going to start by putting together a group agreement and one of our recommendations to go on the group agreement, if you are all happy with it, is that if anything comes up that you want to explore or discuss further make a note of it in what's called your car park in your workbook and this can remind you to discuss it in your next 1:1. This car park is a place to park anything that we cannot address within the scope of today but shouldn't just be ignored. Therefore if there is anything that comes up in discussion we may put it in the group car park or recommend putting it in your own, if we need to move on. We can then come back to it at the end if we have time.
		6 mins	<p>Group Agreement: We would like this to be a relaxed and open session today where everyone feels comfortable to contribute. <i>(create group agreement - reiterate that everything discussed today stays within this room and we respect each other through giving everyone the chance to talk and listening to what others have to say).</i></p> <ul style="list-style-type: none"> ▪ <i>Cover: Toilets, fire escape, breaks</i> <p>Before we get started we would like to hear from you about what you would like from the session. <i>Write up on flipchart.</i></p>
		7 mins	<p>Aim of today's session: Our aim today is to discuss motivation and explore ways that have been proven to enhance motivation. We also want to provide a safe space to practice these techniques. Hopefully you will leave the session feeling more confident and motivated about achieving your goals as you have a toolbox of skills that can support you. All the different tools we discuss will need lots of practice so the more you keep trying them the more you will know whether they can actually work for you and the easier they will become.</p> <ul style="list-style-type: none"> • <i>Run through the different tools we are going to explore today and how we will then put them in the toolbox.</i> • We want to introduce you to Susan who all our examples are going to be based on today.
What is motivation	10.20 – 10.35	2 mins	We are going to start by giving you all some sticky pieces of paper and on these you can write what you feel motivation is/how you would describe motivation and some ideas around

		7 mins	<p>where our motivation stems from. Use a separate sticky for each comment. We will give you two minutes to do this. <i>Bring these together and discuss</i></p> <ul style="list-style-type: none"> ▪ The word motivation is derived from the latin word 'movere' which means to move and it has been defined as the need or drive within an individual that drives us towards our specific goals. ▪ It can be used to refer to our reasons for actions so our motive for doing something, so for Susan reducing her chance of developing diabetes was her motive. Then it also can refer to our enthusiasm for doing something so again thinking about Susan, she was really motivated and focused on losing weight. Both our motives and level of motivation are important in eliciting change.
		6 mins	<ul style="list-style-type: none"> ▪ Motivation can often classified into two categories, self-motivation, which can be referred to as intrinsic motivation, and motivation that stems from others which is extrinsic motivation. With Susan her self motivation was about feeling good in herself and her extrinsic motivation was her GP encouraging her to lose weight. <ul style="list-style-type: none"> ○ <i>Ask them all to separate their definitions into these two groups</i> • I think it's fair to say many of us have times when we struggle to maintain motivation and keep whatever it is we want to do up. One reason for this can be down to change often being a long challenging process where the rewards are often not immediate. A nice way of making sense of this can be through the Coast of South America analogy. The coast of South America can be likened to the change process. We start at the bottom of the coast (near southern Chile) and often it can be quite challenging to begin with so we drop down to the tip of the coast. Once we get past this we have lots of ups and downs but we are still moving in the right direction until we reach the peak and then things start to become slightly easier. Motivation is what can help when we are going through all the ruts as it can help those pros of change be outweighed by the cons. What can also help is trying to hold on to those positive things you have experienced. Our negative thoughts are like velcro, they stick tightly to our brain and need a good old tug to get rid of them. Positive thoughts on the other hand are like Teflon (the non stick coating in pans) and they just slip away and easily get lost. Therefore we inevitably end up focusing on the negative as those thoughts are more prominent and we have to more actively focus on the positive. <ul style="list-style-type: none"> ○ Can anyone resonate with this? ▪ Perhaps then tonight at the end of the day just stop for a minute and think of at least one positive thing you have done/achieved or felt today.
Awareness of Impact	10.35 – 10.45	3 mins	<ul style="list-style-type: none"> ▪ Being able to recognise the impact of the changes you make can help with maintaining motivation especially when motivation is low. This is to do with what we call positive reinforcement that was first understood by

		2 mins	<ul style="list-style-type: none"> On your own we would like you to think about at least one goal you would like to set yourself or maybe already have. It can be anything at all or if you don't feel comfortable sharing then it can be fictional but you may get more from it being personal to you.
		1 min	<ul style="list-style-type: none"> Sometimes we have big ideas and we don't always know how we can feasibly achieve them and make them seem more manageable and realistic. We have a couple of tools that we can use to help us around this that we are going to run through now.
		10 mins	<ul style="list-style-type: none"> One tool that could help you in setting appropriate actions is this hierarchy which is often used in Cognitive Behavioural Therapy and can help you break down your goal into manageable steps. On a scale of 1-10 you can write out what you feel would be the easiest thing to do at 1 to the hardest thing to do at 10 and you can use this as a guide when setting actions starting at the bottom where it feels more manageable and working up. (<i>Show Susans hierarchy</i>) This may take some time to think about properly but we will give you five minutes to start having a think about it now.
		5 mins	<ul style="list-style-type: none"> Now we can think about how we can get the most from setting actions. Here are a set of questions we can use to bear in mind when setting actions. They encourage us to really break goals down and can enhance the benefits of setting goals. <i>Put them up one by one, providing examples for each.</i>
		8 mins	<ul style="list-style-type: none"> Now thinking about the goal you set earlier, in pairs run through it again with these questions in mind and decide whether it's already a SMART goal. If not think about how you could develop it into more of a SMART goal. Can you see any benefits of doing it this way?
	11.25 – 11.45	20 mins	Break
Triggers / Barriers	11.45 – 12.10	7 mins	<ul style="list-style-type: none"> Lets have a little brainstorm about what we think barriers are and some examples of barriers, perhaps some barriers to the goal you were working on earlier? <i>Get them to write their ideas on a sticky and put on the wall with definition at top and an example (Example – you want to eat healthily but do not have the money for fresh foods)</i> <i>Discuss how a barrier is defined as an obstacle that prevents progress and that barriers can act on two levels, emotional and physical. Ask if they can then organise these into two groups.</i>
		7 mins	<ul style="list-style-type: none"> Now lets do the same for triggers, lets start by thinking what are they and some examples. Again you can think about some triggers related to the goal you were working on earlier. <i>Definition = An event that can cause you to act in a way that's detrimental to reaching your goal. (Put this</i>

		4 mins	<p><i>up first and clarify understanding) (Example – when you have a cup of coffee and you automatically reach for a cigarette, that coffee is a trigger)</i></p> <ul style="list-style-type: none"> ▪ With both barriers and triggers the first step to managing them is becoming aware of what your triggers and barriers are. You can then plan how you can manage them differently. ▪ On your own think about what may be a barrier to you reaching your goal.
		6 mins	<ul style="list-style-type: none"> ▪ In pairs discuss how you could attempt to overcome this barrier.
		1 min	<ul style="list-style-type: none"> ▪ When thinking about how to prevent acting on your triggers you can use this tool, which you can take away and think about in more depth or discuss it with your Guide.
Visualisation	12.10 - 12.30	4 mins	<ul style="list-style-type: none"> ▪ A further way we can maintain motivation is through visualisation. What we mean by this is imagining in your mind that you have that thing you want or you've reached your goal. This may sound a bit bizarre and silly at first but there is a lot of evidence to suggest whether we actually do something or just imagine doing it we activate many of the same neural networks (cells that link what your body does to the brain impulses that control it) so it might be something worth trying and seeing if it could work for you. A lot of professional sports people such as golfers have used it to practice their swings. What is important in visualisation is that you imagine you already have the thing you want.
		6 mins	<ul style="list-style-type: none"> ▪ Are you happy to have a quick practice now? <p>If you get into a comfortable sitting position and close your eyes or if you feel more comfortable just look down. Let's start by taking a few deep breaths. Start with a long, slow inhale, breathing in to your tummy on a count of four – 1 – 2 – 3 – 4. Hold your breath for a moment, and then slowly exhale to a count of four -1 -2 -3 -4. We're going to do this again, but this time when you exhale, imagine that you are breathing out all your stress and tension. Inhale, breathing all the way into your tummy - 1 - 2 - 3 - 4. Hold for a moment, and exhale – 1 - 2 - 3 - 4. Feel your worry and tension being released through your breath, leaving you more relaxed. Let's do this two more times. Breathe in 1–2–3–4, hold for a moment, and exhale, -1 -2 -3 -4 breathing out all your tension and stress. And last time, inhale 1 - 2 - 3 - 4, hold, and exhale - 1 - 2 - 3 - 4 releasing any worries or fears, letting yourself feel relaxed and calm. Feeling comfortable and relaxed now imagine you wake up one morning and you have achieved your goal. This can be the goal you were working on earlier or any other goal that you feel is important. (15 seconds) Imagine you have achieved what you wanted to. What do you feel like? (15 seconds) How happy do you feel? (15 seconds) What do you look like? (15 seconds) What changes have you noticed? (15 seconds) Has reaching this goal impacted on your day to day activities? (15 seconds) Do you feel any healthier? (15 seconds) In a few</p>

		4 mins 5 mins	<p>moments we are going to come back to the room so take this time now to explore any last remaining thoughts or images you may have around how you look or feel. (15 seconds) When you feel ready come back to the room and open your eyes.</p> <ul style="list-style-type: none"> • Now just take a few minutes to write down any thoughts you may want to remember or simply how it felt for you • How did that feel for you? • The more one practises this the more effective it's likely to be so we have provided you with a script you can follow but you will be able to find examples on things like you tube.
Rewarding Achievements	12.30 – 12.36	4 mins	<p>One other thing we often forget about doing is rewarding ourselves.</p> <p>There are a couple of benefits from rewarding ourselves which are:</p> <ul style="list-style-type: none"> - Giving you some direction and something to aim for or look forward to. - It's also a way of acknowledging progress and recognising what you have achieved which is really important to do. - It's important to acknowledge that rewards can be anything that make you happy - Susan for example set different rewards for reaching different milestones. At the beginning of her journey she used to reward herself with taking an hour at the end of the week to have bath and paint her nails as she found this relaxing. Then her final reward was going for a weekend away with her family.
		2 mins	<p>We have developed a tool we can use to help us think about what we may want to set as rewards and when we might do this as it can be quite helpful to put a list together of different things you could use as rewards. We can give this to you now to have a look at it at home and then if it's something you think would be helpful then perhaps talk it through with your guide.</p>
Concluding Remarks	12.36 - 12.54	10 mins	<ul style="list-style-type: none"> • We've now come to the end of today's session and appreciate we have covered quite a lot in a few hours. (<i>Return to what they wanted to get from the session and the tools in our toolbox</i>) • Are there any further questions? • Return to the Car Park
		2 mins	<ul style="list-style-type: none"> • Moving forward we encourage you to practice the different things we have discussed and see your guide and follow up anything from today as this may enable you to make what we have discussed more personal to you. If there is anything else that has arisen today please feel free to talk to us before you leave.
		6 mins	<ul style="list-style-type: none"> • Before you do leave we would first like you all to think of your own top tip for maintaining motivation and write it on a sticky piece of paper. Try to keep it quite broad so it would be relevant for everyone no matter what they are working on. We will then put these round the door and take a picture of all of them to send to you

			<p>all but then please take one as you leave and try it out. Then once you have written your top tip please can you also fill out an evaluation form. As this is the first time we have run this session we would be really grateful for feedback about what you found the most helpful and least helpful so we can improve it. We also want to check you are all happy for us to give you a follow up call to see how much you were able to put today's session into practice. Please come and speak to us if you are not happy for us to do this.</p>
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Appendix E
Workshop Flip Charts

Welcome!

Motivation
Workshop
19th Aug 2015

Group Agreement

- ⇒ To use the car park
- ⇒ Respecting what's shared
"staying within the room"
- ⇒ No Swearing / bad language
- ⇒ Listening to each other
- ⇒ Participating

Car Park

In the workshop...

In a break...

In a 1:1...

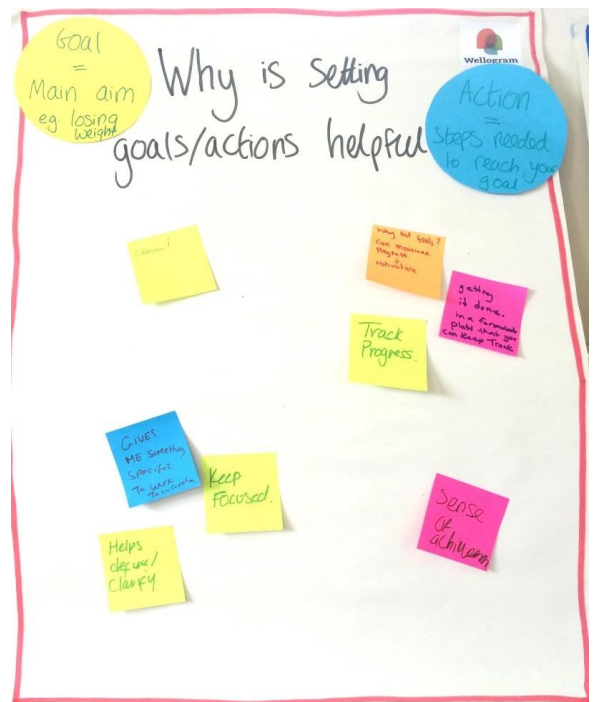
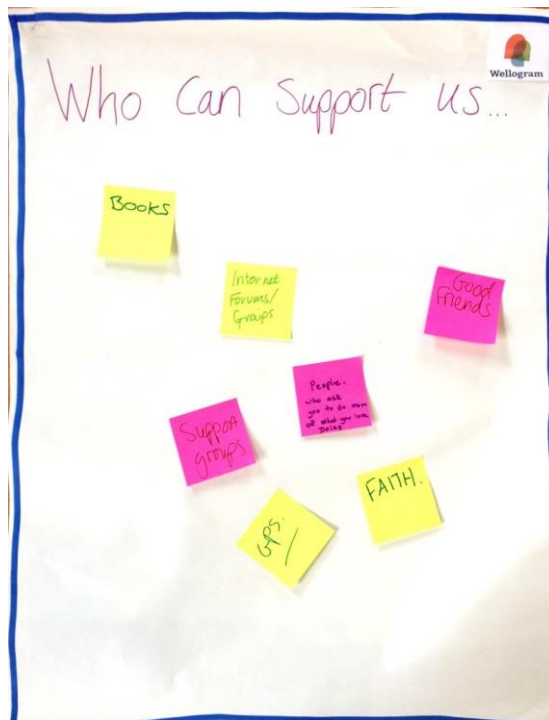
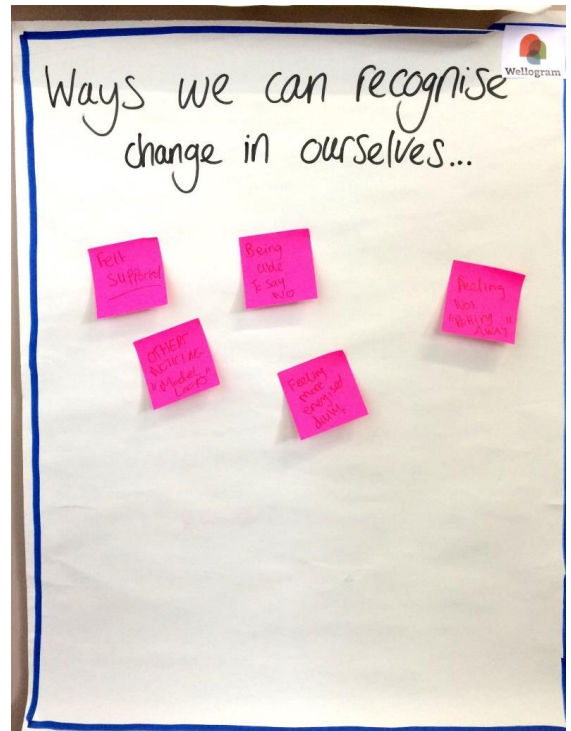
Practice Hierarchy

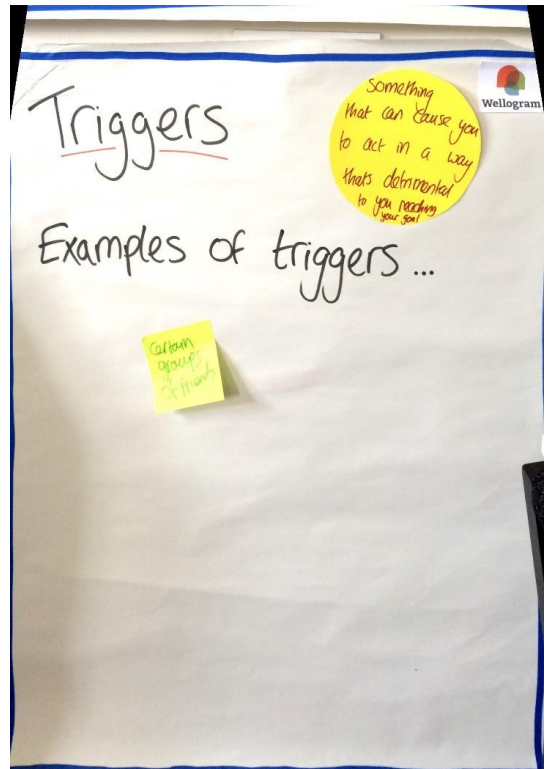
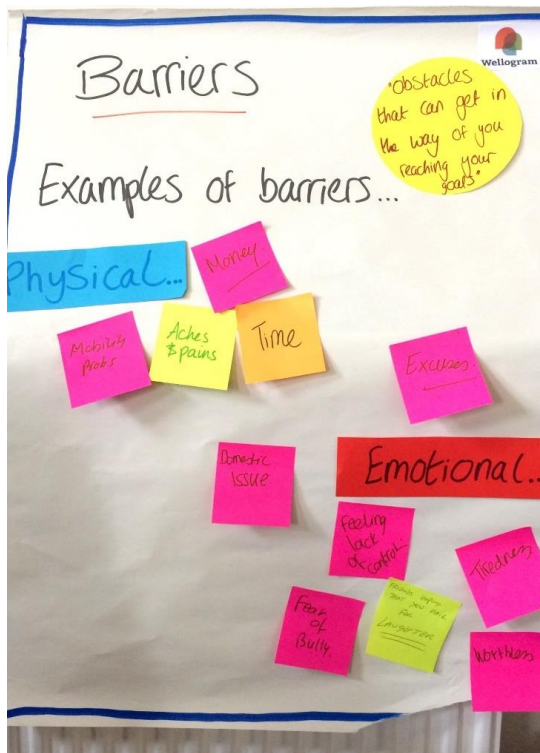
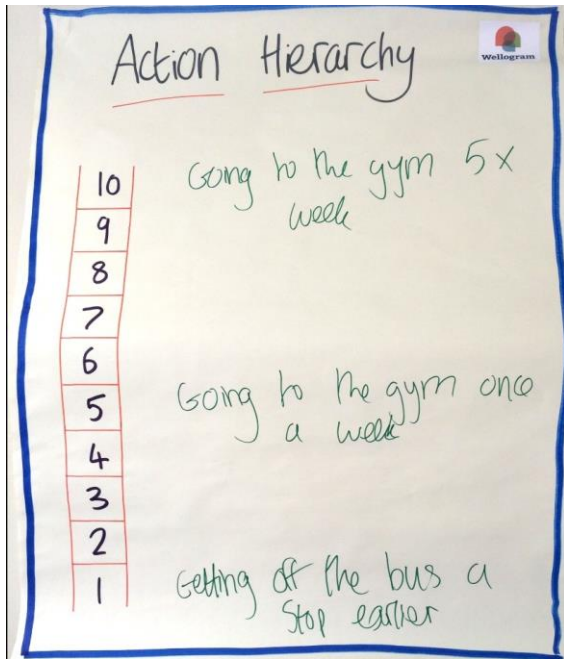
Objectives:

- ⇒ To explore tools/techniques which can help you reach your goal
- ⇒ Provide a safe space to practice

Agenda:

- Recognising change
- Utilising Support
⇒ Ask Tool
- Goal Setting
⇒ Hierarchy
⇒ SMART
- Barriers/Triggers
⇒ Prevent your triggers
⇒ Maximise
⇒ If/Then
- Visualisation
- Rewarding Achievements



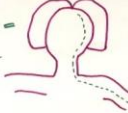


Wellogram

- ① Think about what might be a barrier to you reaching your goal
- ② Think about what might be a trigger?
- ③ Think about how you will overcome this

Wellogram

Visualisation

Neural Network -  Cells that link what your body does to the brain impulses that control it

Benefits:

- ⇒ Rewiring automatic thinking to more positive thoughts
- ⇒ Help you to really imagine what that change would feel like
- ⇒ Increase confidence that you can achieve your goals

Appendix F
Workshop Booklet

Welcome to Wellograms

**Top Tips to
help you Stick**



We all have health and wellbeing goals. Maybe it's something that we need to change, something that we are working towards. Wellogram is all about supporting you to explore opportunities and actions to help you meet those goals and make those changes. We recognise that you are the expert in your own life and that sometimes life gets in the way and we find ourselves stuck. Wellogram is here to work with you during these times by providing you the time and support to;

- Think about your overall health and happiness
- Identify and set goals that could make the biggest difference to you
- Formulate manageable steps that will keep you motivated, and on track to building new habits and reaching your goals

Today's Workshop will:

- Provide you with some of the top tricks and tips for staying motivated when trying to stick to the goals that are important to you
- Offer you a chance to put some of these tips and tricks into practice and to think how best they might work for you
- Connect you with others to support, share experiences and learn new tricks
- Bring together and highlight all of the things you are doing and achieving with your Guide into one set of handy reusable tools

Interested in more 1:1 support? Then contact your Guide or Doctor Surgery to book your follow up.

