A Grounded Theory Investigation into the Influence of Mindfulness on Colleague Relationships

Elizabeth L Millward

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School of Psychology
Faculty of Health and Medical Sciences
University of Surrey
Guildford, Surrey
United Kingdom
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ABSTRACT

The present study aimed to develop a theory of perceptions of how mindfulness influenced colleague relationships. Abbreviated Grounded Theory methodology was used to collect and analyse data from eight participants. The participants were from a diverse range of occupations and geographical locations. 45 to 90 minute interviews were conducted, and participants contacted after to expand on the discussion.

Participants perceived mindfulness practice to influence colleague relationships through changes in internal experience, which led to changes in interpersonal behaviour. The actions of mindfulness practitioners were seemingly influenced by values they held about their workplace relationships. Reactions of colleagues were difficult for participants to predict, and both positive and negative reactions were commonly described by practitioners.

Results of the study provided the beginnings of an explanation for previous contradictory findings. Considerations for future research are discussed, and include further investigation of proposed mediating factors, and possible future interventions to improve workplace relationships; such as ACT and modified mindfulness training.
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CONTENTS

1. ABSTRACT ........................................... Error! Bookmark not defined.
2. ACKNOWLEDGEMENTS ............................. Error! Bookmark not defined.
3. CONTENTS ........................................... 4
4. MAJOR RESEARCH PROJECT: A Grounded Theory Investigation into the Influence of Mindfulness on Colleague Relationships ........................................... 6
   Abstract ........................................................................................................ 7
   Introduction ..................................................................................................... 8
   Method ........................................................................................................... 13
      Design ........................................................................................................... 13
      Procedure ..................................................................................................... 15
      Saturation ..................................................................................................... 18
      Credibility ..................................................................................................... 19
      Reflexivity ..................................................................................................... 20
      Ethical Considerations ................................................................................... 20
   Results ............................................................................................................ 21
   Discussion ....................................................................................................... 41
   References ....................................................................................................... 53
5. APPENDICES .................................................................................. 62
   Appendix 1: Evidence of Ethics Approval ....................................................... 63
   Appendix 2a: Supporting Information: Grounded Theory Canon Consideration .............................................................. 64
   Appendix 2b: Supporting Information: Credibility Consideration .................. 69
   Appendix 2c: Supporting Information: Free writing excerpts and commentary .... 71
   Appendix 3a: Recruitment materials: Correspondence .................................... 74
   Appendix 3b: Recruitment Materials: Flyer (A5) ............................................ 75
   Appendix 3b: Recruitment Materials: Poster (A4) ......................................... 76
   Appendix 4: Consent Form ............................................................................. 77
   Appendix 5: Information Form ....................................................................... 78
   Appendix 6: Interview Schedules .................................................................... 80
   Appendix 7: Coded Examples from Transcripts ............................................ 81
   Appendix 8: The development of a theme: Intentionality .............................. 82
   Appendix 9: Journal Guidelines ..................................................................... 86
   Appendices References ................................................................................... 100
MAJOR RESEARCH PROJECT: A Grounded Theory Investigation into the
Influence of Mindfulness on Colleague Relationships

The Journal of choice for this report is mindfulness. Mindfulness describes its aim as to advance research, clinical practice and theory on mindfulness. This journal was selected because of its close relation to the subject matter of this review. In addition, it is the only scholarly source dedicated to mindfulness theory and multidisciplinary research. Instructions for Authors can be found in Appendix 9.

Word Count
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Abstract

The present study aimed to develop a theory of perceptions of how mindfulness influenced colleague relationships. Abbreviated Grounded Theory methodology was used to collect and analyse data from eight participants. The participants were from a diverse range of occupations and geographical locations. 45 to 90 minute interviews were conducted, and participants contacted after to expand on the discussion.

Participants perceived mindfulness practise to influence colleague relationships through changes in internal experience, which led to changes in interpersonal behaviour. The actions of mindfulness practitioners were seemingly influenced by values they held about their workplace relationships. Reactions of colleagues were difficult for participants to predict, and both positive and negative reactions were commonly described by practitioners.

Results of the study provided the beginnings of an explanation for previous contradictory findings. Considerations for future research are discussed, and include further investigation of proposed mediating factors, and possible future interventions to improve workplace relationships; such as ACT and modified mindfulness training.
Introduction

Problematic workplace relationships seem to be commonplace, with “nearly all of us [having] struggled with workplace relationships we find difficult” (Omdahl & Fritz, 2012, p. ix). Research suggests these difficulties precipitate psychological distress (Cortina, Magley, Williams & Langhout, 2001). Therefore, interventions which have the potential to improve workplace relationships may have a role in the prevention of psychological distress. The role of mindfulness in colleague relationships is a relatively new and a burgeoning field. Much of the existing research has quite severe limitations, and the results are contradictory (Millward, 2014). In this introduction, the research on workplace relationships and wellbeing will be briefly outlined. Then the research on mindfulness and colleague relationships will be reviewed.