These worksheets will cover...



- Key phrases
- Car Park
- Sue's Story
- Coast of South America
- Ask Tool
- Goal Worksheet
- Action Hierarchy
- SMART goal checklist
- My Potential Barrier/s
- Prevent your Triggers
- Triggers - Maximise
- Triggers - If/Then
- Steps for Visualisation
- Thoughts after Visualisation
- Rewards Tool
- Notes



Interested in more 1:1 support? Then contact your Guide or Doctor Surgery to book your follow up.

Key phrases you will come across



Motivation: process that initiates, guides, and maintains goal-oriented behaviors. Motivation is what causes you to act.

Intrinsic: motivation that results from within yourself
e.g. your desire to get fitter

Extrinsic: motivation that results from outside yourself
e.g. doctor advising you to stop smoking

Confidence: A feeling of trust and firm belief in yourself or others

Car Park: A place to 'park' topics of conversation/ thoughts
so they can be returned to at a later time/date

Goal: The object of your ambition or effort; an aim or desired result

Actions: Steps you put in place to help you reach your goal

Barriers: Obstacles that can get in the way of you reaching your goals

Triggers: Something that can cause you to act in a way that is detrimental to you reaching your goal

Visualisation: technique involving focusing on positive mental images in order to achieve a particular goal

Interested in more 1:1 support? Then contact your Guide or Doctor Surgery to book your follow up.

Meet Sue



“ Two years ago I was diagnosed with diabetes. Since then, my doctor has constantly been telling me that I need to loose weight, as this would be a sure way of helping me manage my diabetes better. In the past, I would have tried all of the latest diet trends. I was your typical ‘yo-yo’ dieter! Since having my kids and starting back to work part time at the local school, my weight has just seemed to increase and increase. Now when I try to do a new diet or make plans to exercise I can rarely do it for more than a week. It just seems to take so much time and energy. Two things I have very little of!



I tried Wellogram because I felt something needed to change. Since joining, I've seen my weight has started to come down, I'm eating more of a variety of meals and most surprisingly, I feel like I've got even more energy! With Wellogram, I started small, rather than going straight in like I've always done before. Rather than saying I'll go to the gym 5days a week - I started by going to the park once a week with my sons. Something we all enjoy but never did enough of.

Over the weeks, I've managed to encourage my family and friends to also get healthier. A group of us in work now share healthy lunch ideas and I've switched my weekly coffee and catch up with my best friend to a catch up and Zumba class!

For me the best part of Wellogram, is taking the time out to pause and look at whats working for me. So I know what to do again, if I ever slip up. Conversations with my Guide help me to do that, but I've also started protecting some of my own time to think about this. Recently, I've made an agreement with my husband, he takes the kids out for an hour on a Sunday, while, I have a bubble bath or go get my nails done! It's like a little reward for sticking to my plan. ”

Interested in more 1:1support? Then contact your Guide or Doctor Surgery to book your follow up.

Coast of South America



Interested in more 1:1support? Then contact your Guide or Doctor Surgery to book your follow up.

My Goals



Wellogram

When thinking about your overall health and wellbeing, what are the things you would like to achieve that you believe will help you live a healthier, happier life.

Write down as many of these ideas here:

Can you turn any of these into a Smart Goal?

Interested in more 1:1 support? Then contact your Guide or Doctor Surgery to book your follow up.

Hierarchy



We often aim to change too much too quickly and can then slip up, making us feel demotivated rather than motivated. By breaking down your goal into smaller more manageable steps you are more likely to form that new habit and reach that overall goal.

Choose a goal that you would like to try and achieve first?

What are the different steps you need to take to help you reach this goal?

10	.....
9	.....
8	.....
7	.....
6	.....
5	.....
4	.....
3	.....
2	.....
1	.....

Interested in more 1:1 support? Then contact your Guide or Doctor Surgery to book your follow up.

Setting Smart Goals



Questions to ask yourself	Simple goal	SMART goal
1. Specific. What will the goal accomplish? How and why will it be accomplished?	<i>I want to get fitter</i>	I will improve my fitness by walking for half an hour everyday
2. Measurable. How will you measure whether or not the goal has been reached (list at least two indicators)?	<i>I want to decrease the amount I smoke</i>	I want to reduce the number of cigarettes I smoke from 5 a day to 3 a day
3. Achievable. Is it possible? Have others done it successfully? Do you have the necessary knowledge, skills, abilities, and resources to accomplish the goal? Will meeting the goal challenge you without defeating you?	<i>I want to stop eating sweets</i>	I will reduce the amount of sweets I eat through having them three times a week
4. Results-focused. What is the reason, purpose, or benefit of accomplishing the goal? What is the result (not activities leading up to the result) of the goal?	<i>I want to improve my health</i>	I want to improve my health order to have more stable blood sugar readings.
5. Time-bound. What is the established completion date and does that completion date create a practical sense of urgency?	<i>I want to see my friends more often</i>	Over the next month I will meet up with friends once a week.

Here is an example of a SMART Goal:

Over the next month I will attend the yoga class every Monday in order to increase my fitness and manage stress

Interested in more 1:1support? Then contact your Guide or Doctor Surgery to book your follow up.

Steps for Visualisation



Step 1:

Get into a comfortable position. You may want to close your eyes or even just look down to the ground.

Start by taking a few deep breaths. These are long, slow inhales, breathing right into your stomach on a count of four (1 - 2 - 3 - 4). Hold your breath for a moment, and then slowly exhale to a count of four (1 - 2 - 3 - 4).

Step 2:

Repeat the breathing exercise, but this time when you exhale, imagine that you are breathing out all your stress and tension. Inhale, breathing all the way into your stomach. Imagine any worry or tension being released through your breath? Ask yourself how do you feel? Do this 2 more times, always inhaling and exhaling to the count of 4.

Step3:

Making sure you feel comfortable and relaxed now imagine you wake up one morning and you have achieved your goal (pause for 15 seconds). How do you feel? (pause for 15 seconds) What do you look like? (pause for 15 seconds) What are you doing? (pause for 15 seconds) Is anybody with you? (pause for 15 seconds) What changes have you noticed? (pause for 15 seconds) Has reaching this goal impacted on your day to day activities? (pause for 15 seconds) Do you feel any healthier? (pause for 15 seconds) Before coming back to the room, explore any last remaining thoughts or images you may have around how you look or feel. (pause for 15 seconds) When you feel ready come back to the room and open your eyes.

Interested in more 1:1support? Then contact your Guide or Doctor Surgery to book your follow up.

Car Park



It's likely that some thoughts, questions or ideas have come up for you during this workshop. So as not to forget them, we would encourage you to write them down.

1) Items that could be dealt with in the workshop

2) Items that could be dealt with in a break

3) Items that could be dealt with at a 1:1

Interested in more 1:1 support? Then contact your Guide or Doctor Surgery to book your follow up.

Rewards



When should you use it?

Perhaps you've been sticking to something for a while and need some extra motivation or you have just started sticking to your actions and want to make sure you have something to work towards. Rewards will help you to do this.

How does it work?

This tool helps you to think about how you might use rewards to keep your motivation up and increase your chances of sticking.

What do you do?

Think about your rewards plan. What might you be able to reward yourself with? When might it be best to reward yourself? How often might you reward yourself?

What might you reward yourself with?

When might you reward yourself?

How often might you reward yourself?

Interested in more 1:1 support? Then contact your Guide or Doctor Surgery to book your follow up.

Asks

When should you use it?

If you include your friends and family in practical and specific ways you will increase your chances of sticking.

How does it work?

This tool helps you to think what you can ask people in your network to do to support you.

What do you do?

Make a list of people who you regularly see or are in regular contact with. Take a look at the list of ideas on the left and either taking from these ideas or creating your own, think about what you could ask of which people.

Ideas of things you could ask

- *Text me every day to ask me if I have done it*
- *Remind me when it is time to do something*
- *Do my action with me (eg. go to sleep at the same time, or both make a packed lunch for work)*
- *Ask me if I'd like to do something when you are doing it (eg. do exercise together)*
- *Don't ask me to do something if you know it takes me away from my goal*
- *Do something to with me as*
- *a reward when I have followed through on an action*
- *Tell me about the improvements you notice in me (eg. my mood, physique or energy)*
- *Take a chore off my plate, so I have more time to take actions towards my goal*



Wellogram

Who might you ask and what will you ask them?

Interested in more 1:1 support? Then contact your Guide or Doctor Surgery to book your follow up.

Prevent your triggers



When should you use it?

If you are finding it difficult to resist temptations or if you are going off course.

How does it work?

Helps you to see what triggers you to slip up, if there are common patterns and to work out what to do when you find yourself in that situation again.

What do you do?

Notice when you have slipped up and what it is about the situation which has made you slip up. Write it down, there may be several things, write them all down. One by one take each reason you have slipped up, is there anything you could do next time? Write these down.

When did you slip up?

What triggered you to slip up?

What might you be able to do next time to avoid slipping up?

Interested in more 1:1 support? Then contact your Guide or Doctor Surgery to book your follow up.

Maximise your triggers



When should you use it?

Are you finding that there are some situations when you find it easier to stick to something? Make the most of these situations with this tool.

How does it work?

Helps you to see when you find it easier to make the changes you are making and make the most of these situations.

What do you do?

Think about when you have stuck to taking actions towards your goal. What is it about these situations? Are there any patterns or themes? Write them down. What could you do to increase these times? What could you do to make the most of this situation? Write them down, think about how you are going to put them into action.

Are there times you find it easier to stick to the changes you are trying to make?

Is there anything you can do to increase these times?

What might you do in the moment to make the most out of these times?
How will you put these into action?

Interested in more 1:1 support? Then contact your Guide or Doctor Surgery to book your follow up.

Triggers If/Then



When should you use it?

Sometimes you can't avoid the situations that take you off track. This tool helps you to figure out what you can do in those situations so you don't trip up.

How does it work?

Helps you to notice what trips you up and IF that happens THEN what you can do to counter it.

What do you do?

Notice what happens when you trip up and write these down. Then what you could do when these happen? Write these down.

If you are in a situation where you might slip up then what might you do?

If...

Then...

Interested in more 1:1support? Then contact your Guide or Doctor Surgery to book your follow up.

My Potential Barrier/s...



My Potential Barrier/s...

How to overcome my barrier...

Notes

.....

.....

.....

.....

.....

.....

Interested in more 1:1support? Then contact your Guide or Doctor Surgery to book your follow up.

Appendix G
Pre Workshop Questionnaire



Just to bear in mind when answering these questions:

- **Motivation** = how strongly you **feel** you want to reach your goal/s
- **Confidence** = how able you feel to actually put things into place to reach your goal/s

1. How ***motivated*** do you feel to ***reach*** your health related goal/s?

Not motivated at all							Extremely motivated
1	2	3	4	5	6	7	

2. How ***motivated*** do you feel that you can ***maintain*** your health related goal/s over the long term?

Not motivated at all							Extremely motivated
1	2	3	4	5	6	7	

3. How ***confident*** do you feel that you can ***reach*** your health related goal/s?

Not confident at all							Extremely confident
1	2	3	4	5	6	7	

4. How ***confident*** do you feel that you can ***maintain*** your health related goal/s over the long term?

Not confident at all							Extremely confident
1	2	3	4	5	6	7	

5. Do you currently take actions to help you to live a healthier life?

I do not take any actions			I regularly take actions	
1	2	3	4	5

6. Do you currently set yourself health related goals?

I do not set goals				I am setting goals
1	2	3	4	5

7. Do you currently achieve the health related goals that you set yourself?

I do not achieve my goals				I am achieving my goals
1	2	3	4	5

8. What are your current exercise levels like?

Very low						Very high
1	2	3	4	5	6	7

Hours per week:.....

9. How healthy is your diet currently?

Very unhealthy						Very healthy
1	2	3	4	5	6	7

10. What are your current stress levels like?

Very low						Very high
1	2	3	4	5	6	7

11. How much sleep do you currently get?

Very low amount							Very large amount
1	2	3	4	5	6	7	

Hours per night.....

12. How much do you currently smoke? (*If you don't just leave this one blank*)

Very low amount							Very large amount
1	2	3	4	5	6	7	

No. a day.....

Appendix H
Workshop Evaluation Form

Feedback Form



Just to bear in mind when answering these questions:

- **Motivation** = how strongly you **feel** you want to reach your goal/s
- **Confidence** = how able you feel to actually put things into place to reach your goal/s

1. How ***motivated*** do you ***now*** feel to ***reach*** your health related goal/s?

Not motivated at all							Extremely motivated
1	2	3	4	5	6	7	

2. How ***motivated*** do you ***now*** feel that you can ***maintain*** your health related goal/s over the long term?

Not motivated at all							Extremely motivated
1	2	3	4	5	6	7	

3. How ***confident*** do you ***now*** feel that you can ***reach*** your health related goal/s?

Not confident at all							Extremely confident
1	2	3	4	5	6	7	

4. How ***confident*** do you ***now*** feel that you can ***maintain*** your health related goal/s over the long term?

Not confident at all							Extremely confident
1	2	3	4	5	6	7	

5. Overall how helpful did you find the session in supporting you to reach your health related goals?

Not at all helpful							Extremely helpful
1	2	3	4	5	6	7	

6. How enjoyable was the session?

Extremely enjoyable							Not enjoyable at all
1	2	3	4	5	6	7	

7. How would you rate the delivery of the session?

Very poor							Very good
1	2	3	4	5	6	7	

What aspect did you find the most helpful?

.....
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.....
.....

What aspect did you find the least helpful?

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.....

Recommendations for improvement?

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.....
.....

Any other comments

.....
.....
.....
.....

Appendix I
Post Workshop Questionnaire



1. Do you currently take actions to help you to live a healthier life?

I do not take any actions					I regularly take actions	
1	2	3	4	5		

2. Do you currently set yourself health related goals?

I do not set goals				I am setting goals	
1	2	3	4	5	

3. Do you currently achieve the health related goals that you set yourself?

I do not achieve my goals			I am achieving my goals		
1	2	3	4	5	

Please answer the questions below which are relevant to you.

4. What are your current exercise levels like?

Very low							Very high	
1	2	3	4	5	6	7		

Hours per week:.....

5. How healthy is your diet currently?

Very unhealthy							Very healthy
1	2	3	4	5	6	7	

6. What are your current stress levels like?

Very low							Very high
1	2	3	4	5	6	7	

7. How much sleep do you currently get?

Very low amount							Very large amount
1	2	3	4	5	6	7	

Hours per night.....

8. How much do you currently smoke?

Very low amount							Very large amount
1	2	3	4	5	6	7	

No. a day.....

Have you made any other changes in regards to your health over the past few weeks?

.....
.....
.....
.....

Appendix J
Questionnaire Outcomes

Immediately Before to Immediately After:

1. How motivated do you feel to reach your health related goal/s?

	Member 1	Member 2	Member 3	Member 4	Member 5
Before	4	4	6	3	7
After	5	4	6	4	7

Total Before = 24
Total after = 26
Difference = 2 (8.3% increase)

2. How motivated do you feel that you can maintain your health related goal/s over the long term?

	Member 1	Member 2	Member 3	Member 4	Member 5
Before	3	4	6	2	7
After	5	4	6	5	7

Total Before = 22
Total After = 27
Difference = 5 (22.7% increase)

3. How confident do you feel that you can reach your health related goal/s?

	Member 1	Member 2	Member 3	Member 4	Member 5
Before	7	4	7	2	7
After	7	4	6	4	7

Total Before = 27
Total After = 28
Difference = 1 (3.7% increase)

4. How confident do you feel that you can maintain your health related goal/s over the long term?

	Member 1	Member 2	Member 3	Member 4	Member 5
Before	6	3	7	3	7
After	6	4	6	5	7

Total Before = 26

Total After = 28

Difference = 2 (7.7% increase)

Immediately Before to 1-2 weeks later:

Key for questions 5 - 7

1 = Pre Contemplation

2 = Contemplation

3 = Preparation

4 = Action

5 = Maintenance

5. Do you currently take actions to help you to live a healthier life?

	Member 1	Member 2	Member 3	Member 4	Member 5
Before	3	2	3	3	3
After	4	2	-	4	5

6. Do you currently set yourself health related goals?

	Member 1	Member 2	Member 3	Member 4	Member 5
Before	3	2	5	1	5
After	4	3	-	3	5

7. Do you currently achieve the health related goals that you set yourself?

	Member 1	Member 2	Member 3	Member 4	Member 5
Before	2	1	3	2	4
After	2	1	-	3	4

	Member 1	Member 2	Member 3	Member 4	Member 5
Stage Before	Contemplation/ Preparation	Pre Contemplation/ Contemplation	Preparation/ Maintenance	Pre Contemplation/ Contemplation/ Preparation	Action/ Maintenance
Stage After	Contemplation/ Preparation/ Action	Pre Contemplation/ Contemplation/ Action	-	Preparation/ Action	Action/ Maintenance

8. What are your current exercise levels like?

	Member 1	Member 2	Member 3	Member 4	Member 5
Before	4	1	4	1	4
Hours per week	5		4	2	7
After	4	1	-	2	4
Hours per week	5		-	3-4	6

9. How healthy is your diet currently?

	Member 1	Member 2	Member 3	Member 4	Member 5
Before	3	2	5	5	4
After	4	3	-	4	4

10. What are your current stress levels like?

	Member 1	Member 2	Member 3	Member 4	Member 5
Before	5	7	3	5	2
After	5	6	-	5	3

11. How much sleep do you currently get?

	Member 1	Member 2	Member 3	Member 4	Member 5
Before	5	3	3	7	2
Hours per night	6-7	5 hours on and off	7-8 hours 4 nights a week and 5 hours 3	11	4

			nights a week		
After	5	3	-	7	3
Hours per night	7		-	11	5

12. How much do you currently smoke?

	Member 1	Member 2	Member 3	Member 4	Member 5
Before	5	N/A	N/A	N/A	N/A
No. a day	15				
After	4	N/A	-	N/A	N/A
No. a day	13				

Any other changes:

1 – I think thinking about my barriers has helped with cutting back the smoking slightly.

2 – I am trying hard to take some time to relax and look after myself on days I feel up for it but I am still finding things difficult and haven't really been able to put anything we discussed into practice because of how I have been feeling lately.

5 – since attending the workshop I have stayed away from the betting shop. Trying hard to stop. My walking home from work is going to play. My other half has invested in some sweat suits which I wanted. Life can only get better. Thank you.

Evaluation form Only:

How helpful did you find the session in supporting you to reach your health related goals?

Member 1	Member 2	Member 3	Member 4	Member 5
6	3	5	6	7

How enjoyable was the session? (1 being extremely)

Member 1	Member 2	Member 3	Member 4	Member 5
1	3	3	1	1

How would you rate the delivery of the session?

Member 1	Member 2	Member 3	Member 4	Member 5
7	4	6	6	7

What aspects did you find most helpful?

- Discussion around awareness and triggers (1)
- SMART goal checklist and sharing ideas (2)
- The brain storming (3)
- All (5)

What aspects did you find least helpful?

- None (1)
- Visualisation (2)
- Some content I understand already (3)
- None (5)

Recommendations for improvement.

- None (1)
- A bit rushed, useful areas were left out or rushed through (2)
- Explaining at the beginning how much time is allocated to each section (2)
- Make it shorter (3)
- N/A (5)

Consultancy Competence

Competency 4.0

**A Behavioural Analysis of Unhealthy Supermarket Purchasing Behaviours,
Completed for Public Health England.**

Contents:

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Introduction

This case study outlines the agreement, delivery and evaluation of a consultancy delivered for the Behavioural Insights Team within Public Health England. It illustrates how the competency learning outcomes were addressed and consequently how my consultancy skills were developed throughout the process. After approaching the Behavioural Insights Team they requested I complete the initial part of a behavioural analysis, requiring delivery of a literature review of unhealthy supermarket purchasing behaviours, to which I completed full time for four weeks. Upon completion the outcomes were presented to the Behavioural Insights Team and the project passed onto a PhD student for write up.

Cockman, Evans and Reynolds' (1992) consultancy cycle was utilised to inform the process from initial contact to termination and evaluation of the consultancy. This model was selected due to the alignment I perceived it to have with my consultancy and the emphasis on the entry and disengagement stages, which I believe are important aspects of the process often easily overlooked. The consultancy cycle provided myself with guidance of the steps required to pass through during the consultancy, a way of conceptualising where I was at during the process and some of the key areas to focus on throughout my write up and reflection.