A review of the literature suggested positive colleague relationships could play a role in improved job satisfaction and increased wellbeing (Danna & Griffin; 1999). Analysis of a large cohort of hospital and university colleagues suggested a positive correlation between positive colleague relationships and job satisfaction (Morrison, 2004; Winstead, Derlega, Montgomery & Pilkington, 1995). Findings were confirmed in a wider sample of colleagues (Winstead et al., 1995). All three studies made use of self-report questionnaires and correlational analysis, and as such causality cannot be implied; studies have suggested both job satisfaction and wellbeing lead to better workplace relationships (Abbey, 2015).

A qualitative study by Gersick, Dutton, and Bartunek (2000) interviewed business school faculty members and found colleague relationships were important for workplace wellbeing. However, the study was limited to the perceptions of a
small, specific sample of people, and experiences of workplace relationships more generally may be quite different. Quantitative findings similarly suggested social support from colleagues partially predicted psychological well-being (Daniels & Guppy, 1994; Harris, Heller & Braddock, 1988).

The origins of mindfulness stem mainly from Buddhist ideology, evolving initially from teachings of Siddhartha Gautama in the 5th Century BCE. Buddhist teachings suggested individuals could develop mindfulness through practising meditation and mindful activity (Hahn, 1976). Kabat-Zinn (2011) offers a brief, operationalised definition. Mindfulness is “paying attention in a particular way: on purpose, in the present moment, and non-judgmentally” (p. 291). The prominence of mindfulness in workplace initiatives and policy, to promote employee wellbeing, has been increasing. For instance, a parliamentary report on mindfulness recommended employers promote use of mindfulness, the government’s What Works Centre for Wellbeing commission mindfulness studies in the workplace as priority, and government departments encourage the development of mindfulness interventions for the public sector workforce (Mindfulness All-Party Parliamentary Group, 2015).

A literature review (Millward, 2014) found ten studies describing the influence of mindfulness related practises on colleague relationships. The most relevant are discussed here. Practitioner reports of mindfulness practise outcomes on colleague relationships included; increased compassion, respect, forgiveness, and patience (Forbes, 1999); tolerance, selflessness, and compromise (Hunter & McCormick, 2008); integration, connection, and sensitivity (Mulvaney, 1994), helping, and trust (Richards, Oman, Hedberg, Theresen & Bowden, 2006). Qualitative methods in these studies focussed on the mindfulness practitioner’s
perception of change. However, quantitative studies found null results when investigating mindfulness practices’ effect on perspective taking (Feinholdt, 2012), citizenship behaviour (Giluk, 2010) and ostracism (Ramsey, 2012). Also, null results in an investigation using self-scored quality ratings of colleague relationships after a mindfulness intervention (Giluk, 2010) may suggest a discrepancy in findings not yet explained in the available literature.

Giluk (2010) included an aggregate measure of relationship quality, completed by five colleagues of each individual who had taken part in the mindfulness intervention (Giluk, 2010). Investigation of these outcomes in the mindfulness practicing group, suggested the relationship between mindfulness and relationship quality as reported by colleagues were non-significantly, negatively correlated ($r = -.14$, 95% CI is $-.34 < -.14 < .07$). Also, correlations between dispositional mindfulness and colleague relationship satisfaction in the control group also showed a non-significant, negative correlation. Path analysis suggested mindfulness did prove a significant predictor of poorer relationship quality, when mediated by affect ($\beta = -.32$, 95% CI is $-.62 < -.32 < -.02$). This was the opposite outcome to that suggested by qualitative studies (e.g. Forbes, 1999; Hunter & McCormick, 2008; Mulvaney, 1994; Richards et al., 2006).

The studies highlighted by Millward (2014) had some methodological concerns. Only four of the ten studies met the conservative cut off for quality research ($>.75$; Kmet, Lee and Cook, 2004). There were no qualitative studies which explained the use of validation techniques. For the quantitative studies, participant samples were often small; Giluk (2010), Ramsey (2012) and Feinholdt (2012) all suffered low statistical power or attrition. There were also some concerns about
generalisability as participant pools often drew from a single occupation (e.g. Ramsey, 2012 and Richards et al., 2006) or small geographic area (Sawhney, 2012).

The methodological concerns and the contradictory findings of this evidence base raised questions, which, without a theoretical model to explain them, remained unanswered. The theoretical basis for the influence of mindfulness more generally in the workplace was approached recently in a literature review (Good et al., 2015). The review concluded mindfulness in the workplace improved attention which in turn led to improved cognitive flexibility and capacity, emotions resolving more quickly, less emotional reactivity, increased self-regulation of behavior and less automaticity. Physiologically, mindfulness reduced stress response, increased neuroplasticity, and slowed some signs of aging. These changes to cognition, emotion, behaviour and physiology, were suggested to lead to a range of outcomes, including improved relationships.