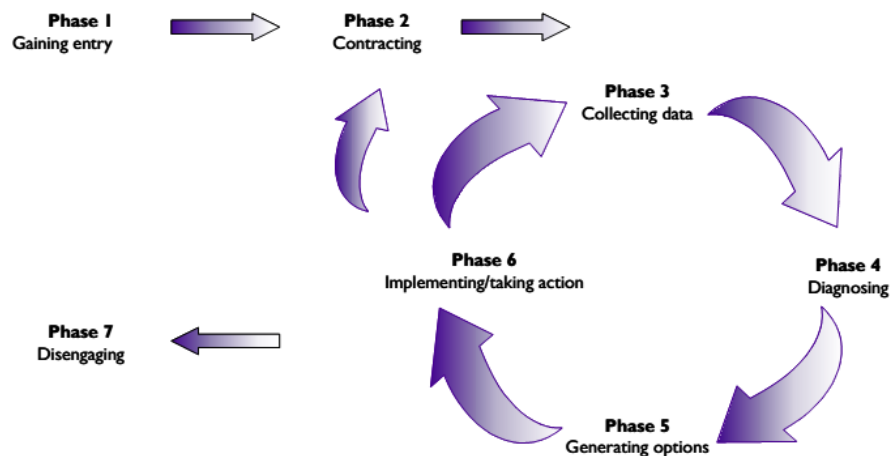


Figure 1: The Consultancy Cycle (Cockman, Evans & Reynolds, 2012)

Assessment of Consultancy Request (4.1)

Whilst attending a SCCH consulting event Public Health England (PHE) advised they were seeking consultants for the delivery of a variety of projects so I followed this up, making contact with the Behavioural Insights Team. My initial email consisted of my CV, current availability and reasons for wishing to complete a consultancy with PHE, which were around enhancing my insight and experience within Public Health and enabling me to develop my consultancy competency skills. I was sent an outline of a behavioural analysis project involving the completion of a literature search into unhealthy supermarket purchasing behaviours and categorisation of the outcomes according to the Theoretical Domains Framework (TDF).

Experience conducting research reviews gave me the confidence that I had the appropriate skills to conduct this content consultancy effectively. I also considered the benefits for myself, due to consultation being considered a process whereby the goal is to assist both the consultee and the consultant. I immediately knew I would find this topic interesting, as I believe changing the environment we live in is an important step in reducing the current issue of 60% of adults being overweight or obese (Health Survey for England, 2014) and 13% of reception children being overweight (Health and Social Care Information Centre, 2015). Furthermore, I knew that utilising a framework I had no previous experience of would be an excellent learning experience. The TDF is considered a useful and flexible framework for targeting resources to influence behaviour change within populations (Phillips et al, 2015) and therefore may be a very useful tool for me, should I wish to pursue a career in Public Health.

Before requesting to meet to discuss this opportunity further, I read a literature review conducted by PHE on antibiotic resistance (PHE, 2015), providing me with an idea of the content and quality expected. I felt it was within my skillset and subsequently requested a face-to-face meeting to discuss the consultancy further.

Agreement of Outcomes & Deliverables (4.1, 4.2)

Prior to attending my meeting with the Behavioural Insights Research Analyst, my primary contact during the consultancy process, I determined exactly what I required clarification around in order to ensure it was a productive meeting (Appendix A). Due to this being the first time I have engaged in this process with an external organisation, I sought

guidance from Meislin's (1997) key questions for consideration during the contracting phase:

1. What do you expect from a consultant?
2. Who's 'buy in' will be required in order to implement the action plan?
3. When can the desired outcomes, agreements and next steps be reviewed?

This helped me to first focus on attempting to understand exactly what PHE may expect from me. From this I could then determine if I felt their request was feasible, in terms of being within my capabilities and being able to complete it within the timeframe. Therefore, when defining questions, I wished to ask at the initial meeting I focused heavily on determining exactly what they required from both the search and the write up of the outcomes, including specific questions such as whether they wanted research incorporated from across the world or solely the UK. This enabled me to feel confident going into the meeting that I was asking the right questions and effectively using the time.

From both questions asked and the discussions we had during the meeting, I left having established the purpose, objectives and outcomes PHE were looking for:

Overall Purpose:

To understand where best to intervene in terms of switching individuals' behaviour towards engaging in healthier purchasing behaviours, when working with local supermarkets.

Objectives:

- a)** To determine the key behaviours driving unhealthy purchasing
- b)** To determine what are the TDF domains that PHE and other organisations should focus their behaviour change efforts on
- c)** To determine the evidence of effectiveness for various interventions delivered to reduce unhealthy purchasing behaviours

Outcomes:

1. A literature review of the drivers of unhealthy purchasing behaviours
2. Categorisation of the literature into TDF domains

Once the objectives and outcomes were established, it was necessary to determine the time frame required. Originally I had advised I could allocate four days a week for four weeks. However, I had since accepted an offer of full time employment making it necessary to advise the Research Analyst that I would only be available for three weeks. Discussing what was possible for myself to achieve in the time was quite challenging as neither of us knew how long the literature review would take due to it being heavily dependent on the extent of papers retrieved. We discussed it may be a challenge to review all domains of the TDF and formulate this into a review but I suggested I attempt to do this and review if necessary. A further aspect we discussed more thoroughly was myself being based at home. There was little room for negotiation around my place of work due to limited space within the office but we agreed that I would maintain regular contact and could visit the office when necessary. Following this meeting I immediately drew up a consultancy agreement, attempting to provide clarity and conformation of the agreed factors (Appendix B).

Reflecting on my meeting to determine the outcomes and deliverables, I feel it is the one area of the consultancy process which I learnt the most from. During the meeting I focused immediately on the practicalities of the project and determining exactly what they required. This was very important, however in doing so I failed to fully establish the purpose of the review. Establishing the purpose is especially important when conducting an external consultancy, due to having no previous involvement in the project or with the team. I feel this would have helped me to determine the most effective use of my time and offer more relevant suggestions around what would be most helpful to them during the consultancy.

During the initial meeting I was conscious about creating a good impression and I feel this did impact on the outcomes agreed. I started with high intentions and during the process had to review and advise that I would only be able to conduct the search and organising the incorporated research into the corresponding TDF domains. It would have been more sensible of me to begin with more realistic outcomes and increase these if necessary. This would avoid the consultee being left with a sense that the anticipated outcomes had not been met. To assist me in determining appropriate outcomes it would have been helpful for me to review the outcomes after the meeting and confirm what I felt was possible once I had time to process the information, rather than making a quick decision during the meeting. Having now anticipated a timeframe and misjudging it I would also be more cautious about being over optimistic and ensuring I attribute time for any anticipated but also unexpected delays that may arise.

Due to this being my first experience of being an external consultant and completing my consultancy at a time whereby I had been through a short period of unemployment, I did not possess the confidence to raise a conversation about any payment. I believe it would

have been very unlikely for me to receive any payment but recognise now how helpful it would have been for me to gain some experience in initiating that conversation. If in this situation again, it would be useful for me to speak to those who have had this conversation and seek guidance from their experiences.

Conducting the Consultancy (4.4, 4.5)

Upon receiving the first search outcomes from the library team it quickly became apparent to me that in order to conduct this review thoroughly, further searches would be required. I was able to communicate this quickly and clearly to the consultee with agreement that I would focus my attention on conducting a very thorough review of the current literature and organising the outcomes according to the TDF domains (Appendix C). Due to this being a slightly more complex process than anticipated the consultee requested also writing a learning report (Appendix D) around conducting a literature review based upon the TDF. I was willing to add this to the outcomes, realising how helpful it would be to capture this process particularly as I was not a member of the team who they could easily ask for advice from in the future. The outcomes therefore changed to:

Outcomes:

1. A comprehensive literature review of research exploring drivers behind unhealthy purchasing behaviours
2. Categorisation of the literature into TDF domains
3. A learning report of conducting a literature review based upon the TDF

I was slightly disappointed I would not get the opportunity to write up the literature review, as I would have liked to have handed over a complete piece of work. However, I did enjoy the work I completed particularly working with the library team utilising both my experience in searching along with theirs to determine effective search strategies. I also substantially increased my knowledge around unhealthy purchasing behaviours due to all the research papers I read.

Upon completion of the consultancy, presenting my work to the Behavioural Insights team was a very important process in enabling me to complete the consultancy cycle and disengage from the project (Cockman, Evans & Reynolds, 2012). In order to ensure I handed over the work effectively I created two folders, a hard copy folder and an electronic

folder containing all the relevant documents. Presenting my findings to the team enabled me to thoroughly explain the work I had completed and provide a platform for them to ask any questions. It provided a formal and clear ending to the process, alongside being helpful to meet and provide any further advice to the PhD student who was going to follow up this project. I felt assured that I had handed over the work in as much detail as possible and feel this has been exemplified by no one from PHE contacting me with follow up questions.

Being asked questions around the work I had completed also helped me identify areas for improvement. I took a very subjective approach when determining which TDF domain each research paper fell under, choosing the areas I felt it was best placed. However, when being asked whether there was any systematic approach I took, I realised it may have been helpful if I had determined a more systematic approach. This meeting was also the point the consultee realised I had no previous experience of using the TDF. This reflected my ability to successfully engage with a new framework, however it may have been helpful for me to have been more transparent from the beginning, as they may have been able to provide further support and guidance.

Establishment, Development and Maintenance of Working Relationships (4.3)

Developing and maintaining a strong relationship with PHE and predominantly the Research Analyst was imperative throughout the consultancy process. It was an aspect of the process that I attributed particular attention to throughout. My approach to obtaining an effective working relationship was informed by Schein's model of Process Consulting (1999). I intended to obtain a collaborative relationship whereby there was appreciation of both consultant and consultees experience and skills, leading to collaboration and joint problem solving (Meislin, 1997). In order to support me in obtaining this I would continually refer back to the ten major principles of Process Consulting (Schein, 1999):

1. Always try to be helpful
2. Always stay in touch with the current reality
3. Access your ignorance
4. All acts are interventions
5. Client owns the problem and the solution
6. Go with the flow
7. Timing is crucial
8. Be constructively opportunistic with confrontive interventions

9. Everything is data; your own errors particularly
10. When in doubt, share the problem

Throughout the consultancy these principles assisted me in developing an open and honest relationship with the consultee whereby I would feel comfortable asking questions and seeking clarification where necessary. I never felt the need or pressure to be the expert and to possess all the answers, yet instead would ask for guidance or offer suggestions to which I requested for the consultees thoughts and recommendations on, which is an important aspect of process consultation (Meislin, 1997). Establishing a good working relationship was more challenging due to myself being based out of the office and most communication being via email. My primary contacts were the Research Analyst and a member of staff from the library team. In order to manage email being the predominant contact method, I ensured I constantly kept the consultee up to date with my progress through sending regular drafts of the work completed. I also ensured they were involved in conversations I had with the library team by incorporating them in any email communication and sharing the outcomes of any telephone conversations. I furthermore made a conscious effort to ensure my emails were very clear and divided into different points to which the consultee could comment on. This was particularly important given how the work I was conducting changed slightly throughout the process and decisions had to be made as to what was the most effective and helpful piece of work I could complete within the timeframe. Being based externally required me to use my own initiative more around smaller details, as I did not want to be constantly sending emails.

One aspect of working from home that I found slightly more challenging was occasionally having to wait for answers to my queries. Had I been based in the office I feel I would have been able to approach individuals to speed up this process. Due to the tight timescale, I could not afford to have periods where I was unable to proceed with the work. This was something I had not fully considered during the contracting phase and would have been helpful to have allocated time for this in the beginning. In future I would also request working in the office where possible.

I believe my flexibility throughout the process also improved the working relationship between myself and the consultee. I ensured that I was flexible to the changing demands of the project and was willing to review our original outcomes at any point. This was important for this piece of work due to it being difficult at the beginning to determine exactly what could be achieved in the timeframe until the search was completed. I felt this illustrated attention to their needs and provided the consultee with confidence that their priorities were important to me.

Overall I felt I utilised my previous experience and the different tools to establish and develop effective working relationships with PHE and built the foundations for maintaining professional relationships beyond the consultancy process. This is illustrated by my review of personal and interpersonal effectiveness (Appendix E) and the ongoing contact between myself and the Research Analyst since the consultancy. Having one primary point of contact was very helpful and minimised complications during the process. However, for the purpose of networking, I would have liked to have met the wider team at the beginning and something I perhaps should have requested. This may have also been helpful in enabling me to situate this piece of work within the role of the Behavioural Insights Team.

Evaluation (4.5, 4.6)

It was important for myself to evaluate both my skills in managing the consultancy process itself and delivering an outcome considered to be of a high standard. The process was particularly important, as illustrated by Gibbs' Reflective Cycle (Gibbs, 1988), to enable myself to identify, alongside my own reflection, areas whereby my consultancy skills could be improved. Therefore, my evaluation form (Appendix F) was designed to provide feedback around both the process and the quality of the work produced. Questions centred predominately on the process were based upon the competency learning outcomes and areas that I felt would be helpful for my subsequent development.

Before receiving feedback I felt I had managed the process in a professional manner throughout the consultancy but was less confident about what I was able to produce within the time and the quality of the work, due to not meeting the initial outcomes. However, I was extremely pleased with the feedback I received illustrating how I was able to effectively manage both the process and producing a valuable, high quality piece of work. Such feedback combined with my own reflections throughout has resulted in me feeling much more confident about delivering further consultancies in the future.

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Appendix A

Questions formulated ahead of the first consultancy meeting

Time:

- 18th January – 4th February, 4 days a week = 12 days work

Meetings:

- email?

Objectives:

- a) what are the key behaviours in IPC
- b) what are the TDF domains that we should probably focus our behaviour change efforts
- c) what is the evidence for various BCTs to improve IPC

Outcomes:

A literature review and categorisation of the literature into TDF domains (addressing a-c? ideally the lit review would be minimal as many systematic reviews have been done)

What's required:

1. Literature search
 - a. Key behaviours
 - b. Evidence for various BCTs to improve IPC
2. Narrowing it down to relevant findings
3. Writing it up
 - a. Literature review
 - b. TDF domains table

General Questions

- What is IPC?
- What are types of key behaviours in IPC?
- Is b based upon a in the sense that where we should focus our behaviour change efforts depends on the key behaviours? And what's been done already © ?
- What are BCT's?
- **what is the evidence for various BCTs to improve IPC** – about why they have the potential to work or more evidence about trials etc that have already been run?
- Would I need to look at individual and health professionals behaviour?
- Would a – c be one literature review? Different search criteria so may have to be separate reviews

Library:

- How does it work with the library – do you have to give the exact search terms or just the topic you want them to do the search on?
- How can I get access to the library service?

Search:

- Just one search engine (medline)?
- Any search inclusion/exclusion criteria?
 - Worldwide behaviour or just in the UK or England?
- Do they want a snowball approach?
- Include reviews or find each paper within the review?

Introduction:

- Background to supermarket shopping behaviours?

TDF:

- Based upon individuals behaviour or health professionals?
- Would I just be completing the evidence section as the proposed are current interventions? Or do you put potential ideas in there?

Appendix B
Consultancy Contract



**CONTRACT FOR CONSULTANCY WITHIN THE
BEHAVIOURAL INSIGHTS RESEARCH TEAM**

Between

Public Health England

and

Lucinda Hawkin

DATE

21st January 2016

PARTIES

1. Lucinda Hawkin (*Trainee Health Psychologist*) of Clapham, London (the "**Consultant**"); and
2. [REDACTED] (*Behavioural Insights Research Analyst*) of Public Health England, Skipton House, 80 London Road, London, SE1 6LH (the "**Client**").

AGREEMENT

1. Term

- 1.1 This agreement shall come into force on Monday 18th January 2016.
- 1.2 This agreement shall continue until end of day on Friday 12th February 2016 subject to any unforeseen termination in accordance with Clause 8.
- 1.3 The consultant shall attribute a total of 12 working days, consisting of 7.5 hours to the client. The intention is for this to be allocated as four days a week for three weeks, however the management of the consultant's time is at their discretion, provided they have attributed the correct number of hours by the end of the contract.

2. Services

- 2.1 The consultant shall provide the services to the client in accordance with this agreement.
- 2.2 The Consultant shall aim to provide the services in accordance with the standards of skill and expertise reasonably expected from Public Health England.

3. Deliverables

- 3.1 The consultant shall attempt to deliver all the deliverables, as stated in objectives and outcomes, to the client during the contracted period and will ensure the client is informed in advance of any outstanding work likely upon termination of the contract.
- 3.2 The consultant must keep the client informed of progress during the term and maintain regular communication including attending any meetings required with the client.
- 3.3 The client must, following request from the consultant to do so, provide written feedback to the consultant concerning the consultant's proposals, plans, designs and/or preparatory materials relating to the deliverables and provide guidance where required.
- 3.4 The consultant shall attempt to ensure that the deliverables are delivered to the client in accordance with the timetable set out (see timetable).
- 3.5 The consultant warrants to the client that:
 - (a) The deliverables in accordance with this agreement will not:
 - (i) breach the provisions of any law, statute or regulation;
 - (ii) infringe any third party's Intellectual Property Rights; or
 - (iii) give rise to any cause of action against the client

4. Objectives

- 4.1 To determine the key behaviours underlying unhealthy supermarket food purchasing.

In order to achieve this the consultant will attempt to:

- (a) Conduct a literature search into this area with the assistance of the Public Health England library service. This may cover behaviours as an entirety or focus more specifically on one/a few areas, depending on the outcomes of the search and what feels achievable during the specified time frame.
- (b) Narrow down the papers retrieved to include only relevant and appropriate papers.
- (c) Write a narrative outlining the findings of the retrieved papers.

(d) Categorise the findings by the Theoretical Domains Framework (TDF).

5. Outcomes

5.1 To be able to better understand individuals behaviours that drive unhealthy food purchasing and subsequently what TDF domains behaviour change efforts should be focused on.

6. Location

6.1 The consultant will not be based in the clients' office and instead will work in a suitable working environment.

7. Payments

7.1 The consultant will not issue invoices for any charges to the client.

8. Termination

8.1 Either party may terminate this agreement by giving to the other party at least 4 days written notice of termination.

8.2 Either party may terminate this agreement immediately by giving written notice of termination to the other party if the other party commits a material breach of this agreement or in unforeseen circumstances where it is not possible for the consultancy to continue.

9. Subcontracting

9.1 The consultant must not subcontract any of its obligations under this agreement without the prior written consent of the client.

10. Confidentiality

10.1 The consultant will not disclose any confidential information during the contracted period, or at any time thereafter, to any person, company or other organisation without written consent.

11. Feedback

11.1 The consultant agrees that at the end of the contracted period they will provide feedback to the client around the impact and quality of the work and their management of the consultancy process.

ACCEPTANCE

Both parties have indicated their acceptance of this Agreement by signing below.

SIGNED BY THE CONSULTANT:

Signature:

Name:

Date:

SIGNED BY THE CLIENT:

Signature:

Name:

Date:

Credit

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(<http://www.seqlegal.com>).

Appendix C
Completed TDF Table

Drivers of food purchasing behaviours categorised by the Theoretical Domains Framework

TDF Domain	Barriers and facilitators	Issue	Search outcome reference	Additional TDF domain placed under (if any)
Knowledge	Evidence	Education alone has no effect on fruit and vegetable purchasing (6) and food purchasing (21).	Cochrane 6 Cochrane 21	
		Shoppers with lower levels of education and those residing in lower income households were least likely to purchase foods high in fibre and low in fat, salt and sugar.	Medline 215	
		Education increases fruit and vegetable purchases with no difference on total grams of fat purchased.	Cochrane 15	
		Shopping education increases purchases of fruit and dark-green/yellow vegetables.	Psyc 33	
		Educational information booklets when shopping increases individuals purchases of fruit and vegetable and reduces saturated fats and white cereals.	Cochrane 22	
		Automated advice recommending specific switches from selected products higher in saturated fat to similar products lower in saturated fat decreases levels of saturated fat purchased with no difference to the average cost of food.	Medline 217	
		Individuals use fat claims alongside nutrition facts tables to inform purchases.	Cochrane 12, Psyc 26	Psyc 26 – beliefs about consequences, social influences, reinforcement, goals, emotion
		Front of package nutrition labelling increases knowledge but has no influence on purchasing behaviour for cereals.	Cochrane 13	
		Traffic light nutrition labelling has no influence on purchasing behaviour	Medline 154	
		Traffic light labelling has no influence on purchasing of ready meals and sandwiches	Psyc 26 (2 nd search)	
		Practical factors dominate parents purchasing behaviours over nutritional information	Psyc 29 (2 nd search)	Intentions
		Food decisions are made with little cognitive involvement, which may explain why interventions designed to appeal to highly cognitive thought such as food labelling are ineffective.	Psyc 30 (2 nd search)	Memory, attention and decision processes

	Individuals are more concerned about avoiding food labelled with red traffic light food labelling than choosing greens and saturated fat and salt has a greater influence than fat and sugar.	Psyc 3	Intentions
	Those who notice and acknowledge traffic light labels purchase healthier items.	Psyc 16	
	In a canteen setting red labels on food and beverages decrease purchasing of these items and green increase purchases, alongside rearranging healthy items to more accessible positions.	Psyc 15	Memory, attention and decisional processes, environmental context and resources
	Labelling, reduced prices and increased availability of lower calorie foods increases purchases of these items in students vending machines without buying more products overall.	Cochrane 16	Reinforcement, environmental context and resources
	Price increase of 35% reduces purchases of soft drinks with education having no independent effect.	Medline 189	Reinforcement
	After reading a media campaign and receiving a food voucher older individuals buy more items marked with a label signifying their reduced risk of CVD and women buy more of these items than men. There are no significant associations between purchase of labelled food items and either education or income.	Medline 58	Reinforcement, beliefs about consequences
	In overweight and obese individual's healthy recipe flyers reduce snacks purchased.	Psyc 19	Environmental context and resources
	Point of purchase health information for vegetables increases purchases of these items.	Medline 156	Environmental context and resources
	Individuals purchasing and purchasing intentions of omega 3 rich foods increased after hearing a pod cast on omega-3 whilst shopping in the supermarket	Medline 71	Environmental context and resources, beliefs about consequences
	Signage and taste testing increases the likelihood of individuals purchasing healthy items rather than unhealthy.	Psyc 20	Environmental context and resources, Reinforcement, Social Influences
	Providing caloric information reduces total sugar sweetened beverage calories purchased and the likelihood of buying one and increases switching to drinks with no calories, even after the information is removed.	Psyc 6 (2 nd search)	
	Calorie labelling reduces the purchasing of high-calorie items in university students with no compensatory changes in unlabelled alternative items. Females report being more influenced by labels than males.	Medline 47	

		Nutrition navigation system (3-tiered star icon) on foods increased purchasing of healthier ready to eat cereals for up to a year.	Medline 174	
		Special supplemental program for women, infants and children tripled purchases of 100% whole-grain bread and replaced purchasing of white bread.	Psyc 11 (2 nd search)	
		Some young female women do not believe a high intake of unhealthy nutrients is relevant to their health, due to not feeling they need to be concerned about heart disease and high blood pressure at their stage in life. Others are more conscious of items with unhealthy nutritional value.	Psyc 26	Environmental context and resources, social influences, beliefs about consequences, reinforcement, intentions, goals, emotion
Skills	Evidence	Parents who made healthy dietary choices reported learning cooking skills while at university, attending community cooking classes, having access to quality food provided by church and community organisations or access to Healthy Start vouchers.	Medline 31	Reinforcement
		Individuals who rely on analytical-rational thinking engage in greater searching for information and analysis of nutritional information to inform their choices than individuals who prefer intuitive-experimental thinking.	Psyc 25	Memory, attention and decision processes
		Parents who made healthy dietary choices reported learning cooking skills while at university and attending community cooking classes.	Medline 25	Environmental context and resources, Reinforcement
		Individuals report lack of self-efficacy in choosing, preparing and cooking healthful foods as a barrier to healthful shopping.	Medline 93	Social Influences, Professional, social role and identity, Belief in capabilities
Memory, attention and decision processes	Evidence	Hunger reduces preference for fruits.	Cochrane 1	
		Teenage girls when hungry purchase higher kilo caloric foods	Medline 169	Social influences
		Tiredness, lack of time, hunger or stress of the supermarket crowds reduced attention to nutritional information.	Psyc 26	Knowledge, Beliefs bout consequences
		Acute sleep deprivation in men increases calories and grams purchased.	Medline 108	
		Individuals who rely on analytical-rational thinking engage in greater searching for information and analysis of nutritional information to inform their choices than individuals who prefer intuitive-experimental thinking.	Psyc 25	Skills
		Individuals with less inhibitory control purchase more calories from the internet supermarket and those with less inhibitory control and who are overweight buy more calories of snacks in the	Medline 48	Reinforcement

		sales promotions condition, but not in the control condition. Individuals with normal weight and/or high inhibitory control, sales promotions have no effect on their purchases of calories of snacks.		
		Individuals with low self-control are more likely to buy low fat cheese when advertised as the most highly sold cheese in that supermarket.	Psyc 4	Social influences
		More impulsive individuals adjust calorie consumption with regard to price changes whereas less impulsive individuals were less influenced by price changes.	SCOPUS 23	Reinforcement
		Implicit attitudes that occur without effort and consciousness predict purchases of fruit and chocolate and explicit attitudes do not.	Medline 155	
		Consumers low organic food purchases, even though they possess positive attitudes towards organic food, result from such ideologically formed attitudes not being present in habitual low-involvement shopping activities with limited problem-solving needs.	Psyc 24 (2 nd search)	
		Food decisions are made with little cognitive involvement, which may explain why interventions designed to appeal to highly cognitive thought such as food labelling is ineffective.	Psych 30 (2 nd search)	Knowledge
		Reducing the need for executive function (EF) at the moment of choice through a point-of-purchase intervention (signage) reduces high calorie snack purchases.	Medline 32	Environmental context and resources
		Product packaging material is believed to affect food quality, influencing purchasing decisions.	Psyc 34	environmental context and resources, beliefs about consequences, reinforcement, goals
		In a canteen setting red labels on food and beverages decrease purchasing of these items and green increase purchases, alongside rearranging healthy items to more accessible positions.	Psyc 15	Knowledge, environmental context and resources
Behavioural regulation	Evidence	Habit influences purchasing of organic and local foods	Psyc 21 (2 nd search)	Professional, social role and identity, beliefs about consequences
		More frequent supermarket trips and fewer small trips are associated with healthier purchasing and visiting more store chains is associated with higher percentages of energy from fruit and veg.	Medline 16	
		Shopping more often is associated with higher fat intake in those over 70 years old.	Medline 151	
		Shopping frequently at a supermarket increases the odds of purchasing sugar sweetened beverages and those with high availability of healthy foods lowers the odds of purchasing sugar-sweetened beverages.	Medline 96	Environmental context and resources
		Participants who had deliberately lost weight choose more dairy products, meat, and sweets and fewer fruits and vegetables. Active weight-losers show a stronger desire for high-caloric intake,	Psyc 38 (2 nd search)	Goals

		probably because of a behavioural mechanism seeking to maintain their original body weight set-point		
		Enactment of self-regulatory behaviours was the best predictor of participants' nutrition in the models. Planning and tracking healthier eating, using strategies to increase fruits, vegetables, and fibre and to decrease fat led to lower levels of fat, higher levels of fibre and higher levels of fruits and vegetables in participants' food purchases.	Medline 211	Beliefs about capabilities, social influences, optimism
Environmental Context and Resources	Evidence	The single most important reported food purchasing influence is cost (123, 152), particularly in low income families (185)	Medline 123, 152, 185	
		Low socio economic shoppers have higher purchases of non-core foods such as carbonated drinks and chips.	Medline 191	
		More equivalent household budgets between low and high income women doesn't eradicate differences in healthfulness of food purchases.	Psyc 31 (2 nd search)	
		Low socio economic status shoppers purchase calories in inexpensive forms that are higher in fat and less nutrient rich.	Medline 147	
		Lower socio economic groups are less likely to make food purchasing choices consistent with dietary guidelines but this is not mediated by price.	Medline 209	
		Bigger the household size, the lesser grocery shopping behaviour is consistent with dietary guideline recommendations	socINDEX 7	
		Cost is the most commonly and extensively described barrier to purchasing fresh fruits and vegetables.	Medline 95	Environmental context and resources
		Individuals buy less sugar sweetened beverages when the price of these are increased.	Cochrane 2	
		Price, followed by shelf life are the most important attribute that influence purchasing decisions.	Psyc 34	Memory, attention and decision processes, beliefs about consequences, reinforcement, goals
		Young adults emphasise on functional foods' convenience and (low) price	Psyc 41 (2 nd search)	Beliefs about consequences, intentions, goals
		Price increases up to 25% on unhealthy products do not affect purchases.	Cochrane 10	
		A 30% tax on unhealthy foods decreases purchasing of these items and increases purchasing of unhealthy items.	Psyc 29	
		Price increases reduce the purchase of sugar sweetened beverages with no increases in purchases in other food categories.	Medline 37	
		Taxes reduces calories purchased and subsidies increase calories purchased yet neither affect overall calories purchased in female shoppers.	Medline 29	
Increased tax reduces the total calories purchased, especially for energy dense products and calories from carbohydrates but not calories from fat.	Medline 157			

	Consumers are more responsive to changes in price than to changes in packet size (bonus packs) for indulgent food options and more responsive to changes in packet size than price for healthy food options.	Psyc 10 (2 nd search)	
	Parents who made healthy dietary choices reported having access to quality food provided by church and community organisations or access to Healthy Start vouchers.	Medline 25	Skills, Reinforcement
	Labelling, reduced prices and increased availability of lower calorie foods increases purchases of these items in students vending machines without buying more products overall.	Cochrane 16	Knowledge, Reinforcement
	Signage and taste testing increases the likelihood of individuals purchasing healthy items rather than unhealthy.	Psyc 20	Knowledge, Reinforcement, Social Influences
	Exposure to healthy food adverts increase individual's preference to buy fruit, particularly in those with higher levels of education.	Cochrane 1	
	Staff promoting fruit and vegetable sales increases fruit and vegetable intake in Latino food stores but decreases self-efficacy.	Cochrane 9	Social influences, beliefs about capabilities, optimism
	Point of purchase health information for vegetables increases purchases of these items.	Medline 156	Knowledge
	Individuals purchasing of snacks is influenced by health evoking posters at vending machines.	Psyc 1	
	In overweight and obese individual's healthy recipe flyers reduce snacks purchased.	Psyc 19	Knowledge
	Those actively watching their weight, when reminded about weight management focus predominately on energy and fat content when selecting foods.	Medline 44	Goals
	Point of purchase kiosk featuring fruits, veg and healthy snacks along with a sampling pod increased sales of whole wheat bagels, bananas, radishes, honey, sun flower seeds, baked tortilla chips and almond butter	Medline 133	
	Reducing the need for executive function (EF) at the moment of choice through a point-of-purchase intervention (signage) reduces high calorie snack purchases.	Medline 32	Memory, attention and decision processes
	Decreased availability of unhealthy snacks decreases the probability of purchasing such snacks yet shelf arrangement has no influence.	Cochrane 17	
	Promotion of healthier products through placement, signage and product availability increases sales of these items.	SCOPUS 13	
	Visual prompts placed strategically in the fruit and vegetable section of the supermarket, including life-size cut-outs of health professionals, signage and floor stickers bearing the slogan "Let's Shop Healthier", and free reusable fruit and vegetable bags increase fruit and vegetable purchases	Other 10	
	Non sugar sweetened drinks purchases in adolescent's increase when placed on the second or third shelves of the front cooler compared to bottom shelf of the cooler farthest from the entrance	Medline 6	
	End of isle displays increase purchasing of carbonated drinks, coffee and tea	Medline 49	
	In a canteen setting red labels on food and beverages decrease purchasing of these items and green increase purchases, alongside rearranging healthy items to more accessible positions.	Psyc 15	Knowledge, memory, attention and decision processes

		Healthy food items at the store checkout (prominent discriminative stimuli) can lead to a substantial impact on sales of these products but this is not maintained when they are moved back to their original location.	Psych 2 (2 nd Search)	
		Product access, packaging (size) and images affect purchase and consumption. Coupons and cross-promotion increase product liking and purchase. Products in prominent and “early trip” locations increase purchasing. Shelf labels, samples and taste testing, and end-of-aisle displays are most noticed by customers.	Medline 139 (a review)	
		Shopping frequently at a supermarket increases the odds of purchasing sugar sweetened beverages and those with high availability of healthy foods lowers the odds of purchasing sugar-sweetened beverages.	Medline 96	Behavioural regulation
		Greater perceived time to travel to food outlets is associated with less frequent purchasing of sugar sweetened beverages and convenience store foods and perceived shorter walking time is associated with greater sugar sweetened purchases.	Medline 134, 135	
		Individuals purchasing and purchasing intentions of omega 3 rich foods increased after hearing a pod cast on omega-3 whilst shopping in the supermarket.	Medline 71	Knowledge, Beliefs about consequences
		Eye contact with cereal spoke-characters increases trust and connection to brands increasing the choice of these products over competitors.	Psyc 6	Social influences, reinforcement, emotion
		Lack of time and stress of the supermarket crowds reduced attention to nutritional information.	Psyc 26	Knowledge, social influences, beliefs about consequences, reinforcement, intentions, goals, emotion
		Convenience is the main positive driver for purchase of fresh convenience food such as shop made sandwiches.	Psyc 28	Beliefs about consequences, intentions, goals
		Participants between the ages of 18-30 focus on issues of food preparation and knowledge, prices and time.	Psyc 44 (2 nd search)	Beliefs about consequences, intentions, goals
		Difficulties transporting shopping and poor quality and variety are some of the barriers to fruit and vegetable purchasing.	Medline 95	Environmental context and resources
		There is a positive association between variety in fruit and vegetables and probability of purchasing.	Medline 129	
Social influences	Evidence	Individuals with low self-control are more likely to buy low fat cheese when advertised as the most highly sold cheese in that supermarket.	Psyc 4	Memory, attention and decision processes
		Information about average number of produce purchases and most popular items displayed in shopping baskets affects purchasing habits.	Psyc 18	

	Teenage girls purchase higher kilo caloric food products when their peer was doing so.	Medline 169	Memory, attention and decisional processes
	Staff promoting fruit and vegetable sales increases fruit and vegetable intake in Latino food stores but decreases self-efficacy for consuming more fruit and veg.	Cochrane 9	Environmental context and resources, beliefs about capabilities, optimism
	Television and newspaper reports on iodine deficiency disorders increase purchasing of national iodized salts.	Medline 206	Beliefs about consequences
	Social media conversations on twitter, Facebook and YouTube impact on the valuation of brand characteristics and choice of carbonated soft drinks	Psyc 6 (2 nd search)	
	Presence of children reduces the purchase of healthy items.	Psyc 20	Knowledge, environmental context and resources, reinforcement
	Nearly half of adults give in to children's requests for sweets and snacks	Psyc 50 (2 nd search)	
	Parents frequently report food requests for unhealthy foods such as chocolate and confectionary from their children and most purchase at least one item requested.	Medline 67	
	Children constantly influence parents purchasing decisions within supermarkets	Other 6	
	African American parents describe children as promoting unplanned unhealthy food purchases which is exacerbated by the supermarket promoting unhealthy options and providing limited opportunities for children to interact with healthier foods.	Medline 34	
	Individuals report conflicting needs when satisfying self and others as a barrier to healthful purchasing.	Medline 93	Skills, Beliefs around capabilities
	Participants perceiving family members making attempts at healthier eating had lower levels of fat and higher levels of fibre and fruits and vegetables in their food purchases.	Medline 211	Behavioural regulation, beliefs about capabilities, optimism
	Eye contact with cereal spoke-characters increases trust and connection to brands increasing the choice of these products over competitors.	Psyc 6	Environmental context and resources, reinforcement, emotion
	Stress of the supermarket crowds reduced attention to nutritional information.	Psyc 26	Knowledge, environmental context and resources, beliefs about

				consequences, reinforcement, intentions, goals, emotion
Professional, social role and identity	Evidence	Individuals are more influenced by fair trade labels than organic labels when buying chocolate.	Psyc 5	Beliefs about consequences
		Organic food shoppers are motivated by values, beliefs and the creation of norms	Psyc 21 (2 nd search)	Behavioural regulation
		Lines in shopping baskets detailing where to put healthy items and unhealthy items increase produce purchases but not overall expenditure.	From psyc 18 (ref 52, 82)	Goals
		Individuals report conflicting needs when satisfying self and others as a barrier to healthful purchasing.	Medline 93	Skills, Social influences, Beliefs about capabilities
Beliefs about capabilities		Individuals self-efficacy for consuming more fruit and vegetables decreases as a result of staff promoting sales.	Cochrane 9	Environmental context and resources, social influences, optimism
		Individuals report lack of self-efficacy in choosing, preparing and cooking healthful foods as a barrier to healthful shopping.	Medline 93	Skills, Social Influences, Professional, social role and identity
		Participants perceiving family members making attempts at healthier eating had lower levels of fat and higher levels of fibre and fruits and vegetables in their food purchases which was in large part indirect through self-efficacy and self-regulation	Medline 211	Behavioural regulation, social influences, optimism
		Participants with greater confidence in their ability to make healthier choices purchase lower levels of fat, and more fibre, fruit and vegetables.	Medline 211	Behavioural regulation, social influences, optimism
Optimism	Evidence	Individuals self-efficacy for consuming more fruit and vegetables decreases as a result of staff promoting sales.	Cochrane 9	Environmental context and resources, social influences, beliefs about capabilities
		Positive outcome expectations did not exert any total effect on fat, fibre, or fruits and vegetables. Negative outcome expectations, however, had a negative effect on the quality of food purchases and intake.	Medline 211	Behavioural regulation, beliefs about capabilities, social influences

Beliefs about consequences	Evidence	Some individuals show a preference for a familiar pro biotic claim and negative preference for a non-familiar fat metabolism claim over nutritional compositions.	Psyc 7	Reinforcement
		Produce purchasing is increased through health messages displayed on floors of supermarkets.	Psyc 18	Goals
		Some young female women do not believe a high intake of unhealthy nutrients is relevant to their health, due to not feeling they need to be concerned about heart disease and high blood pressure at their stage in life. Others are more conscious of items with unhealthy nutritional value.	Psyc 26	Knowledge, environmental context and resources, social influences, reinforcement, intentions, goals, emotion
		Importance of health has a direct effect on purchase of light products.	Psyc 28	Environmental context and resources, intentions, goals
		Purchasing of fruits and vegetables are most strongly driven by the value of health.	Psyc 28	Environmental context and resources, intentions, goals
		Young women avoid unhealthy foods in order to minimise weight gain rather than for health reasons.	Psyc 26	Knowledge, environmental context and resources, social influences, reinforcement, intentions, goals, emotion
		After reading a media campaign and receiving a food voucher older individuals buy more items marked with a label signifying their reduced risk of CVD and women buy more of these items than men. There are no significant associations between purchase of labelled food items and either education or income.	Medline 58	Knowledge, Reinforcement
		Television and newspaper reports on iodine deficiency disorders increase purchasing of national iodized salts.	Medline 206	Social influences
		Individuals purchasing and purchasing intentions of omega 3 rich foods increased after hearing a pod cast on omega-3 whilst shopping in the supermarket	Medline 71	Knowledge, Environment context and resources
Younger women's food choices relate to concern with their appearance	Psyc 44 (2 nd search)	Environmental context and resources, intentions, goals		

		Health claims outperform nutrition claims, and both of these claim types outperform reduction of disease risk claims.	Psyc 23 (2 nd search)	
		Older individuals (60+ years old) were more likely to make food choices based on health considerations	Psyc 41 (2 nd search)	Environmental context and resources, intentions, goals
		The most important health benefit influencing purchasing intentions is high nutritional value followed by potential to reduce the risk of cancer and heart disease.	Psyc 40	Goals
		Individuals are more influenced by fair trade labels than organic labels when buying chocolate.	Psyc 5	Professional, social role and identity
		Organic food shoppers are motivated by values, beliefs and the creation of norms. Pro-environmental concerns in women age 40-55 reduces consumption of unhealthy and healthy foods.	Psyc 21 (2 nd search)	Behavioural regulation, professional, social role and identity
		Product packaging material is believed to affect food quality, influencing purchasing decisions.	Psyc 34	Memory, attention and decision processes, environmental context and resources, reinforcement, goals
		Food choice in young women is often influenced by the desire for hedonic pleasure after negative experiences, over nutritional value.	Psyc 26	Knowledge, environmental context and resources, social influences, reinforcement, intentions, goals, emotion
Reinforcement	Evidence	Labelling, reduced prices and increased availability of lower calorie foods increases purchases of these items in students vending machines without buying more products overall.	Cochrane 16	Knowledge, Reinforcement
		Price reduction alone and combined with skill building increases fruit and vegetable purchases but this is not sustained 6 months later.	Medline 31	Skills
		Price reductions increase fruit and vegetable purchases and consumption over a 6 month period with education increasing this further.	Cochrane 6	
		Discounted fruit and vegetables increase purchasing of these items but this effect reduces after intervention.	Medline 99	
		Individuals purchase more fruit and vegetables when receiving a 25% discount without purchasing more calories or items overall.	Cochrane 11	