Seven studies, which identified relationships as an outcome, were selected by Good et al (2016). The review included additional studies of dispositional mindfulness skills not covered in the Millward (2014) review. These studies found dispositional mindfulness was positively associated with better relationships with clients (Beach, Roter, Korthuis, Epstein, Sharp, Ratanawongs... & Saha, 2013). Mindfulness improved attitudes of subordinate staff (Reb, Narayanan & Chaturvedi, 2014) and reduced likelihood that hostility between colleagues would lead to abuse (Liang, Lian, Brown, Ferris, Hanig & Keeping, 2015). Four further studies investigated the impact of mindfulness interventions. Mindfulness communications training was reported to increase open listening, awareness and communication quality (Beckman, Wendland, Mooney, Krasner, Quill, Suchman & Epstein, 2012).
Mindfulness monitoring led to improvements in team meetings, including active listening and collaboration (Singh, Singh, Sabaawi, Myers and Wahler, 2006). These two studies lacked control groups, and as such changes cannot necessarily be attributed to the intervention alone. The two remaining studies made use of control conditions and showed successful manipulations of mindfulness as measured by self-report questionnaires. A short mindfulness induction showed increases on measures of cohesion and collective performance (Cleirigh & Greaney, 2014). Listening to a single mindfulness audio clip led to a reduction in reaction to injustice and retaliation (Long & Christian, 2015). The studies suggest both dispositional mindfulness, and a range of non-standard mindfulness interventions (not Mindfulness Based Stress Reduction, Mindfulness Based Cognitive Therapy or regular meditation), may have a role in improving relationships in the workplace.

A model which specifically explores participants’ (who have completed MBSR, MBCT, regular meditation or a combination thereof) experiences of colleague relationships is lacking. Findings theoretically suggest mindfulness practice of this nature could improve colleague relationships (Millward, 2014; Good et al., 2016), with some research supporting this claim. Other research, however, suggests the colleagues of participants find the practice detrimental to their relationships (Giluck, 2010). Colleague relationships have been found to be important to wellbeing (Daniels & Guppy, 1994; Gersick et al., 2000), and while it is still unclear whether mindfulness can improve these relationships, interventions claiming to use mindfulness to this end are already being marketed to many workplaces (Good et al., 2016).

**Aims for this research**
The goal of the present study was to inform workplace mindfulness research and interventions. The researcher anticipated this research would help address some shortfalls of previous qualitative research, namely by investigating a diverse range of workplaces and geographical locations, and raising analysis to abstraction. The researcher used an exploratory approach to develop consistent hypotheses to inform future research. Improved interventions may allow for better relationships in the workplace and an increase in colleague wellbeing and positive mental health (Dutton & Heaphy, 2003; Harter, Schmidt & Hayes, 2002; Thau, Aquino & Poortivliet, 2007).

The aim was to explore Participants’ perceptions of the ways their engagement with mindfulness impacted on their relationships with colleagues. Also, there was a focus on their understanding of the mechanisms involved in the process. As recommended by Willig (2013), an intentionally open-ended research question was developed, to avoid assumptions about the area of interest. The researcher aimed to create a valid and credible theory, to explain the influence of mindfulness on colleague relationships, producing a set of hypothesis for future research. Grounded Theory methodology was chosen, to meet these aims. As current research is contradictory, a constructivist approach was taken to allow flexibility in analysis. The approach’s grounding in data and the reflective stance was likely to be useful when investigating a research area which was theoretically underdeveloped but commonly discussed, as this may have rendered it susceptible to assumptions leading the analysis rather than data.

**Method**

**Design**
An abbreviated, Constructivist Grounded Theory methodology was selected to meet the research aims laid out in the preceding section. Grounded Theory methods provide strategies for conducting rigorous qualitative analysis, which results in an abstracted, generalizable theory (Charmaz, 2006). Common to all Grounded Theory approaches is simultaneous collection and analysis of data, creation of codes and categories from this data, theory to explain behaviour, memo-making, theoretical sampling and a delay in incorporating literature (Charmaz, 2006). Constructivist Grounded Theory is considered post-positivist; without any one “truth”. As such the approach does not aim to prove or disprove a hypothesis, but to develop meaning (Charmaz, 2006).

The researcher selected a Grounded Theory approach for the following reasons. Firstly, the common aim of Grounded Theory research is to create theories that explain social phenomena, such as workplace relationships (Urquart, 2013). Secondly, Grounded Theory allows the researcher to be immersed, both in the field and in the data, acquiring insight about the subjectivity and multiplicity of colleague experiences of their workplace relationships. Thirdly, Grounded Theory allows for the researcher to interpret all possible aspects of the active role of participants in determining the relationships they have at work, and the experiences they participate in (Charmaz, 2006). Finally, Grounded Theory allows the researcher to gain rich and broad data from a range of perspectives and accentuate the focus on meanings and interpretive understanding.