	Individuals purchase healthier foods when receiving a large discount, whilst also purchasing significantly more calories.	Cochrane 10	
	Price discounts of 50% in an online environment increase the purchasing of healthy items but also increase total energy purchased.	Psych 8 (2 nd search)	
	Discounts maintain healthier food purchasing habits over the longer term.	Cochrane 21	
	Individuals with less inhibitory control purchase more calories from the internet supermarket and those with less inhibitory control and who are overweight buy more calories of snacks in the sales promotions condition, but not in the control condition. Individuals with normal weight and/or high inhibitory control, sales promotions have no effect on their purchases of calories of snacks.	Medline 48	Memory, attention and decision processes
	More impulsive individuals adjust calorie consumption with regard to price changes whereas less impulsive individuals were less influenced by price changes.	SCOPUS 23	Memory, attention and decision processes
	Price increase of 35% reduces purchases of soft drinks with education having no independent effect.	Medline 189	Knowledge
	Product packaging material is believed to affect food quality, influencing purchasing decisions.	Psyc 34	Memory, attention and decision processes, environmental context and resources, beliefs about consequences, reinforcement, goals
	Eye contact with cereal spoke-characters increases trust and connection to brands increasing the choice of these products over competitors.	Psyc 6	Environmental context and resources, social influences, emotion
	Some individuals show a preference for a familiar pro biotic claim and negative preference for a non-familiar fat metabolism claim over nutritional compositions.	Psyc 7	Beliefs about consequences
	Young women avoid unhealthy foods in order to minimise weight gain rather than for health reasons.	Psyc 26	Knowledge, environmental context and resources, social influences, beliefs about consequences, intentions, goals, emotion
	Food choice in young women is often influenced by the desire for hedonic pleasure after negative experiences, over nutritional value.	Psyc 26	Knowledge, environmental

				context and resources, social influences, beliefs about consequences, intentions, goals, emotion
		Coupons for fresh produce increases weekly purchasing of fruit in low income families, yet has little impact on vegetable purchases.	Medline 83	
		Parents who made healthy dietary choices reported having access to quality food provided by church and community organisations or access to Healthy Start vouchers.	Medline 25	Skills, Environmental context and resources
		Signage and taste testing increases the likelihood of individuals purchasing healthy items rather than unhealthy.	Psyc 20	Knowledge, Environmental context and resources, Social influences
Intentions	Evidence	Tiredness, lack of time or stress of the supermarket crowds reduced attention to nutritional information.	Psyc 26	Knowledge, environmental context and resources, social influences, beliefs about consequences, reinforcement, goals, emotion
		Convenience is the main positive driver for purchase of fresh convenience food such as shop made sandwiches.	Psyc 28	Environmental context and resources, beliefs about consequences, goals
		Early-middle-aged consumers show a great interest in knowing the origin of the functional product; while young adults emphasise on functional foods' convenience and (low) price	Psyc 41 (2 nd search)	Environmental context and resources, beliefs about consequences, goals
		Participants between the ages of 18-30 focus on issues of food preparation and knowledge, prices and time.	Psyc 44 (2 nd search)	Environmental consequences and resources,

				beliefs about consequences, goals
		Practical factors dominate parents purchasing behaviours over nutritional information	Psyc 29 (2 nd search)	Knowledge
		Individuals, particularly those who are parents, are more likely to buy child friendly shaped foods and are willing to pay extra for these products.	Psyc 1 (2 nd search)	
		Food choice is young women is often influenced by the desire for hedonic pleasure after negative experiences, over nutritional value.	Psyc 26	Knowledge, environmental context and resources, social influences, beliefs about consequences, reinforcement, goals, emotion
		Individuals are more concerned about avoiding food labelled with red traffic light food labelling than choosing greens and saturated fat and salt has a greater influence than fat and sugar.	Psyc 3	Intentions
Goals	Evidence	Young women avoid unhealthy foods in order to minimise weight gain rather than for health reasons.	Psyc 26	Knowledge, environmental context and resources, social influences, beliefs about consequences, reinforcement, intentions, emotion
		Participants who had deliberately lost weight choose more dairy products, meat, and sweets and fewer fruits and vegetables. Active weight-losers show a stronger desire for high-caloric intake, probably because of a behavioural mechanism seeking to maintain their original body weight set-point	Psyc 38 (2 nd search)	Behavioural regulation
		Those actively watching their weight, when reminded about weight management focus predominately on energy and fat content when selecting foods.	Medline 44	Environmental context and resources
		Produce purchasing is increased through health messages displayed on floors of supermarkets.	Psyc 18	Beliefs about consequences
		Importance of health has a direct effect on purchase of light products.	Psyc 28	Environmental context and resources, beliefs about

				consequences, intentions
		Older individuals (60+ years old) were more likely to make food choices based on health considerations	Psyc 41 (2 nd search)	Environmental context and resources, beliefs about consequences, intentions
		Purchasing of fruits and vegetables are most strongly driven by the value of health.	Psyc 28	Environmental context and resources, beliefs about consequences, intentions
		The most important health benefit influencing purchasing intentions is high nutritional value followed by potential to reduce the risk of cancer and heart disease.	Psyc 40	Beliefs about consequences
		Younger women's food choices relate to concern with their appearance	Psyc 44 (2 nd search)	Environmental consequences and resources, beliefs about consequences, intentions
		Health enhancement and health risk prevention through appropriate dietary choices as the most important motives of functional food purchasing for young adults and early middle aged individuals.	Psyc 41 (2 nd search)	Beliefs about consequences
		Price, followed by shelf life are the most important attribute that influence purchasing decisions.	Psyc 34	Memory, attention and decision processes, environmental context and resources, beliefs about consequences, reinforcement
		Lines in shopping baskets detailing where to put healthy items and unhealthy items increase produce purchases but not overall expenditure.	From psyc 18 (ref 52, 82)	Professional, social role and identity
Emotion	Evidence	Food choice is young women is often influenced by the desire for hedonic pleasure after negative experiences, over nutritional value.	Psyc 26	Knowledge, environmental context and resources, social influences, beliefs

				about consequences, reinforcement, intentions, goals
		Stress of the supermarket crowds reduced attention to nutritional information.	Psyc 26	Knowledge, environmental context and resources, social influences, beliefs about consequences, reinforcement, intentions, goals
		Eye contact with cereal spoke-characters increases trust and connection to brands increasing the choice of these products over competitors.	Psyc 6	Environmental context and resources, social influences, reinforcement

Systematic reviews not yet included or retrieved:

1. Systematic reviews of the evidence on the nature, extent and effects of food marketing to children: a retrospective summary. 2013. (PsycINFO 30)
2. A systematic review of the effectiveness of food taxes and subsidies to improve diets: understanding the recent evidence. 2014. (Medline 40)
3. Nutrition interventions at point-of-sale to encourage healthier food purchasing: a systematic review. 2014 (Medline 53)
 - *Education and money incentives*
4. Effectiveness of subsidies in promoting healthy food purchases and consumption: A review of field experiments. 2013. (SCOPUS 18)
 - *All but one study found subsidies increase purchases*

Appendix D
Learning Report



**Public Health
England**

Literature Review Learning Report February 2016

This report outlines the process and learnings of conducting a comprehensive literature search in order to inform the design of a Theoretical Domains Framework (TDF), addressing the drivers of behaviour associated with food and drink purchasing. It is hoped this TDF and review would identify which optimal drivers of purchasing behaviour to target and, thus, justify the design of interventions aiming to improve healthy purchasing behaviours within supermarkets in the UK. An initial search was conducted, the search outcomes reviewed and a subsequent search conducted in order to expand the retrieved literature. The question began with a focus on unhealthy food purchasing and after the initial search was extended to food purchasing as an entirety in order to ensure all relevant literature was captured.

Initial Search question:

What are the drivers of unhealthy food and drink purchasing?

Initial Search Dates:

Date From	Date Until
2011	2016

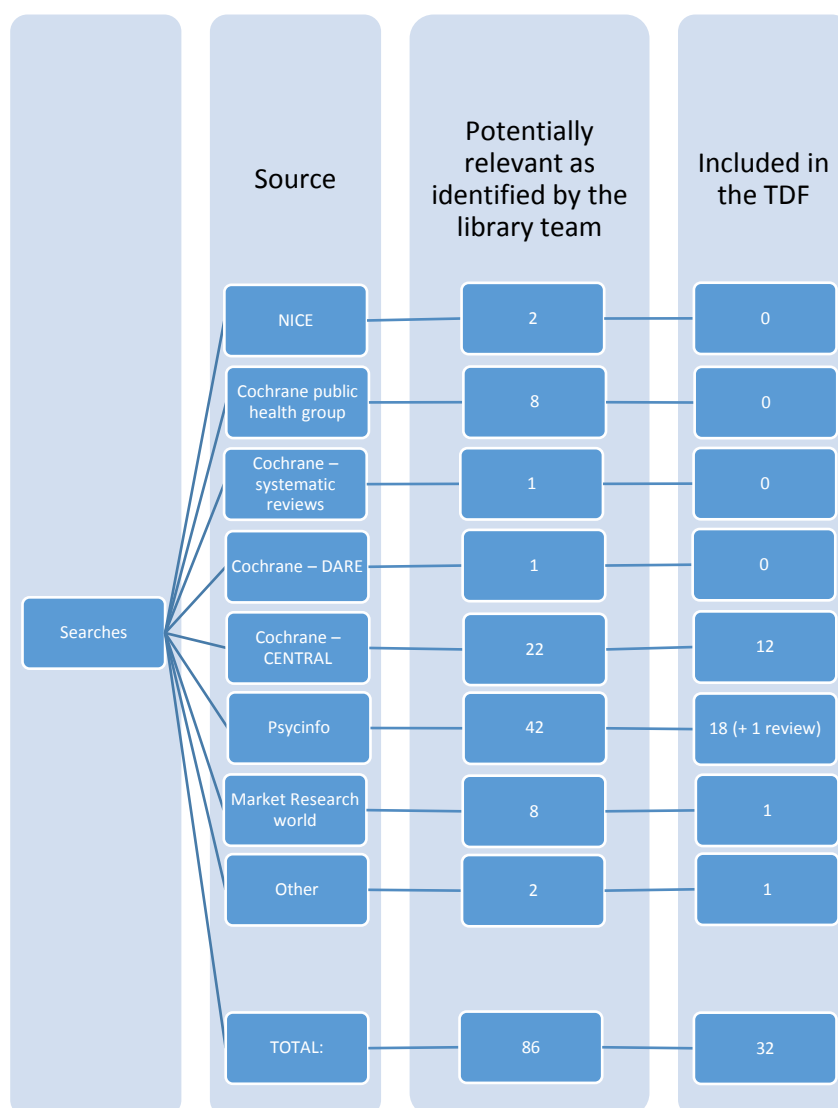
Initial Search Terms:

Patient/Population/Problem or concept 1	Intervention or concept 2	Comparison or concept 3	Outcome Or concept 4
Supermarket Shop* Store* Outlet* Retailer* Point of purchase* Grocery adj4 shop* Grocery adj4 store* "consumer food" Purchas* Buy* Brows*	"Unhealthy adj4 food" "processed food" Fat* Sugar* Salt* Sweet* "less healthy" Subject headings for Medline and Cochrane – foods/ or food additives/ or		Behavio* "automatic behavio" Influ* Driver Factor Process* Pattern* Skill Decision* Environment "Social influen*" Attitude* Emotion*

Sale* Vend* Sell*	food habits/ or frozen food/		Behavio* adj chang* "behavio* change" "social marketing" Insight Psychology* Preference* Habit* Choic* Decid* Like* Choos* Select* Pick Switch* Swap* Subject headings for Medline and Cochrane – behavior and behavior mechanism/ or habits/ or feeding behavior/ or behavior/ or health behavior/ or emotion/ or motivation/
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Initial Search Sources and Number of Results:

Source	Results
NICE	2 (signposts to NICE guidance and resources)
NHS EVIDENCE	0
COCHRANE PUBLIC HEALTH GROUP	8
COCHRANE – SYSTEMATIC REVIEWS	1 (already found)
COCHRANE – DARE	1
COCHRANE – CENTRAL	22
PSYCINFO	42
MARKET RESEARCH WORLD	8
OTHER:	
FOOD STANDARDS AGENCY	0
PHE OBESITY	0
PIE LIBRARY	1
NATIONAL CENTRE FOR SOCIAL RESEARCH	1
NATIONAL SOCIAL MARKETING CENTRE	0
KNOWTHIS	0
NATIONAL INSTITUTE FOR HEALTH RESEARCH	0



What worked well:

- Most literature retrieved was relevant to the research question.
- Only searching back 5 years ensured the retrieval of research that is more likely to be relevant to current food shopping behaviours/environments.
- PsycINFO retrieved a large amount of relevant research papers.
- Largest proportions of research retrieved highlighted the influence of:
 - Knowledge e.g. food labelling
 - Environmental context and resources e.g. taxation
 - Beliefs about consequences e.g. impact on health

What could be improved:

- Range of years searched perhaps too restrictive. Drivers of food and drink purchasing behaviours from 10 years ago may still be relevant now.

- Sources searched were mainly health related. Extending to marketing related sources was initially thought to be of benefit. However, when reviewing the journals papers retrieved were published within there were a number of marketing and advertising journals. Marketing on products also didn't appear to be massively underrepresented within the outcomes. This could however still be an area where further searching could be of some benefit.
- Small proportion of research retrieved addressing the influence of:
 - Skills
 - Professional, social role and identity
 - Beliefs about capabilities
 - Optimism
 - Reinforcement
 - Intentions
 - Emotion
 Thus questioning whether the search was retrieving research falling under all TDF domains.
- No research around behavioural regulation which one would have expected to find research around different strategies people use when shopping such as writing lists, avoiding isles, weekly shops to reduce the supermarket visits etc

Other General Observations:

- A large proportion of the retrieved papers delivered interventions aiming to increase the purchasing of healthy foods. Little research found that looked specifically at the drivers of unhealthy purchasing.
- There were no substantial reviews or summaries found during the searches.

Next steps:

- To widen the review to purchasing behaviours in general rather than just unhealthy purchasing behaviours to avoid the loss of potentially relevant information.
- To increase the dates searched, search terms and sources searched.

This decision was made due to the belief that the initial search was not exhaustive and a thorough approach was desired.

Second Search question:

How * impacts on food and drink purchasing behaviours?

*knowledge, one's skillset, memory, attention & decisional processes, behavioural regulation, environment, one's resources, social influences, one's role and identity, one's capabilities, optimism/confidence, beliefs about consequences, reinforcement, one's intentions, one's goals and emotion.

Second Search Dates:

Date From	Date Until
2006	2016

Additional Search Terms from the Original Terms:

Medline and Cochrane

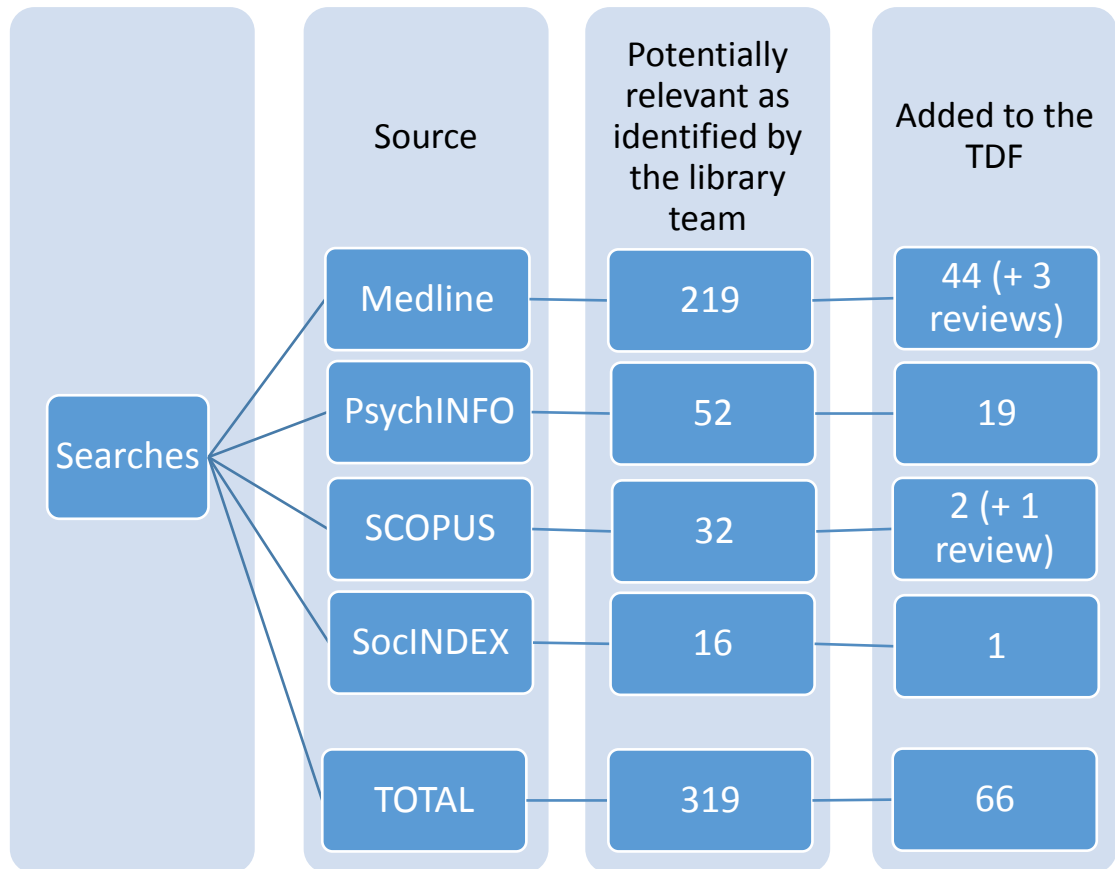
Health literacy/ or hunger/ or attention/ or memory/ or impulsive 274ehaviour/ or compulsive behaviour/ or loyalty or perception/ or 274ehaviour control/ or "isle avoid*" or "shopping list" or social environment/ or advertising as topic/ or "product placement" or ambience or "social factor*" or "social norm" or "cultural norm" or personality development/ or personality/ or behaviour control/ or competence or optimism or confidence or self-efficacy/ or reinforcement (psychology)/ or reward/ or intention/ or goals/ or emotions/ or stress, psychological/ or stress, physiological/ or anger/ or tired* or excitement* or pleasure/

PsycInfo

Literacy/ or health literacy/ or hunger/ or attention/ or memory/ or implusiv* or compulsions/ or loyalty/ or "internal factors" or perception/ or consumer 274ehaviour/ or "isle avoid*" or "shopping list" or advertising/ or "product placement" or environment/ or psychosocial factors/ or popularity/ or social norms/ or identity formation/ or personality / or self control/ or competence/ or optimism/ or self-efficacy/ or health attitudes/ or reinforcement/ or rewards/ or intention/ or goals/ or emotional control/ or emotions/ or stress/ or anger/ tired* or excitement* or pleasure/

Second Search Sources and Number of Results:

Source	Results
Medline	219
Psycinfo	52
SCOPUS	32
SocINDEX	16
Cochrane	0



What worked well:

- Further potentially relevant papers were retrieved, particularly within Medline.
- Some of the initially retrieved papers were retrieved again through different sources particularly SCOPUS, implying a thorough search was conducted.

What could be improved:

- A large proportion of the research wasn't relevant to the question suggesting the search terms were now too broad. Examples of these areas are:
 - Looking at validity of measures/questionnaires/online supermarket tool
 - Types of shop, items within them and health of local population
 - Nutritional quality in shops and location
 - Where foods are located within stores
 - Whether unhealthy foods are more likely to be promoted
 - Label use and understanding
 - Analysis of what people buy in supermarkets/schools etc
 - How far people travel to shop
 - Content of foods
 - Assessing knowledge around food nutritional value
 - Snack quality in afterschool programmes
 - Fast food and restaurant settings
 - Purchasing selections and preferences
 - Comparing food prices

Other general observations:

- TDF domains with large amounts of evidence:
 - Knowledge (with mixed results around the effectiveness of increased knowledge)
 - Environmental context and resources
 - Beliefs about consequences
 - Reinforcement
- TDF domains remaining with proportionately less evidence:
 - Skills
 - Behavioural regulation
 - Professional, social role and identity
 - Beliefs about capabilities
 - Optimism
 - Emotion
- Areas where the low levels of evidence appear particularly surprising:
 - Behavioural regulation
 - Expected some more about what actions people take to reduce their unhealthy purchases.
 - This may be a result of behavioural regulation being a very broad term and not retrieving the relevant research. A need to be more specific?
 - Emotion
 - Expected more about how one's emotion impacts on purchasing behaviour

Things we could have done differently reflecting back:

- Make slight alterations to the search strategy and update the search in gradual steps to determine what aspect is most helpful to change i.e. years searched, sources or search terms rather than make changes to all these aspects in one go and re-run the search.

Potential next steps:

- Retrieve all potentially relevant studies
 - Assess for quality using something like the Effective Public Health Practice Project Qualitative Assessment Tool for Quantitative Studies
 - Perhaps impose some stricter inclusion/exclusion criteria e.g. quant studies only with 50 participants or more
- Try to find the Money Advice Service report on supermarket shopping – doesn't seem to have been made publicly available yet
- Retrieve further papers from within the reviews and some of the key papers?
- Conduct further searches:
 - Expand the terms/focus on specific TDF domains if areas are felt missing e.g. around emotion and purchasing habits
 - Expand the sources searched

Appendix E
Personal and Interpersonal Effectiveness Ratings

Checklist of Consultant Competencies

Personal and interpersonal effectiveness	Skill level: 1 - 5
<p>Self knowledge Awareness of the values and beliefs that influence the way I work. Awareness of my own motivations and the personal rewards I derive from consulting. Awareness of the ethical choices I do, and would, make when faced with difficult, conflicting options.</p>	3
<p>Self awareness Awareness of my own emotional response to situations and people, particularly awareness of patterns which may lead to inflexible behaviour.</p>	4
<p>Active listening Attending to the content and process level in communication. Being attuned to non-verbal signals and their possible meaning Ability to draw others out. Diagnosing possible underlying feelings, concerns and motivations.</p>	4
<p>Self expression Ability to express my own thoughts, ideas and feelings clearly. Awareness of incongruities in my verbal and non-verbal expression.</p>	3
<p>Relationship building Building open, collaborative relationships. Exchanging feedback in a timely and constructive way. Being assertive, when appropriate, particularly with authority figures. Balancing support and challenge in relationships. Ability to influence others and gain commitment. Being open to influence from others.</p>	5
<p>Conflict handling Valuing and exploring differences. Ability to challenge without alienating. Maintaining flexibility, choice and self-esteem when faced with conflict and hostility. Having the personal courage to open up potentially difficult areas.</p>	3
<p>Personal and professional limits Awareness of the limits of my own competence. Willingness to ask for help. Willingness to admit my own mistakes without loss of self confidence. Commitment to my on-going development.</p>	4

Appendix F Evaluation Form

Consultancy Feedback Form

Please let me know whether you agree or disagree with the following statements through marking the most appropriate answer:

The consultant...