A constructivist approach was selected to allow for the researcher’s experience, values, and knowledge to influence data collection and become interwoven with the discourses of participants in analysis, as opposed to a
“redescription” of data (Pidgeon & Henwood, 1997). This is particularly important considering the researcher’s experiences as a mindfulness practitioner, a colleague, and a friend to some of the participants.

Abbreviated methods are selected when the research question, time constraints or resources demand it (Pidgeon & Henwood, 1997), as this approach is less highly regarded than traditional Grounded Theory approaches (Willig, 2013). The data is analysed following the principles of Grounded Theory, but theoretical sensitivity and saturation are only implemented within the data collected during initial sampling. Traditional canons of Grounded Theory were still adhered to by the researcher. However, when new avenues for exploration arose late in the analysis (for example the inclusion of attachment in the discussion), these avenues were not explored through further theoretical sampling. Instead, saturation was achieved through continued contact with previous participants and continued analysis of the existing data. This was in line with the recommendations from Willig (2001) and Charmaz (2006).

Procedure

Procedure followed Charmaz’s (2014) guidance. This was largely influenced by Glaser and Strauss (1967) and as such their original canon was considered in detail (See Appendix 2a). This affected the research in the following ways. Data collection and analysis were seen as interrelated, so coding, memo writing and the development of conceptual categories began as soon as the first Participant was interviewed. Coding focussed on action and process to build this into theory. As categories began to form and group, memos focussed on developing relationships between the categories, developing the links between the coded
processes. These emerging relationships were developed and verified through constant comparison. Also, new ideas and links were checked back with participants for verification, and other researchers to ensure abstraction (through supervision sessions). Once concepts were developed, they became the basic unit of analysis and theory forming focussed on memos and concepts, which were applied back to the data and to other data sources, until all variation could be accounted for by an inclusive, abstract theory. Broader conditions were also analysed regarding both the participants’ position in the workplace, the workplace’s position in society, and this study’s place in wider research. Evidence of these processes in appendices 7 and 8.

Participants. Inclusion criteria were intentionally kept broad to allow for theoretical sampling where necessary. The researcher advertised for individuals that had completed either a MBSR or MBCT course, or who would consider themselves to have a regular mindfulness practice. Also, these individuals had to be currently working, where they had contact with colleagues. It was intended to include 15 participants unless theory reached saturation earlier. Participants were recruited through posters advertised in Buddhist centres and mindfulness training establishments, and leaflets given out by mindfulness trainers in the workplace. These, and additional materials, can be found in Appendix 3. Two further participants were recruited through the researcher’s personal contacts, and one through ‘snowballing’. Theoretical sampling informed the recruitment process. As theory developed, participants were recruited according to job role, mindfulness training, practise type and gender, to thicken categories, raise theory to abstraction and answer questions arising from the data.
This resulted in 8 suitable individuals before saturation was reached. The individuals were from a diverse range of locations in the UK and USA. Six were female, and two were male. Profession domain, practise type and duration are detailed in the table 1. Limited sample characteristics are included due to the potential for participants to be identified.

Table 1.
Participant characteristics

<table>
<thead>
<tr>
<th>Participant</th>
<th>Professional domain</th>
<th>Type of mindfulness practice/training</th>
<th>Duration of mindfulness practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Healthcare</td>
<td>MBSR/regular meditation (group and alone)</td>
<td>~1 year</td>
</tr>
<tr>
<td>2</td>
<td>Healthcare</td>
<td>MBSR/regular meditation (group and alone)</td>
<td>~2 years</td>
</tr>
<tr>
<td>3</td>
<td>Administrative</td>
<td>MBSR/regular meditation (group and alone)</td>
<td>~3 years</td>
</tr>
<tr>
<td>4</td>
<td>Healthcare</td>
<td>MBSR/regular meditation (group and alone)</td>
<td>~15 years</td>
</tr>
<tr>
<td>5</td>
<td>Computing</td>
<td>Regular meditation (group and alone)</td>
<td>~2 years</td>
</tr>
<tr>
<td>6</td>
<td>Education</td>
<td>Regular meditation</td>
<td>~1 year</td>
</tr>
<tr>
<td>7</td>
<td>Hospitality</td>
<td>Regular meditation</td>
<td>~15 years</td>
</tr>
<tr>
<td>8</td>
<td>Healthcare</td>
<td>MBCT/ Regular meditation</td>
<td>~4 years</td>
</tr>
</tbody>
</table>

Data Collection. Participants who volunteered for the study were sent an information sheet and a consent form. Those who consented were contacted to arrange a meeting or video chat. The conversation was recorded on a Dictaphone to be transcribed by the researcher, and detailed field notes kept during the conversation. Reflective memos were written immediately after each interview (see Appendix 2c). All participants consented to further contact. The researcher
transcribed and coded all of these interactions, to further hypotheses or to validate
the model in line with recommendations by Glaser & Strauss (1967) and Yardley
(2000).

**Analysis.** Analysis followed six main steps (see figure 1). In step one, open-
coding was used to capture detail, variation, and complexity of basic, qualitative
material. This was completed line-by-line as recommended by Charmaz (2014). Step
two involved constantly comparing data across cases and categories for similarities
and difference. Step three required sampling of new data on theoretical grounds, to
thicken themes and categories or check ideas. Step four utilised the writing of
theoretical memos to explore emerging ideas and links to researcher knowledge and
experience; these were often discussed and explored with other researchers. Step five
required more focused coding of defined categories, through actions and
interactions rather than line-by-line. In step six, the researcher wrote, diagrammed
and researched literature to develop a more theoretical model; this model was then
reapplied to the data a final time to identify negative cases. When no negative cases
were identified the analysis was considered complete.

**Saturation**

Analysis continued until saturation; when the original research aims were
met, no negative cases were found and no new categories arose. Saturation of themes
was reached at interview 7 and one further interview was conducted to test this, with
no new line-by-line or focused codes identified. Data was checked for saturation
through recoding with the final model, as well as final comparisons between the
transcripts, memos and field notes to confirm that all relevant patterns were
accounted for. This was in-line with recommendations for robust Grounded Theory
Yardley (2000) highlights four areas of credibility in qualitative research: sensitivity to context; commitment and rigour; transparency and coherence; impact...
and importance. The researcher considered these areas in the formation of the current report according to Yardley’s (2000) guidance (see Appendix 2b).

**Reflexivity**

Charmaz (2006) highlights the importance of self-reflection throughout Grounded Theory research to develop good quality theory. Reflection was facilitated by free writing on the researchers feelings, thoughts and behaviours after key points in the process (for example, after interviewing a participant, after a participant disclosure, after a change in direction or methodology decision). These were read back during the analysis process, so the researcher could make links between their experience and analysis. Reflections included the role of expectations and the pressure to feedback good news, feeling less comfortable reporting the interpersonal challenges experienced by friends, and the assumptions the researcher previously held about the worth of mindfulness (see Appendix 2c).

**Ethical Considerations**

The current project gained ethical approval from the University of Surrey Faculty of Arts and Human Sciences Ethics Committee (see Appendix 1). The research was carried out following the approach set out in the application. The following ethical considerations were especially pertinent to this research.

Confidentiality; the FAHS Good Research Practise Guidelines (University of Surrey, 2001), and Code of Human Research Ethics (BPS, 2010) were followed. Only the researcher had access to recordings. Files were transferred onto an encrypted, password protected pen drive within 24 hours. Recordings were transcribed by the researcher, and were anonymised. Confidentiality would only have
been broken in the unlikely event of someone being at risk, or if professional codes of conduct required the researcher to report the information. No situation arose which required this.

Psychological harm; the FAHS Good Research Practise Guidelines (University of Surrey, 2001), and Code of Human Research Ethics (BPS, 2010) were followed. Conversations about relationships did sometimes elicit difficult feelings. This was managed through presenting the topic before the individual consented to the study and details of support being given after interviews. Local safeguarding procedures were to be followed if it seemed a child or vulnerable person was at harm and emergency services were to be contacted if there was an immediate risk. No situation arose which required this.

Consent; the FAHS Good Research Practise Guidelines (University of Surrey, 2001), and Code of Human Research Ethics (BPS, 2010) were followed. Individuals were made aware of the study’s aims before attending the interview and were given an information sheet and consent form at the beginning of the interview.

**Results**

Analysis of transcripts resulted in codes, sub-themes and themes. Analysis continued as theory developed, and four overarching categories were identified:

1. Internal outcomes of mindfulness practise
2. Intending to change according to values
3. Changes in interpersonal behaviour in the workplace
4. Reactions of colleagues
These four broader categories were used to organise the content of the themes, and for developing links between codes, sub-themes, and themes through the use of constant comparison (Glaser & Strauss, 1967). These relationships are summarised in Figure 2.