1. Initiated the consultancy in a professional and appropriate way

Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree
✓				

Additional comments... *Initiated through a professional network*

2. Effectively and quickly established the project intentions and sought more information where necessary

Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree
✓				

Additional comments... *Very quickly understood the project, familiarised with the TDF efficiently and engaged with stakeholders promptly*

3. Demonstrated the skills needed to complete the job or project

Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree
✓				

Additional comments... *Clear grasp of both systematic literature searches and ability to apply skills to an unfamiliar task.*

4. Demonstrated effective communication skills with all parties throughout

Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree
✓				

Additional comments... I was copied in and consulted throughout the project

5. Provided regular updates and information as the project progressed

Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree
✓				

Additional comments... As above, plus a very good final presentation to the team

6. Met project goals as outlined and/or communicated any unmet or alterations in goals in advance of the end of the contract

Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree
✓				

Additional comments... The project brief was flexible & Lucy provided clear direction as to the most valuable actions.

7. Responded well to any changes in requirements

Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree
✓				

Additional comments... See above answer!

8. Used their initiative but also sought advice when appropriate

Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree
✓				

Additional comments: Explored options well with stakeholders and provide well thought-out recommendations.

9. Produced satisfactory results of a quality expected at Public Health England

Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree
✓				

Additional comments: Excellent documents produced and shared.

10. Provided a substantial and beneficial contribution to the overall project

Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree
✓				

Additional comments: Has provided an excellent foundation for future project actions.

11. Handed over the work clearly and effectively

Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree
✓				

Additional comments: Comprehensive presentation delivered to the team.

Any other comments or feedback?

No, just Thank You!

Thank you for taking the time to provide me with this feedback.

Signed: [Redacted]

Name: [Redacted]

Job Title: BEHAVIOURAL INSIGHTS RESEARCH ANALYST

Date: 15/02/2016

Teaching and Training Competence Competency 5.0

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Teaching and Training Case Study and Plan (5.1, 5.2 & 5.3)

Introduction

This case study aims to illustrate how a teaching session was designed, planned and delivered based upon participant learning needs, module objectives and relevant teaching theory. To enable this to be achieved, a teaching session entitled 'Breast Cancer' was delivered to MSc Health Psychology students as part of the Responses to Illness module. This topic was chosen to exemplify how I have developed and enhanced my teaching skills. Breast cancer is not an area I am particularly knowledgeable in yet I took the challenge of learning alongside the students and as a result I believe this really enabled me to enhance my skills around competently designing and delivering any form of teaching, not just within areas I feel particularly confident and comfortable. When planning this session I asked myself four fundamental questions which will be discussed in turn: 'Who am I teaching?' 'What am I teaching?' 'How will I teach it?' and 'How will I assess learning?' (Spencer, 2003).

Profile and Learning Needs (*Who am I teaching?*)

Health Psychology Master's students level of engagement and enthusiasm for Health Psychology is likely to be relatively strong, as they have chosen to enhance their knowledge within this particular area of psychology. Therefore it can be assumed there will be a basic level of engagement, which has also been clarified from my previous experience with this group whereby we had a very interactive session with significant student input. Such approach to learning signifies they are at the stage of learning at a deep rather than surface level, attempting to understand and critically evaluate information (Marton, 1975). Therefore a scaffolding approach to learning whereby the teacher supports independent thinking and learning rather than simply providing all necessary information (Vygotsky, 1978), is appropriate and was adopted due to master's students desire and expectation to '*possess the skills needed to exercise independent learning and to develop new skills at a high level*' (The Quality Assurance Agency for Higher Education, 2010 p4). Within this group of students, there were a broad range of ages and cultures (see learner profile: Appendix A) resulting in a diverse group with the potential for different levels of knowledge and experiences. Instead of perceiving this as a challenge, I view diversity to be a useful teaching resource (Wilson & Peterson, 2006). Differences can be utilised to build new

experiences upon, for all those involved in the teaching session (Lampert, 2001). Individuals' background and experiences were subsequently respected and from the beginning they were encouraged and supported to share knowledge and experiences. One way I utilised the variety of knowledge and experiences was through reflecting back questions when I did not have the answer or there was not a clearly defined answer as I appreciated students may have greater insight than myself. This technique encourages student participation and facilitates active learning (Buddle, 2015). Through sharing knowledge and stories between us this led to beneficial discussions, one in particular around cultural barriers to breast screening.

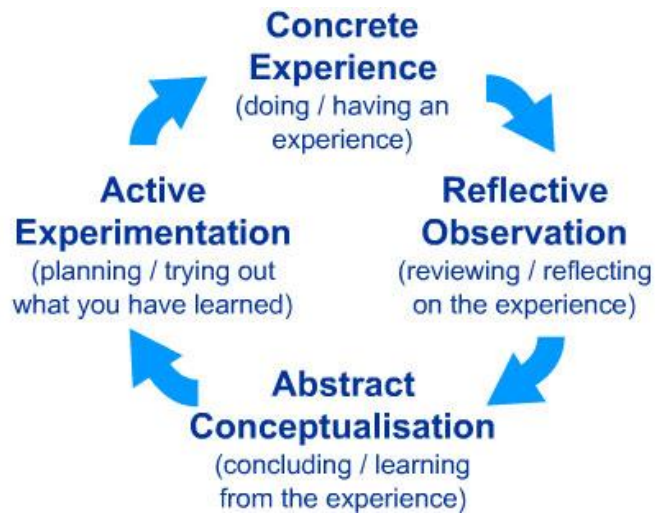
Objectives and Learning Outcomes (*What am I teaching?*)

The topic of Breast Cancer was selected upon the premise that it is the most common type of cancer in the UK (Cancer Research, 2014), having a profound effect on many individuals and consequently indicating a significant role for Health Psychologists. I created a set of teaching objectives and learning outcomes based primarily on those of the module but also determined by the learners' needs (see Appendix B). Consideration of the module assignments were taken, purposefully incorporating designing an intervention around male breast cancer as practice for their consultancy report based upon a group whose needs are not currently being met. As practice is fundamental in learning having had this space will hopefully assist in their skill development and ability to complete their assignment to a respectable standard (The Social Market Foundation, 2007). Having studied the same MSc degree a year ago I was able to reflect back on my experiences and what I found helpful, thus attempting to design the session as much as possible from the student's perspective. I feel this enabled me to make reasonably accurate assumptions as to what they might find beneficial in terms of their development as a Health Psychologist and in order to meet the aims of both the module and the masters as a whole. Formulating concrete objectives and outcomes enabled me to think more specifically about the content and how I was going to deliver this and subsequently formulate a teaching plan (Appendix C).

Teaching Methods and Materials (*How will I teach it?*)

Prior to the session a summary of the lecture was provided with references for further reading (Appendix D). This can be a useful way of preparing students for learning and

encouraging engagement and beginning to build their concrete experiences (Kolb, 1984: Figure 1). However it was not apparent that any of the students had done this indicating the need to perhaps set specific tasks around prior reading, rather than simply just providing a list.



McLeod, (2010)

Figure 1: Kolb's Experiential Learning Cycle

From the beginning I considered how the teaching could meet the different learning styles and needs of the students, as a student focused approach facilitates deeper level learning (Prosser & Trigwell, 1999). An overview of what the session entailed at the beginning and a summary of what we had covered at the end was included for benefit of the holist learners. Throughout the session subdivided sections were numbered in order to support serialist learners (Pask, 1976). Throughout designing the teaching session I referred to Honey and Mumford's (1982) learning styles in order to ensure I was designing the teaching in a beneficial format for all students (Table 1). Maintaining this focus helped to ensure that I did not design the session completely based around my learning style and techniques I find effective. However even though I intended to incorporate a variety of techniques, on reflection I realised I frequently slipped into techniques benefitting my own style. More focus on learning styles is therefore required to ensure I actively address all styles.

Table 1:

How Honey and Mumford's (1982) teaching styles were addressed

Style & Key Words	Ways in which the style was addressed
<p>Activists</p> <p>(Experience, direct action, new experiences, challenges)</p>	<ul style="list-style-type: none"> -Multiple practical exercises to provide different challenges -Allowing space for lots of discussions and participation -Designing intervention for a currently under targeted group to provide a new exciting experience
<p>Reflectors</p> <p>(different perspectives, thinking, evaluating, preparation)</p>	<ul style="list-style-type: none"> -Including a task that provided space to think by themselves -Ensuring I allowed enough time for discussions and exercises -Including multiple perspectives when exploring the impact of a diagnosis -Incorporating the largest exercise at the end of the lecture so they had some time to process everything -Providing pre reading so they could prepare for the session beforehand
<p>Theorists</p> <p>(Bigger picture, solving problems, structure)</p>	<ul style="list-style-type: none"> -Clear aims presented at the start and end of the session, with each section being numbered -Incorporating different theories and models to explain behaviour -Providing space for questions
<p>Pragmatists</p> <p>(Practical application, integrating theory, planning)</p>	<ul style="list-style-type: none"> -Designing an intervention whereby students could apply what they had learnt -Encouraging students to incorporate theories when designing their intervention -Addressing the role of Health Psychologists throughout to see the relevance of their work

Even though breast cancer is relatively well known and understood it was imperative to begin by covering aspects such as definitions, symptoms and treatment, as one should never proceed based on assumptions of pre-existing knowledge. Threshold concepts students needed to know and understand in order to benefit and be able to fully engage with the subsequent materials and discussions (Meyer & Land, 2006) therefore ensured everyone began the session with a certain level of understanding of the illness. According to Reigeluth's Elaboration Theory (1987) material should be organised in increasing order

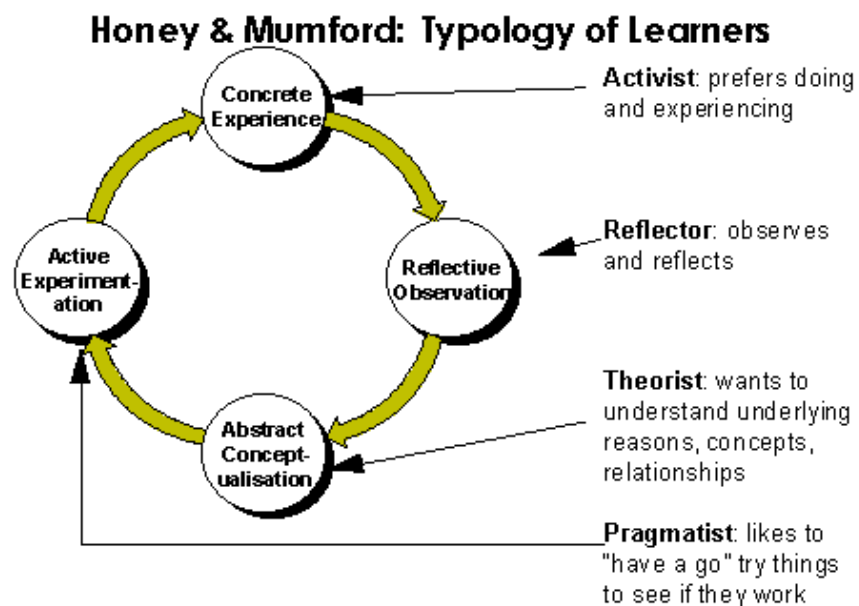
of complexity to best facilitate learning. Therefore the session was intentionally designed to start with the basic premises, moving into more complex issues.

Dialogue and discussions are a fundamental aspect of learning as they prompt critical investigation, analysis of information and reflection (Carnell, 2007), which results in enhanced knowledge and skill development. The importance of discussions are rooted in Vygotsky's (1978) social learning theory illustrating the influence of the social world on development. Through engagement and discussion learners together create collective understanding (Lave & Wenger, 1991). Dialogue is also important as students benefit from what is known as peer learning whereby they learn from explaining themselves to their peers and their peers explaining themselves in return (Boud, Cohen & Sampson, 2014). Group discussions and working collaboratively in pairs or groups can therefore be a very effective learning tool which I attempted to incorporate where possible. Throughout the session, I pre prepared questions that I could present to the group in order to encourage students to think, share their thoughts and formulate into discussions. Encouraging reflection is a crucial element of the learning cycle according to Kolb (1984). I feel confident in being able to facilitate this due to my previous experience of being able to establish a good rapport and relationship with the students which encourages them to reflect on the content and share their thoughts and experiences. Also being conscious of providing signs that I am listening and engaging when students are talking to provide positive reinforcement in order to encourage further participation. I also prepared different answers myself so I was prepared and had an idea of what it was I wanted to achieve from particular discussions and therefore if what I had intended was not being achieved I could add to the discussion. This is imperative as students have expressed that actively facilitated discussions which successfully maintain focus and ensure everyone participates at a meaningful level, fosters critical thinking (Hosler & Arend, 2012). Critical thinking is particularly important as it signifies a change from other directed learning to self-regulated learning (Dimmitt & McCormick, 2012). Students, especially at postgraduate level need to be able to enhance these metacognitive skills (Dunn, Saville, Baker & Marek, 2013). To facilitate this process I incorporated discussions that attempted to elicit critical thinking as there was no right or wrong answer, for example having a discussion around whether good communication skills can be taught or not. In order for students to gain more from discussions I believe I need to not only encourage discussions but advance discussions through greater challenging of students, particularly when ideas are being proposed.

To further enhance discussions and facilitate learning relevant and current topics were incorporated (Pintrich, 2003). For example encouraging a discussion around the benefits and downsides of predictive genetic testing as it is currently topical, frequently featuring in

the media. I also included examples of current phone apps that are used to promote breast checking. As well as being relevant, tasks that are personally meaningful to those being taught enhance motivation and learning (Pintrich, 2003). In order to address this, throughout the session I included information and encouraged the students to think about the role of Health Psychology in the areas discussed such as in Doctor Patient Communication.

Pintrich (2003) proposes that tasks that are interesting facilitate motivation. This was another reason as to why the task of designing an intervention for men with breast cancer was chosen, as I believe it is a relatively interesting and unknown area. As well as the topic for this task being interesting the experiential process itself provided a very important and a beneficial learning task. As Kolb (1984) proposes one has to reflect, conceptualise and experiment with information and experiences in order for learning to take place. Consequently through encouraging students to participate in designing an intervention this provided space for them to firstly reflect on everything we had discussed and covered in the teaching session, integrate resulting ideas and apply a problem solving attitude to the situation in order to design a new intervention. As learners can get stuck in this process I ensured I circulated round the groups to answer any questions and facilitate the process if needed. Through addressing each stage of Kolb's learning cycle throughout the session this ensured the session met the needs of all four learning styles according to Honey and Mumford (1982), activist, reflector, theorist and pragmatist (Figure 2).



(Atherton, 2013)

Figure 2: Honey and Mumford Learning Styles mapped onto Kolb's Experiential Learning Cycle

In order to enhance the quality of the session I sought clarification for any of the medical aspects I did not fully understand from my placement supervisor who is a General Practitioner. I sought feedback around the presentation of the session from a peer who has recently been a postgraduate student as peer feedback can have a very influential and powerful influence on one's progression (Caffarella & Barnett, 2000). To ensure the content was appropriate I sent it to my academic supervisor in advance of the lecture.

Assessment (*How will I assess learning?*)

Assessment of learning was an ongoing process throughout delivery of the session. How much and the level of students engagement and contribution provided some initial feedback of their learning. This was assessed by the questions asked, levels of clarification required and the depth of discussions taking place. Designing an intervention provided the students and myself with some formative feedback as it enabled us to get an idea of progression (Fry, Ketteridge & Marshall, 2009). More formal assessment of learning was obtained through the feedback form highlighting what students had learnt and taken from the session. In order to assess learning more effectively knowledge could have been measured both at the beginning of the session and the end. Summative feedback was difficult to obtain after teaching one session. However as one of the learning tasks provided an opportunity to practice for the task that will be required of them in their assignment, their performance on this assignment may be in some small respect attributable to this session.

Conclusion

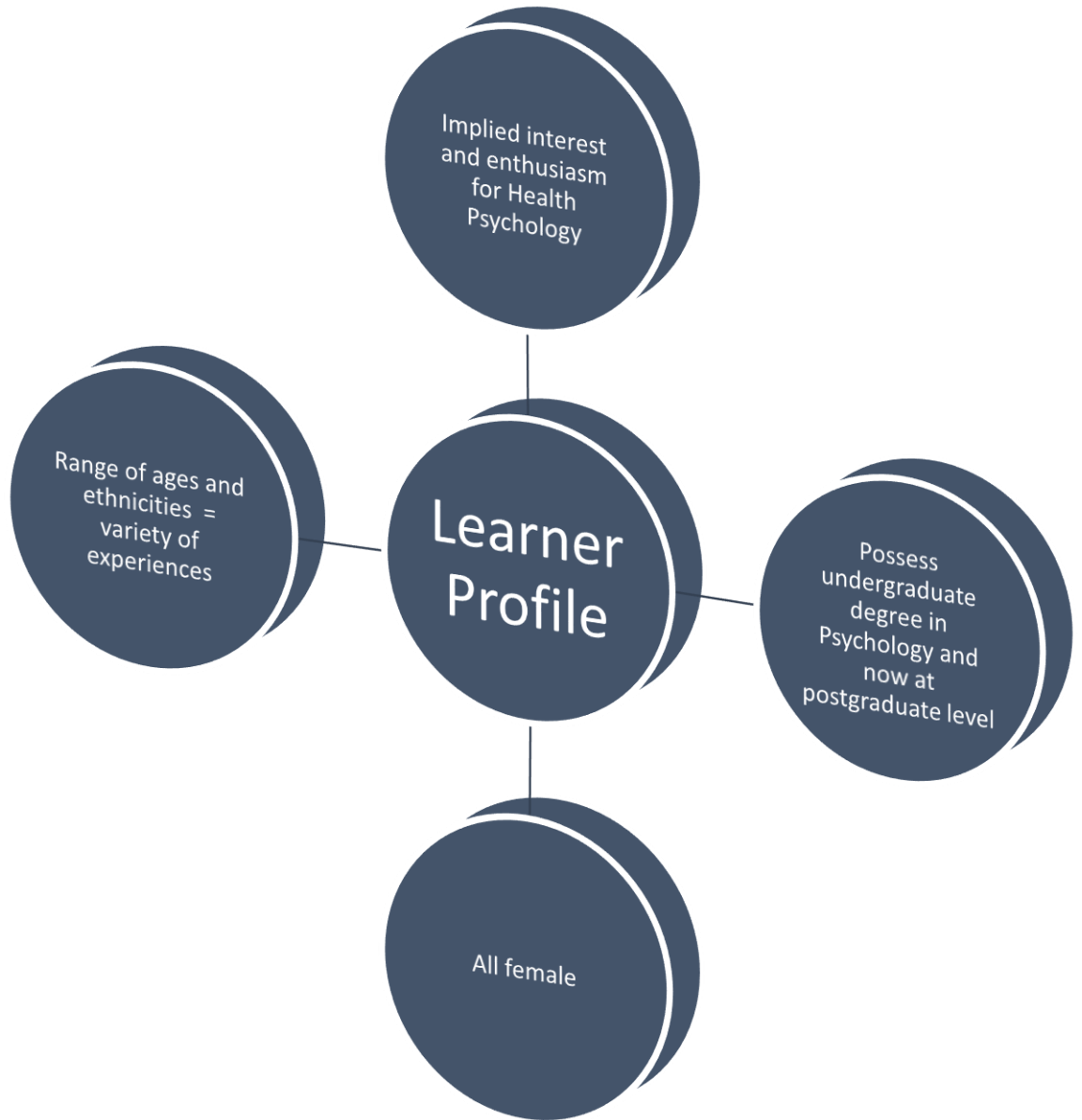
Following Spencer's (2003) four questions to consider when planning teaching, enabled me to design a relatively thorough and seemingly effective teaching session for the specified group. Starting by initially understanding who my target audience was and what they may want and require from the session, I was able to explore different teaching theories that may benefit this particular group. This enabled me to plan the session based around the objectives and learning outcomes, utilising those different teaching tools and techniques to meet such objectives. I intend to continue to practice and enhance my teaching skills further, particularly designing and delivering teaching to different target audiences.