**Internal Outcomes of Mindfulness practice**

- Slow Down
- Self-Reflection
- Intentionality
- Emotional Regulation

**Behaviour change**

- Teamwork
  - Showing Gratitude
  - Being Helpful
  - Less Likely to react negatively
  - Share feelings with colleagues
  - Spend time with valued colleagues
  - Improve communication
  - Create Space from colleagues
  - Be Assertive
  - Share Mindfulness

**Colleague Reactions**

- Feltjected by Participant
- Felt Participant was calm
- Felt participant was avoidant
- Felt Participant was uncomfortable
- Felt valued by Participant
- Seek out Participant for help

*Figure 2: Diagram showing the relationships between themes as experienced and described by participants.*
Participants reported mindfulness practise led to the development of four internal changes; slowing down; emotional regulation; intentionality; and self-reflection. Although each type of change was reported separately they were conveyed to be mutually influencing each other, with the development of each change reported to be further supporting the development of other changes. The participants reported the changes allowed them to alter how they behaved in the workplace.

Participants reported making changes to their behaviour, influenced by the individual’s values. The values described were collated in to three main groups: values around teaching colleagues, values around teamwork, and values around being professional around colleagues. These values were perceived to influence the behaviours the participant carried out after practising mindfulness. Values related to teaching were demonstrated by participant’s efforts to teach their colleagues about mindfulness and support them in being more mindful. Values related to teamwork were demonstrated by participants offering emotional and physical help to their colleagues, and expressing gratitude. Values related to being professional were demonstrated by participants creating more space from their colleagues and being more assertive. Some behaviours were linked to more than one value set. All three were envisioned by participants to lead to improved communication and spending time with valued colleagues. Teamwork and teaching values were envisioned as leading to an increase in sharing feelings. Professional and teamwork values were both perceived to lead to a reduction in aggressive responding.

It was suggested different ways of behaving elicited different colleague reactions. Though relationships were not always clear, some emerging patterns could
be seen. Reactions to behaviours related to teamwork values were largely reported as positive, with colleagues seeking out participants for support and feeling valued. Reactions to teaching values were often reported as negative, with discomfort about mindfulness and colleagues feeling condescended to. Reactions to professional values were suggested to be mixed, with some participants reporting some colleagues conveyed feeling rejected. Some had reportedly believed participants were being avoidant. Others reportedly felt practitioners were calm. All other behaviours were reported to elicit mixed reactions which were seemingly unpredictable for the participants. Each theme and subtheme is explored in the following section.

**Internal outcomes of mindfulness practise**

Participants spoke about four predominant internal outcomes of mindfulness practise: slowing down; emotional regulation; intentionality; and self-reflection. These four internal outcomes were often spoken about together, and participants considered them linked.

**Slowing down.** Three participants explicitly described slowing down as an internal outcome of mindfulness practise (participants 1, 4 and 8). Other participants made reference to “pausing” or “stepping back” which seemed to describe a similar experience. Participants felt they were able to slow their thinking, and in turn slow their actions. They felt less influenced by the high speed nature of their workplaces.

“I think it definitely made my day calmer. I think it made me stop.”

Participant 1

“I think that’s what it does, it gives you a bit of a pause.”

Participant 8
Most participants described mindfulness allowing them to pause, so they could untangle their thinking, feel calmer and choose a suitable reaction, highlighting how interconnected the internal changes felt to these participants.

“Space between taking in information, digesting it, and bonding to that information.”

Participant 8

“Space between taking something in and reacting.”

Participant 8

**Emotional regulation.** One of the most extensively spoken about internal outcomes was the ability to regulate emotion, often through letting go. Participants spoke about how initially letting go took conscious effort, and they would reflect on whether the source of their negative feelings was important.

“The mindfulness way is ‘does it really matter?’ Things are in the past and letting them go.”

Participant 1

“The ability to deal with my feelings... I got the email from her ... saying you haven’t paid and I thought you know what just let it go, and I usually would have thought ‘I need to email back’.”

Participant 3

Others consciously managed their emotions by practising mindfulness exercises at times they felt negative emotion.
“My anxiety levels were high I could feel it. So I sat in that meeting and I just kept saying to myself stay in your body breathe... That allowed me to really stay present and focussed and calm.”

Participant 4

Whether they managed by letting go or practising mindfulness exercises in stressful situations, participants felt mindfulness practise made them feel more calm in the workplace in general.

“There is a build-up effect of calm.”

Participant 1

“Before things that I would take personal, they just don’t affect me anymore, it just rolls off like a duck.”

Participant 5

“I was just getting very very upset... [mindfulness] just helped me to really calm down”

Participant 6

Intentionality. Half of the individuals spoke about developing increased intentionality. This theme encapsulated participants’ feeling able to react to difficulties in a way that was intentional rather than habitual or emotion led. Many felt emotional difficulties had got in the way of behaving this way before.

“I don’t become that person that makes decisions reactively, I can be a better person, and that works quite well.”

Participant 3
This skill also allowed people to develop more ways to respond, so they had a choice in how to behave.

“I think it gives me a bit more choice in how going to respond to a comment or to something.”

Participant 3

Some felt it was slowing down that allowed for this change, rather than freedom from emotional difficulties.

“It gives you a bit of space between taking something in and reacting or not reacting to it... I think it gives you the option to not go to that automatic response. Either to respond in a different way or not to respond at all.”

Participant 8

**Self-reflection.** Participants report they had a more developed capacity for self-reflection.

“But I think the mindfulness group kind of gave me the confidence to be able to think about what was it about this person that was bothering me and how can I address it.”

Participant 2

“It’s quite interesting, you know, monitoring your responses to that”

Participant 3.

For some, self-reflection proved the link between intentionality and emotional regulation. The increase in reflection may have allowed participants to identify the emotions, thoughts and interpersonal experiences were causing them to behave in
certain ways. This understanding allowed them to make informed choices about which actions to take.

“It was a real eye-opening experience. The courses increased my awareness of my emotions which increased my ability to choose my reactions.”

Person 3

“It’s because of the mindfulness, [I am] so much more aware of my feelings... The way something has affected me and my thinking and the decisions I make.”

Person 6

“I think mindfulness helps me look inwards and wonder what is it that is pushing a button. ... I think that it gives me a bit more choice in how going to respond to something.”

Person 8

**Intending to change according to values**

Mindfulness was reported to influence internal processes, which then allowed for changes in behaviour. The behaviours chosen seemed to be in line with values participants held. Some had reportedly struggled to behave according to these values prior to mindfulness training.

“With mindfulness I am more me. I don’t become that person that makes decisions reactively.”

Participant 3
Individuals described three main value groups, which they hoped they embodied at work. It was possible for participants to hold multiple values, which appeared in different groups.

**Professional values.** Some participants seemed to feel it was important for colleagues to recognise them as a professional, who remained cool, calm, and collected regardless of the events in the workplace.

“As a professional, I’ve learnt to not to be super emotional outwardly.”

Participant 6

These individuals wanted to use mindfulness to be as efficient as possible in the workplace.

“I could really see the value of the practice... To actually be able to operate in a more effective way.”

Participant 4

Among the participants interviewed, the individual who exhibited professional values most strongly was Participant 1. Participant 1 felt it was important to be “productive”, and within colleague relationships, hoped she could learn from her colleagues to increase efficiency; a “what can they show me how can they help kind of thing.” Furthermore, Participant 1 preferred when her colleagues could experience her as someone unemotional and contained; she preferred to take on “ownership of emotional support” herself.

“If I feel anxious or incapable, I think I am less likely to share it anyway... I don’t just come out and vent, because I might come across as uncontrolled and emotional.”
Teamwork values. Other individuals exhibited values around creating a working team who supported one another. Individuals who held these values seemed to want colleagues to appraise them as a helper, wanted to look after their colleagues and make them feel supported and happy.

“I quite like helping people. ... There was a woman in my last job who would come to me with IT questions [laughter]. I do want to help you, I’ll come over look at your screen and randomly click on things.”

Participant 1

“I was more aware of my natural compassion and my drive to help.”

Participant 1

These participants valued kindness and harmony in the workplace.

“The more we can bring kindness rather than criticism to that is absolutely enormous in terms of the workplace.”

Participant 4

“[We] always try to find the perspective where harmony is central.”

Participant 7

This identity has been particularly clear in individuals that worked in helping professions, several Participants reported they were in these roles because they enjoyed helping people, or hinted they felt this was part of their identity.

“Everybody is there, because we love to do what we do. We help people.”
Participant 4.

**Teaching values.** Some reported wanting colleagues to appreciate them as a person who taught their colleagues and supported them to grow. Those exhibiting these values tended to see themselves as wise and felt their wisdom was sought out by colleagues.

“I feel like I am a very open person that people can approach, and I just try to pass the knowledge on to them.”

Participant 5

Within this cohort of participants, Participant 4 spoke most of the values related to teaching and sharing. Participant 4 spoke of how she had been “sowing seeds of practice”, and felt it was important to support her colleagues in their learning.

“I hope I’ve been able to share that, in either just how I am and maybe sometimes by actually teaching people.”

Participant 4

She felt the way she behaved in the organisation was important, because it “influenced people.”. She felt the most important role she had was to help “people learn and grow from where ever they are”.

**Changes in interpersonal behaviour in the workplace**

As a result of the internal changes brought about by mindfulness, and filtered through values, participants decided on changes they wanted to make in the way they behaved with their colleagues.
Creating more space from colleagues. Participants with professional values reported feeling they wanted time away from their colleagues, in order to care for their own wellbeing. This space from colleagues was often physical, and participants described finding it difficult to manage making time for themselves and spending time with others.

“[Mindfulness exercises] took me away from my work colleagues. ... it’s hard to find that time without it taking away from that social time.”

Participant 1

For some, they could also develop a psychological space from colleagues, where they felt more distanced from difficult interactions.