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Appendix A
Learner Profile



Appendix B

Objectives and Learning Outcomes

Objectives

- To cover breast cancer definitions, prevalence & symptoms
- To explore breast cancer screening in relation to Behaviour Change Models
- To discuss the use of Predictive Genetic Tests for Cancer Risk Genes
- To discuss diagnosis, treatment and the importance of good Dr Patient Communication
- To explore the impact a breast cancer diagnosis has on both men and women and their close relatives/friends.
- To highlight interventions designed to support those with Breast Cancer
- Thinking about the role Health Psychology can play in breast cancer screening and treatment

Learning Outcomes

- To enhance students' knowledge of breast cancer and appreciation for the differential impact it has on men and women who receive the diagnosis and their loved ones.
- To enhance their knowledge and critical evaluation of behaviour change models and their application in understanding and influencing health behaviours around breast cancer. Their skills around this will be developed through designing a behaviour change intervention.
- To encourage students to recognise the role Health Psychology can play in enhancing screening and one's treatment experiences of breast cancer.
- To encourage students to work together in a collaborative manner and engage in informative discussions.

Appendix C
Teaching Plan

Topic	Time	Detail	Slide No.	Resources
Introduction	2.00 – 2.10	<ul style="list-style-type: none"> - Ask students to sign the register - Advise students the session will be filmed and an observer will be coming in after the break - Introduce the topic of breast cancer and acknowledge the potential of it being a sensitive topic - Cover the aims of the session 	1 – 2	Camera Observer Report Register
1. Definitions, prevalence & symptoms	2.10 – 2.25	<ul style="list-style-type: none"> - Ensure students understand the definition of cancer and use facts to put it into context - Watch video to illustrate how cancer spreads - Move more specifically to Breast Cancer covering the definition, types and facts <p>Discussion: Were any of the facts surprising? What are the most common types of cancer?</p> <ul style="list-style-type: none"> - Outline symptoms – including current campaigns and Apps in order to make it current <p>Discussion: Have you seen these campaigns? Are there any other campaigns you are aware of?</p>	3 – 5	Video
2. Breast Cancer Screening	2.25 – 2.45	<ul style="list-style-type: none"> - Discuss screening and it's sensitivity - Explore how both the Health Belief Model and the Theory of Planned Behaviour can be used to understand screening behaviour. - Make it personally relevant for students by thinking about the role of Health Psychologists in screening 	6 – 11	Diagrams of the different models
3. Predictive Genetic Tests	2.45 – 2.55	<ul style="list-style-type: none"> - Ensure knowledge and understanding of predictive genetic testing and the process involved <p>Discussion: What are people's thoughts? What are the pros and cons of this testing?</p>	12	Link for further info
4. Diagnosis, treatment & communication	2.55 – 3.15	<ul style="list-style-type: none"> - Cover the different types of treatment and the differences between them - Self-reflection space to decide what they feel are the three most important aspects of communication when delivering a diagnosis <p>Discussion: What aspects did everyone pick and why. Share my own.</p> <ul style="list-style-type: none"> - Clarify differences between patient centred and Doctor Centred communication and patients personal experiences - Encourage students to reflect on the role Health Psychologists can play in communication 	13 – 19	Diagram illustrating different surgical treatments Pens

		Discussion: Are there any other roles Health Psychologists can play in enhancing communication? Use quote to initiate discussion in pairs as to whether good communication is inherent or can be taught.		
	3.15 -3.30	Break		
5. Psychosocial Impact of a breast cancer diagnosis	3.30 – 3.55	- Encourage students to appreciate different perspectives through considering how a diagnosis effects younger women, older women, partners, children and men Discussion: How do you think men feel having been diagnosed with what is generally perceived to be a women's illness?	20 - 25	
6. Interventions	3.55 - 4.05	- Moving onto considering what can be done to alleviate the impact of a diagnosis through illustrating a few different types of interventions.	26 - 27	
7. Designing an intervention	4.05 – 4.45	- An opportunity to put everything discussed into practice through designing an intervention around men and breast cancer in groups of 2 or 3. - Give guidelines and provide 15 minutes to design. Circulate around the groups during this time Discussion: Sharing design of interventions	28	Paper Pens Guidelines
Summary	4.45 – 4.50	- Summarise what has been covered in the session and point towards references for further reading and information - Provide space for students to ask any remaining questions		
Feedback	4.50 – 5.00	- Hand out feedback forms and collect once completed		Feedback forms Pens

Appendix D

Teaching summary for handbook

This session will focus specifically on breast cancer and its psychological impact. Breast cancer is often perceived as a female illness due to higher rates of women being diagnosed with breast cancer. However it is very important to also explore how having what is generally viewed as a predominately 'feminine' illness impacts on men with breast cancer and the support they require to come to terms with such a diagnosis. The effect of breast cancer screening, diagnosis and treatment on both men and women will be explored and the wider impact on partners and family. The importance of good communication with healthcare professionals around a breast cancer diagnosis and treatment will also be discussed.

Suggested Reading:

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Appendix E

Powerpoint Presentation

Breast Cancer



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Aims

1. To cover breast cancer definitions, prevalence & symptoms
 2. To explore breast cancer screening in relation to Behaviour Change Models
 3. Discuss the use of Predictive Genetic Tests for Cancer Risk Genes
 4. To discuss breast cancer diagnosis, treatment and the importance of good Dr Patient Communication
 5. To explore the impact a breast cancer diagnosis has on both men and women and their close relatives/friends
 6. To highlight interventions designed to support those with Breast Cancer
- ▶ Throughout we will think about the role Health Psychology can play in breast cancer screening and treatment

1. Cancer

- ▶ Cancer is the rapid creation of abnormal cells that grow beyond their usual boundaries. These can then invade adjoining parts of the body and spread to other organs. This process is referred to as metastasis. (WHO, 2015)



Facts:

- ▶ Its one of the leading causes of deaths in the world
- ▶ There are more than 200 types of cancer
- ▶ More than 1 in 3 people will develop some form of cancer in their lifetime

How cancer spreads:

- ▶ https://www.youtube.com/watch?v=qn_noiZs9s

Breast cancer

- ▶ Cancer that forms in tissues of the breast
- ▶ The most common type = ductal carcinoma, which begins in the lining of the milk ducts (thin tubes that carry milk from the lobules of the breast to the nipple)
- ▶ Another type = lobular carcinoma, which begins in the lobules (milk glands) of the breast
- ▶ Invasive breast cancer is the most common and is breast cancer that has spread from where it began in the breast ducts or lobules to surrounding normal tissue.



Breast profile:
A Ducts
B Lobules
C Dilated section of duct to hold milk
D Nipple
E Fat
F Pectoralis major muscle
G Chest wall/rib cage
Enlargement
A Normal duct cells
B Basement membrane
C Lumen (center of duct)

Facts

- ▶ Breast Cancer is the most common type of cancer in the UK (Cancer Research UK, 2014)
- ▶ There are an estimated 550,000 people living in the UK today who have had a diagnosis of breast cancer. (Breast Cancer Care, 2015)
- ▶ 4 out of 5 breast cancers are found in women over 50 years old (NHS, 2015)
- ▶ 3 out of 4 women diagnosed with breast cancer are alive 10 years later. (NHS, 2015)
- ▶ In the 1970s, just over half of women with breast cancer survived the disease beyond five years. Now it's more than 8 in 10. (Cancer Research UK, 2014)

Symptoms

If one gets to know how their breasts normally look and feel, they will be more likely to spot any changes. Symptoms are:

- ▶ A lump or thickening in the breast.
- ▶ A change in the nipple. The nipple might be pulled back into the breast, or change shape. You might have a rash that makes the nipple look red and scaly, or have blood or another fluid coming from the nipple.
- ▶ A change in how the breast feels or looks. It may feel heavy, warm or uneven, or the skin may look dimpled. The size and shape of the breast may change.
- ▶ Pain or discomfort in the breast or armpit.
- ▶ A swelling or lump in the armpit

NHS, (2015)

2. Screening

What it involves:

- ▶ Screening involves x-ray test called a mammogram which can spot cancers that are too small to see or feel

Who is eligible:

- ▶ Women aged 50-70 and registered with a GP are automatically invited every three years
- ▶ NHS is in the process of extending the programme as a trial to some women aged 47-73
- ▶ Anyone who has specific concerns or is at high risk

Coverage:

- ▶ March 2012 - 77% of women aged 53-70
- ▶ March 2011 - 77.2% of women aged 53-70
- ▶ March 2010 - 76.9% of women aged 53-70 (hscic, 2013)



Sensitivity:

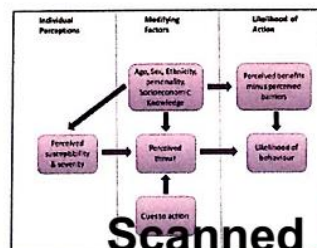
- ▶ Screening does detect cancers that would never have become life-threatening. This results in about 4,000 women each year in the UK being offered treatment they did not need.

Breast Cancer Screening & the Health Belief Model

Health Belief model has been used extensively to predict, understand and design interventions around screening behaviours.

Yarborough & Braden (2001)

Model explained 47 % of the variance in screening behaviour when socio economic status was included. Otherwise predictive power was low, ranging from 15 to 27%



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Breast and Cervical Cancer Screening in Hispanic Women: A Literature Review using the Health Belief Model (2002)

Perceived Barriers

- ▶ Fear of cancer due to the belief it can not be cured
- ▶ Fear of not being able to cope with a diagnosis
- ▶ Embarrassment of discussing and exposing private body parts. This was supported by Yarbrough & Braden (2001) along with healthcare staff being rude

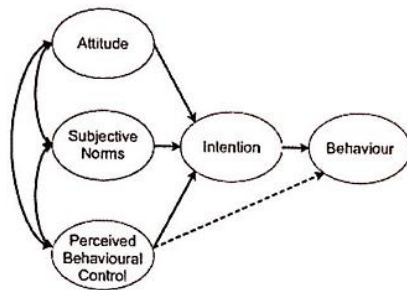
Perceived Susceptibility

- ▶ Belief that screening is an unnecessary procedure
- ▶ Preventative health procedures are not a priority

Cues to action

- ▶ Positive = physician recommendations, written materials and media

Breast Cancer Screening and the Theory of Planned Behaviour



Attendance and reattendance for breast cancer screening: A prospective 3-year test of the Theory of Planned Behaviour (2000)

Findings:

- ▶ Intention was the strongest predictor of reattendance
- ▶ Attitude and subjective norm both predicted the behaviour when intention was excluded from the regression equation.
- ▶ Model (attitude, subjective norm and perceived behavioural control) could even predict who would attend before the invitation for their first screening went out.

Role of Health Psychologists in Screening

- ▶ Aim - increase the uptake of screening
- ▶ Strategy - Conducting research, designing and delivering interventions

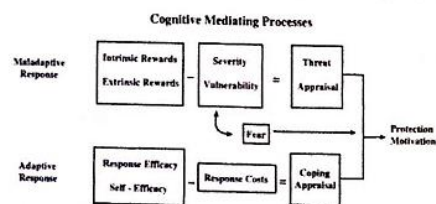


Figure 2. Cognitive mediating processes of protective motivation theory.

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3. Predictive Genetic Tests for Cancer Risk Genes

- Breast Cancer can be strongly influenced by genes and consequently run in families
- BRCA1 and BRCA2 - two genes that raise your cancer risk if they become altered.

Process:

- A relative with cancer has a diagnostic blood test to see if they have a cancer risk gene. Their result will be ready six to eight weeks later.
- If their test is positive, one can then have the predictive genetic test to see if they have the same faulty gene. This is done at a local genetics service.

Subsequent actions if positive:

- Risk reducing mastectomy - reduces the risk by 90-95%

<http://www.royalmarsden.nhs.uk/SiteCollectionDocuments/patient-information/brca.pdf>



4. Diagnosis

- ▶ Mammogram to produce an X-ray of the breasts
- ▶ Ultrasound scan may be done
- ▶ Biopsy - sample of tissue cells is taken from the breast and tested. Needle biopsy is the most common type of biopsy where a sample of tissue is taken from a lump in the breast using a large needle.
- ▶ Needle test on lymph nodes in armpit (axilla) to see whether these are also affected.

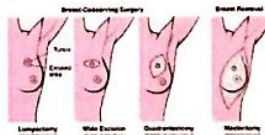


NHS, (2015)

Treatment

Breast cancer is treated using a combination of:

- ▶ Surgery - Breast Conserving Surgery - Mastectomy
- ▶ Chemotherapy
- ▶ Radiotherapy



- ▶ Surgery is usually the first type of treatment people have, followed by chemotherapy or radiotherapy or, in some cases, hormone or biological treatments. (NHS, 2015)

Dr Patient Communication

Table 1
Behavioral Characteristics of Patient-Centered and Doctor-Centered Approaches to Communication

Patient-Centered	Doctor-Centered
Solicits and acknowledges patient concerns and uses them to build agenda	Sets agenda based on biomedical issues
Asks explicitly about the patient's thoughts	Assumes patient will volunteer thoughts if important
Encourages patients to express their feelings	Tends to focus the conversation away from feelings
Solicits patient involvement in decision-making	Regards decision-making as largely based on physician judgment

Back, 2006

Both patients and their relatives or friends preferred a patient centered approach in all aspects of the consultation. (Dowsett et al, 2004)

In a study of bad-news conversations in which women with breast cancer were surveyed 6 months after diagnosis, the physician's communication style was the strongest predictor of adjustment to illness. (Roberts et al 1994)

Breast cancer patients' experiences of patient-doctor communication: a working relationship.

- ▶ Physicians who provided patients with the opportunity for choice and participation through their relationship-building /information-sharing efforts helped to create the woman's experience of feeling in control of her own life and health. However too much choice can be overwhelming (McWilliam, Brown & Stewart, 2000)

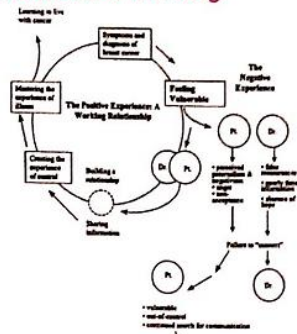


Fig 1. Breast cancer patients' experience of patient-doctor communication.

Role of Health Psychologists in Dr Patient Communication

- ▶ Enhancing and expanding research around doctor patient communication
- ▶ Teaching medical professionals about the importance of good communication, the impact it can have and how best to achieve 'good' communication
 - ▶ Communication is now a taught module in medicine
 - ▶ UK NHS Plan (DH, 2000) - joint training in communication skills across healthcare professionals
 - ▶ A national programme for advanced communication skills training has been developed for senior nurses, allied health professionals and doctors who are working mainly in cancer and palliative care. The training programme is learner centred and experiential.
- ▶ Ensuring doctors are emotionally equipped to deal with delivering bad news
- ▶ Providing support to patients after their diagnosis

Is good communication inherent or can it be taught?



Reflect on the following comment made by a senior nurse who worked in a critical care setting:

'Only let staff break bad news if they are competent in communication skills. I don't think training helps, I think you either can or you can't break bad news well.'

(Online Cancer Education Forum, 2009)

- ▶ Do you think the ability to communicate well is inherent or can communication skills be taught?

5. Psychosocial Impact of a Breast Cancer Diagnosis

- ▶ Diagnosis of cancer elicits greater distress than any other disease (Shapiro et al, 2001)
- ▶ Reported psychological consequences - depression, sadness, anger, frustration, panic and anxiety, suicidal ideation, pain, telling children. Generally more pronounced with increasing severity. (Shapiro et al, 2001).
- ▶ As many as 25% of women with breast cancer suffer marked psychological morbidity associated with diagnosis and treatment, though for many women psychological distress declines substantially 1 yr after treatment. Less invasive surgery may result in less body image concern and better sexual functioning. (Glanz & Lerman, 1992)

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Psychosocial Impact of a Breast Cancer Diagnosis

Younger women (below 50)

- ▶ Concerns about premature menopause and pregnancy related issues. Sexual functioning greater problem than lack of sexual interest, and body image = moderate concern.
- ▶ Mastectomy = greater problems with body image and interest in sex
- ▶ Chemotherapy = greater sexual dysfunction

Avis, Crawford & Manuel, (2004)

Older women (65+)

- ▶ Psychosocial adjustment at 15 months was predicted by better mental health, emotional social support, and better self-rated interaction with health care providers

Ganz et al, (2003)

Impact on others

Carers are less likely than patients to disclose their concerns and worries (Keller et al, 1996)



Partners

- ▶ Husbands' emotional distress after diagnosis predicted their distress a year later. (Northouse, Templin & Mood, 2001)
- ▶ Significant others describe need to adapt to the fear of losing their partner, the impact on their own mortality and their new role of caregiver. Women were continuing to experience difficulties at treatment completion while their significant others were focused on 'getting back to normal'. Lethborg, Kissane & Burns (2003)
- ▶ Men felt stretched and overwhelmed, particularly when helping at home was unfamiliar. Men spoke about trying to be positive and to have positive people around them. They were strengthened by their wives' positive attitudes, although spouses often protected each other by not sharing fears and emotions. Most men put themselves on hold.

Impact on others

Children

- ▶ Children who had been 8-12 years of age when their mothers were diagnosed with early-stage breast cancer voiced nine categories of worry during the interviews
 - ▶ worrying that the mother was going to die
 - ▶ feeling confused
 - ▶ worrying that something bad would happen
 - ▶ worrying about the family and others
 - ▶ worrying when the mother did not look good
 - ▶ worrying that their mothers would change
 - ▶ wondering if the family would have to cut back financially
 - ▶ worrying about talking to others
 - ▶ wondering if they would get cancer

(Zahlis, 2001)

Breast Cancer in Men

- ▶ Around 350-400 new cases of breast cancer are diagnosed in men in the UK every year.
- ▶ It is most often diagnosed in men aged 60-70.
- ▶ Main symptom = hard lump in one breast. The lump is almost always painless
- ▶ The outlook for breast cancer is not as good in men as in women.
 - ▶ Reduced awareness of the condition = longer to diagnose
 - ▶ Don't visit their GP for health concerns.
- ▶ There is very little research on the management and care of male breast cancer, and that which exists is often extrapolated from research about breast cancer in women
- ▶ One for the Boys - male cancer awareness campaign



Scanned by CamScanner

Impact on Men

- ▶ Delay in diagnosis, shock, stigma, altered body image, lack of emotional support, provision of inappropriate information
- ▶ Seen as a woman's complaint, it's daft for a bloke to have breast cancer.
- ▶ The chemist called me over and *Was the name on the prescription correct?*, so when I said yes he said *Are you sure because tamoxifen is only prescribed for women?* I explained it was for my husband who had breast cancer.

France et al, (2000)

- ▶ Healthcare professionals often set up support links for women
- ▶ Perception by some healthcare professionals that a support network for men would not work.
- ▶ All felt it could be useful: *'One of the worst things was the fact there weren't any men I could go to'*
- ▶ Many men disappointed at the lack of information on breast cancer that was relevant to men

Williams et al, (2003)

6. Psychological Interventions

Support Groups:

- ▶ Positive effects of social support, cognitive therapy, and supportive information (Glanz & Lerman, 1992)
- ▶ Spiegel et al (1989) - weekly support group meeting for one year enhanced patients' psychosocial functioning and reduced pain. Survival was significantly different, 36.3 months (intervention group) 18.9 months (control group)
- ▶ *Bosom Buddies* - 12-week, structured, web-based support group. Reduces depression and cancer-related trauma, and perceived stress. (Winkelberg et al, 2003)

Mindfulness Based Stress Reduction:

- ▶ 8-week MBSR program - MBSR group re-established peripheral blood mononuclear cell NK cell activity (NKCA) and cytokine production levels. Non-MBSR group = continued reductions.
- ▶ Women in the MBSR program had reduced cortisol levels, improved QOL, and increased coping effectiveness compared to the Non-MBSR group.

Psychological Interventions

Exercise:

- ▶ Setting up classes solely for women with breast cancer helped to reduce difficulties in prioritizing exercise over caring roles and worries about changed appearance.
- ▶ Women removed their wigs in the classes
- ▶ Valued exercising with women in the 'same boat' because of the empathy and acceptance and the opportunities to exchange information and form friendships.
- ▶ Action-orientated format of the group was preferred to a talk-based format

Emslie et al, (2007)

Relationships:

- ▶ Brief psychoeducational group program for partners - 3 months after intervention, partners had less mood disturbance than controls.
- ▶ Patients reported less mood disturbance, greater confident support (CS) and greater marital satisfaction.

Bultz et al, (2000)

What we have covered...

- ▶ Breast cancer definitions, prevalence & symptoms
- ▶ Breast cancer screening in relation to Behaviour Change Models
- ▶ Highlighted the use of Predictive Genetic Tests for Cancer Risk Genes
- ▶ Discussed breast cancer diagnoses, treatment and the importance of good Dr Patient Communication
- ▶ The impact a breast cancer diagnosis has on both men and women and their close relatives/friends
- ▶ Interventions designed to support those with Breast Cancer
- ▶ The role Health Psychology can play in breast cancer screening and treatment

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Teaching and Training Evaluation (5.4)

Introduction

For this evaluation I chose a teaching session titled 'Breast Cancer' which I delivered to London Metropolitan Health Psychology MSc students on the Responses to Illness module. This teaching session was selected due to the triangulation of feedback obtained, allowing for a systematic and robust evaluation, which is instrumental in supporting the progression of my teaching skills (Felder & Brent, 2004). Triangulation was achieved through self-reflection, video analysis, an academic observer and student feedback. These are the most widely recognised forms of evaluation and together create a thorough evaluation due to the provision of multiple perspectives (Fry, Ketteridge & Marshall, 2009). Furthermore, I felt this teaching session fell at an appropriate place in my competency development. I have already made some enhancements to my teaching through acting on both previous student feedback and self-reflections and subsequently felt this was a beneficial time to evaluate my teaching further and more rigorously.

Evaluation Method

I approached the evaluation with the intention of exploring how informative, interesting and interactive my teaching sessions were and how I could further develop my teaching to enhance learning. I also wished to reflect on my style of delivery and ability to design teaching sessions of an appropriate level for the specified target group. In order to achieve effective evaluation I perceived my feedback as formative data that I could utilise to develop and enhance my teaching and training skills rather than simply providing confirmation that my teaching was good enough (Golding & Adam, 2014). I attempted to avoid a summative attitude, explaining away any form of negative feedback. Perceiving feedback as formative can also help in reducing the emotional impact of feedback, as feedback is not viewed as criticism but instead information which can be used for skill development (Stein et al, 2013). Maintaining this focus was particularly important for myself as I am aware I am prone to automatically seeing negative feedback as criticism, yet when I have approached feedback as a tool for development I find it much more beneficial, enabling me to focus on the positive attributes feedback entails. In order to facilitate this developmental process I followed Ormrod's Self-Regulated Learning Process (2012) (Figure 1), initially setting goals and objectives (Appendix A), collecting data for self-assessment which included feedback from

multiple sources, evaluating and interpreting this feedback and from this determining how I could advance my teaching.

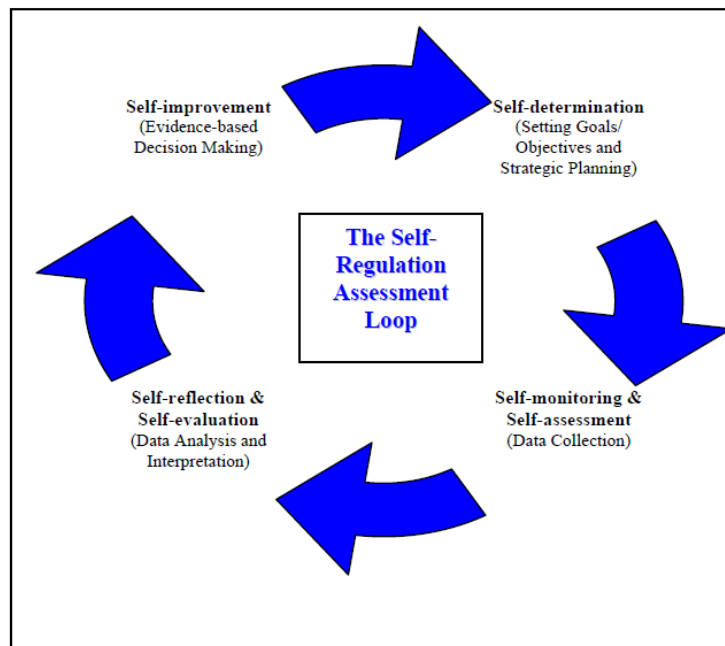


Figure 1: The Self-Regulation Loop

Student Feedback & Recommendations for Improvement

Student feedback was considered an important aspect of my evaluation process. Students provide direct insight into the learners view and experience thus making them a credible and useful source of feedback (Benton and Cashin 2012). In light of this an evaluation questionnaire was designed to provide insight into how informative and interesting the session was, how students rated the delivery and what could be improved (Appendix B). Thus covering both the content and delivery of the session. This questionnaire was simple and brief in order to avoid 'questionnaire fatigue' and resulting reductions in accuracy (Fry, Ketteridge & Marshall, 2009). Space was provided for additional comments and it finished with two qualitative questions around the most and least beneficial aspects of the session and how the session could be improved. From previous experience this group of students all answered these questions with their responses being incredibly beneficial, as they provided illustrations of how I could enhance my teaching skills. One way I could more successfully address my outcome of enhancing knowledge

would be to assess their level of knowledge around the topic before and after the session rather than only seeking feedback afterwards.

Student feedback was overall incredibly positive with responses varying between good and very good. They expressed learning new information and for aspects they did already have some pre-existing knowledge, what we covered was still beneficial. Multiple students commented on the amount of references and further reading which they found very helpful for what one student referred to as 'further knowledge and understanding'. The ease of being able to understand and make sense of the content was something that was important to me due to often feeling I could improve my ability to articulate information. Therefore receiving positive feedback around ease of understanding, with further explanations when necessary was reassuring. I set students the challenge of designing an intervention around male breast cancer which students expressed finding really interesting as it was a 'new and novel' area. I intended to choose an interesting topic due to it helping to enhance motivation and learning (Pintrich, 2003). Combined with my observations of how important they appeared to feel this area was, suggests they appreciated the differential impact a breast cancer diagnosis has on different people, which was one of my learning outcomes. Furthermore they discussed finding interaction with materials taught and space to discuss and share stories and information helpful. I was pleased receiving this feedback as a further learning outcome was to encourage students to collaborate and engage in informative discussions. Some recommendations for improvement were based around incorporating personal experiences of receiving a diagnosis or communication with their practitioner, which I agree would have added some personal insight. Such positive feedback provided me with a great boost of confidence that the content and delivery of my teaching was perceived to be of a good to very good standard as illustrated by the comment of 'love Lucy's style and delivery'. However as I wanted to approach evaluation as a means of self-improvement, further feedback was required.

Observer Feedback & Recommendations for Improvement

Feedback from my observer was an invaluable feedback tool due to the provision of constructive feedback from someone with substantial expertise and experience in teaching. It provided a space to reflect and discuss my teaching with someone, which can enhance the effectiveness of improvements subsequently made (Penny & Coe, 2004). In order to provide the observer with some guidance around aspects of the teaching to which I felt feedback would be beneficial, I designed an observer report based upon the template used

by Postgraduate Certificate in Education (PGCE) trainees at London Metropolitan University (Appendix C). This consisted of a series of questions centred around the content and delivery of the session. Considerable overlap was evident in feedback from both the students and observer, particularly around good interactions and rapport with the group, encouraging and supporting them in their learning. Advice was provided around improving this further through ensuring engagement from the entire group rather than focusing on the students who more frequently and willingly contribute. I was aware and conscious of this when teaching but was unsure exactly how to address this further without putting students on the spot and making them feel uncomfortable. I have since received further training around this from attending facilitation training. I consequently feel more confident in techniques I can utilise to address and incorporate quieter members such as use of eye contact, asking questions and being comfortable with silence to provide the space for those who need longer to process information.

In terms of my delivery the observation was made that I could reduce the amount of information on my slides and read less directly from them. This is important as reading from slides can lead to cognitive loading and a consequent reduction in students understanding of the material (Sweller, 2007). I believe this is something that will come more naturally with increasing confidence but when designing teaching sessions something I will place more consideration into and attempt to minimise. My observer reported that I responded well to comments from students, providing great encouragement. However I could advance this through expanding on their comments, facilitating them to engage in a more critical reflection. This could be achieved through greater questioning and entering into more critical debates which is something I intend to master. Had I provided more critical questions and feedback when they were sharing their intervention idea with the group, this may have challenged them to engage with all aspects of designing an intervention, as many had not fully considered their evaluation.

Self-Evaluation & Recommendations for Improvement

My own thoughts and feelings are a helpful evaluation tool, as similar to the students I can provide direct insight into how it felt to deliver the teaching session. This was achieved by writing a reflective log throughout designing the session and after delivering the session. I was really pleased with the session and felt I had taken previous student feedback and my own self reflections and built upon these. One particular area I improved was timings as previously I had too much content. In this session I reduced the content leaving substantial

time for discussions and practical exercises. I also planned where I needed to be at certain time points, enabling me to track our progression and alter the pace accordingly. I was aware the session was still relatively content heavy and believe greater effort is needed to reduce this further and for myself to feel less obligation and pressure to provide so much information. This would then decrease the chance of surface learning taking place (Fry et al, 2009) and increase the opportunities for experiential learning and critical discussions which are important components of deep learning (Kolb, 1984). Discussions are such important components of deep learning as they enable students to internalise ideas and empower them to be thoughtful (Vygotsky, 1978).

Upon starting the session I acknowledged that it may be a particularly sensitive topic and gave reassurance to students that they could leave at any time if needed. This is particularly important to acknowledge and address when teaching sensitive topics (University of Sheffield, 2015) and I feel may have helped in initiating an open and respectful space whereby students felt comfortable sharing their personal experiences. Initially the students were relatively quiet and I found it challenging to encourage contributions. I considered whether this was a reaction to the presence of the camera, as being observed can alter behaviour (Landsberger, 1958). However through continuously asking questions where possible and engaging in some group work this helped to increase contributions and we ended up having a very interactive and what I felt, enjoyable session.

When evaluating teaching skills I think it is very important to reflect on who I am within that role as this can impact on my teaching. One particular thing I found especially helpful was accepting that just because I am teaching a topic that does not mean I have to be the expert in that field. Through accepting and acknowledging this I felt I could be more honest and open when I did not know the answer to a question. I sometimes put questions back to the group or attempted to answer the question as best as I could, but always making explicit my uncertainty. It is also important for me, especially when designing sessions to be aware of my personal learning styles as they are likely to influence my teaching. According to Gardener's Multiple Intelligences Framework (1983) I am a visual-spatial learner and both an intra and inter-personal learner. When designing the session I attempted to ensure that learning styles were taken into consideration in some form rather than falling into the default of my own preferences. However on reflection I feel this could be enhanced, for example creating tasks which involving moving around to benefit those kinaesthetic learners, as I felt overall I sub consciously stuck relatively closely to my own learning preferences.

Conclusion

Evaluating my teaching skills through the triangulation of feedback has been an incredibly helpful tool for me. Having the opportunity to view and critically appraise my teaching from multiple perspectives has provided me with greater insight, subsequently enhancing the opportunity for skill development. Self-evaluation is a powerful tool yet has the potential to be biased making feedback from others imperative, particularly when they were more skilled and experienced than myself. Their feedback was extremely positive providing me with a great confidence boost, especially as teaching is a new and novel experience for me that I was initially nervous about. As well as feeling more confident in my ability to teach I also feel much more knowledgeable about how I can develop myself even further. I believe approaching my feedback as formative data and thus not just accepting the fact my teaching is good enough but instead focusing on how I can enhance my teaching skills, was a valuable approach.

Evaluating teaching alone does not necessarily lead to improvements, as one needs to act on the outcomes of the evaluation (Kember, Leung, and Kwan 2002). Therefore taking my learnings forward and increasing my confidence in teaching is something which I intend to do through continuously delivering and evaluating teaching and training sessions. This is something I have already begun and plan to continually develop and improve throughout my career as a Health Psychologist.

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Appendix A

Objectives & Learning Outcomes

Objectives

- To cover breast cancer definitions, prevalence & symptoms
- To explore breast cancer screening in relation to Behaviour Change Models
- To discuss the use of Predictive Genetic Tests for Cancer Risk Genes
- To discuss diagnosis, treatment and the importance of good Dr Patient Communication
- To explore the impact a breast cancer diagnosis has on both men and women and their close relatives/friends.
- To highlight interventions designed to support those with Breast Cancer
- Thinking about the role Health Psychology can play in breast cancer screening and treatment

Learning Outcomes

- To enhance students' knowledge of breast cancer and appreciation for the differential impact it has on men and women who receive the diagnosis and their loved ones.
- To enhance their knowledge and critical evaluation of behaviour change models and their application in understanding and influencing health behaviours around breast cancer. Their skills around this will be developed through designing a behaviour change intervention.
- To encourage students to recognise the role Health Psychology can play in enhancing screening and one's treatment experiences of breast cancer.
- To encourage students to work together in a collaborative manner and engage in informative discussions.

Appendix B

Student Feedback Form Containing Summary of the student feedback

1. How informative was the session? How much did you learn from the session

Very good	Good	OK	Poor	Very poor
7	0	0	0	0

Any other comments: Learnt new information

2. How interesting and engaging was the session?

Very good	Good	OK	Poor	Very poor
5	2	0	0	0

Any other comments: The intervention topic area is new and novel

Lucy enabled us to be interactive and this made it more interesting

Allowed time to talk, engage and share stories & information

3. How easily were you able to understand the session?

Very well	Well	OK	Not Well	Not well at all
6	1	0	0	0

Any other comments: Easily understandable and anything not understood was explained

Very straight forward language used and it was very easy to

Understand

Information was easily understood

4. How would you rate the delivery of the session?

Very good	Good	OK	Poor	Very poor
3	4	0	0	0

Any other comments: Good pace & engaging, was quiet at times

5. How would you rate the opportunity to contribute to the session?

Very good	Good	OK	Poor	Very poor
7	0	0	0	0

Any other comments: Lucy gave good opportunities to discuss

Multiple Opportunities

Liked the men's breast cancer awareness

6. What were the most beneficial and least beneficial aspects of the session?

Most: Group work I find beneficial

Good Research

Use very up to date resources

Very easy to understand

Possibility given to interact with the session and the materials that have been taught

Many studies to refer to which provides further knowledge and understanding

Learning about men and incidence of breast cancer and the discussion sessions

The whole lecture was beneficial even though we already know some of it but mens breast cancer awareness was very interesting

Learnt about how cancer forms & blood supply

Least: can't think of any...

7. How do you think the session could be improved?

- From todays session I feel it did not need improving, love Lucy's style of delivery
- Have quizzes maybe? To get the brain thinking after some listening
- I think it was delivered in a very efficient manner and also it was very engaging
- Watching a video on peoples views on how they felt when they were diagnosed and their thoughts on the delivery of diagnosis
- More recent studies on male cancer and their views on checking and what works

Appendix C

Observer Report



Teaching & Training Observer Report

Name of teacher: Lucy Hawkin	Date: 23/4/15
Name of observer: [REDACTED]	Venue: London Metropolitan University
Course/level of students: MSc Health Psychology	Approx no. of students: 9
Topic: Breast Cancer	Length of observation: 1 hour

Aim(s)

What are your aims for the session?

- To cover breast cancer definitions, prevalence & symptoms
- To explore breast cancer screening in relation to Behaviour Change Models
- Discuss the use of Predictive Genetic Tests for Cancer Risk Genes
- To discuss diagnosis, treatment and the importance of good Dr Patient Communication
- To explore the impact a breast cancer diagnosis has on both men and women and their close relatives/friends.
- To highlight interventions designed to support those with Breast Cancer
- Thinking about the role Health Psychology can play in breast cancer screening and treatment

Outcomes

What are the specific learning outcomes planned for the students (e.g. knowledge and understanding, skills, subject-specific skills)?

- To enhance students' knowledge of breast cancer and appreciation for the differential impact it has on men and women who receive the diagnosis and their loved ones.
- To enhance their knowledge and critical evaluation of behaviour change models and their application in understanding and influencing health behaviours around breast cancer. Their skills around this will be developed through designing a behaviour change intervention.
- To encourage students to recognise the role Health Psychology can play in enhancing screening and one's treatment experiences of breast cancer.
- To encourage students to work together in a collaborative manner and engage in informative discussions.

Were there any particular factors/problems taken into account when planning the session? *E.g. Is this your first ever class with this group? Can you anticipate and prepare for any potential difficulties?*

Having previously taught this group I am aware they generally engage very well and enjoy group discussions. In the last session we ran out of time so I have attempted to reduce the content this time, allowing time for group work.

Are there any aspects of this session which are new to you?

Breast Cancer is not a topic I am an expert in so I have learnt a lot myself from designing the lecture. This means I may therefore find it difficult to answer some more complex questions and will be unable to talk from a lot of personal experience.

What particular aspects of your teaching would you like feedback on?

★ Content and presentation of content. Delivery of the lecture and student participation.

Observer's Comments

To be completed by the observer *during or immediately after the teaching session*. Attach additional pages if necessary. The breakdown of each category (in italics) is a *guide* to the observer as to aspects for comment and discussion.

Teaching characteristics – Comments

1. Planning and Content

Appropriateness of aims and outcomes (where it is possible to evaluate this). Communication of these to students. Relevant and interesting content. Organisation of content.

Well structured and organised material that is clearly relevant to the topic. Maybe links could have been made to the module aims, more generally and be less content focused and more goal focused.

2. Delivery

Attitude to subject matter. Clarity of presentation. Emphasis of key points. Variety of techniques used. Pace of session (time management). Tone, volume, clarity of speech. Summary (end and/or interim).

Enthusiastic, friendly, clear. Appropriate use of body language, eye contact etc. Volume, pace, pitch, speed, projection etc all great. Encouraged & received discussion well. Appropriate use of methods. Good timing of clear structure.

3. Student participation

Question and answer technique. Exercises/activities. Class management (appropriate level of control and authority). Instructions to students. General class atmosphere. Level of participation between students (excessive? lacking?). Attention and interest. Attitude to students. Awareness of individual needs. Student-teacher rapport.

Professional and appropriate. Obvious rapport and clear that there is an existing relationship with the audience. Warm & friendly dynamic. – maybe expand/develop/summarise/add more to student comments/contributions.

– 1 person was far less engaged than the rest and maybe could have worked harder & involving the quiet 1 – is this related to you saying 6 (not 7) hrs?

Observer's Comments (continued)

Teaching characteristics - Comments

4. **Methods and approaches**
Choice/variety of teaching/learning methods. Use and design of instructional materials (OHP, handouts etc.)
Use of appropriate reinforcement. Examples and analogies. References and links to research, other resources. Dealing with problems/disruptions.

NIA.

Appropriate methods employed, relevant to topic, size + level of group. Good reference to material that could at times be more up to date, evidence base - could have provided a more

5. **General**
Were aims and outcomes achieved? Did the session appear to result in students learning? Appropriateness of teaching/learning methods. Was effective communication achieved and involvement of students?

Yes.

Excellent involvement and interaction with the group. Showed interest & enthusiasm.

Yes -

Did you ask for student feedback??

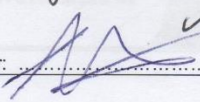
Critical debate.

6. **Aspects to improve**
Comment in terms of both teaching style and content (if possible).

- More links with module would benefit.
- More critical depth, discussion of material/research/evidence presented.
- At points, gain clarification of audience level of understanding of outside concepts/terms etc.

7. **Strengths**
Again, comment in terms of both teaching style and content (if possible)

Rapport. Approachable. Encouraging. Good amount of material provided. generated discussion. Structure + organization.

Signed by observer: 

Date: 23/4/15

DVD and Reflective Commentary

This reflective commentary is based upon a section approximately in the middle of my Health Psychology MSc teaching session titled 'Breast Cancer'. I found recording myself a daunting but very helpful developmental tool allowing me to identify and critically appraise strengths and weaknesses of my teaching, as briefly illustrated within this reflective commentary.

It is apparent a good rapport between the students and myself was created, allowing for a relaxed session incorporating humour. Thus meeting my intention of generating a space whereby the students felt comfortable sharing thoughts and ideas. At times I felt I perhaps became too comfortable and informal through continual leaning on the desk and my tone of voice flattening, lacking enthusiasm. At one point I also did not convey professionalism and respect when looking through my notes whilst one of the students was speaking. It could be portrayed as being uninterested and disengaged. Therefore when attempting to create an informal space I should take caution to ensure it does not become too informal.

One of my teaching objectives was to encourage students to engage in a collaborative manner and contribute to informal discussions, which I felt was evident. One way I successfully facilitated this was through allowing the students to have discussions between themselves, with minimal interruptions. In doing this they were effectively engaging with the role of Health Psychologists in Dr Patient communication, which was a further objective. I expressed my level of engagement through reflecting on comments and summarising or adding additional comments, which I felt helped to encourage contributions. However in a number of situations additional steps could have been taken to further enhance learning through providing additional questioning. Thus encouraging a more critical approach, which is expected of Masters' students.

When responding to one particular query I opened it up to the students to encourage their contributions. My purpose being initially I was unsure how to answer the question but also felt it could create an interesting discussion. This approach is more professional than providing incorrect answers and an effective tool for incorporating and utilising students own experiences and insight rather than perceiving myself to be the expert. Therefore I felt my intention and initial management of the question was sensible and appropriate until I proceeded to answer the question myself. As I had asked the students for their opinions it would have been more appropriate to allow provide space and time for students to provide their thoughts, controlling my urge to jump in with my opinion.

In one instance I instructed students to discuss the task in pairs yet one student initiated a group discussion. I felt I was sufficiently responding to their feedback, being flexible to how the students wanted to approach the task. Yet in doing this I made the assumption that all students wanted a group discussion. I would have been more considerate to check that everyone was happy to continue the group discussion, as some may have preferred smaller group work due to their particular learning style. This illustrates my tendency to listen to those with a louder voice and not pay the appropriate level of attention to those with quieter voices.

From this reflective commentary and reflecting on the entire teaching session I feel I have identified some of my strengths and key areas for improvement in order to further enhance my teaching skills.

Appendix A
Teaching Disc