“I used to just really get angry... mindfulness just helped me to take a step back, and just watch, it was like it was a movie.”

Participant 6

Being more assertive. Two participants reported the practise increased assertiveness. They reported the reduction in high emotion allowed them to have difficult conversations about things they were not happy with.

“I think I was able to have a conversation ... And say actually it isn’t appropriate for you to bring a client to my desk and ask me to make a cup of tea in front of them... Yeah I think its how I am able to do that more in this job as well.”
Participant 2.

**Being less likely to react negatively.** Participants exhibiting both professional and teamwork values reported they were becoming less reactive in situations where colleagues upset them. Several gave examples of confrontations in the workplace that would have previously ended differently. For some, their style of communication changed, from snappy or aggressive to more controlled.

“If I got stressed I would say things and not realise things could be hurtful but now I find other ways ... I [am more] able to be controlled.”

Participant 3

Some felt they would have been more involved in a situation in the past, perhaps arguing or trying to ‘fix’ a situation; but instead they chose to step back and leave the situation alone, perhaps also reflecting on the feelings of the other person.

“Mindfulness just helped me to take a step back ... I had a chance to do what I need to do, rather than being feeling and potentially acting aggressive.”

Participant 6

“Instead of getting annoyed and defensive about it... I think it just helped me be a little more understanding and more willing to have a conversation with people about their anxieties.”

Participant 2

“I think mindfulness made me more tolerant.”

Participant 2
**Showing gratitude.** Another common change in behaviour was showing gratitude to colleagues. This was especially reported by participants with teamwork values. This was achieved through first engendering a more internal appreciation for colleagues, and then sharing those feelings with them.

“The more you practice that the more you feel a sense of gratitude and appreciation for all things... more appreciative of the people around you.”

Participant 7

“I make sure I say thank you for everything and really value what they do.”

Participant 3

**Being helpful to others.** Individuals with teamwork values endeavoured to help their colleagues more.

“Being kinder towards other people... I think caring for myself opens up a little more space to notice how other people are feeling and thinking; looking after my colleagues as well.”

Participant 1

“If someone comes to speak to me... I always make an effort... what can I do to help you?”

Participant 3

“I can enquire whether everything is OK. Before I would either ignore it ... I am definitely more involved in reaching out and supporting others.”

Participant 5
**Sharing feelings.** Those with teaching and teamwork values reported being more able to share their feelings with their colleagues. Some participants reported they felt this approach was healthier. In workplaces that had a shared culture of mindfulness, participants reported the environment encouraged openness, and this behaviour was practised by most employees within these organisations (e.g. participants 7 and 4).

“You feel as though you can talk to somebody... I’m sure that does create a sense of openness.”

Participant 7

“I think I wasn’t always like this... mindfulness has helped... I’m not as closed as I used to be.”

Participant 8

**Sharing mindfulness.** A change in behaviour that was unique to those describing teacher values, was sharing mindfulness. The extent to which individuals shared mindfulness in the workplace varied. Some would drop hints to their colleagues that they may need a better way to cope with their difficulties. Others told stories about mindfulness, or informed others of their own experiences.

“I share my mindfulness experience with others... I try to provide them with knowledge about being in the present and even maybe sharing with them quotes or stories that I had found through my training.”

Participant 5
Those that most strongly held teacher values chose to teach mindfulness to colleagues, found ways to integrate mindfulness in to their workplaces or change workplace environments and processes to be more mindful.

“I have been able to share that just by how I am and maybe sometimes by teaching people.”

Participant 4

“I have reached a point now where I am able to learn, and help people to learn and grow from wherever they are.”

Participant 4

**Working to improve communication.** Many participants reported feeling they could communicate better with their colleagues. Changes in behaviour within this theme were largely centred around listening to others, which they reported led to “richer” communication.

“I think I take more time to listen... its made me more aware of whatever they’re saying... I just let them vent.”

Participant 5

“[Developing] the ability to really listen deeply to people.”

Participant 4

“I think through practice we are able to, find a buffer to go okay I can listen to your point of view”

Participant 7
“Starting anything with practise opens up a much richer and deeper level of communication.”

Participant 4

**Spending time with valued colleagues.** Most participants noticed they were more motivated to spend time with colleagues. This change was motivated by better understanding of their anxiety around being with colleagues, whether related to insecurities around themselves or around the quality of their work.

“I have ... cultivated some relationships ... I feel that I was closed up prior to my mindfulness and now that I am more open, less insecure and more comfortable with myself. Its made these relationships grow and blossom.”

Participant 5

“Being embedded in the team is a good way to spend time... I think maybe [I] placed a bit more emphasis on getting to know people.”

Participant 1

In other instances, it was self-reflection on the positives of colleague relationships that motivated more time spent with colleagues.

“mindfulness helped me to notice how good it made me feel to talk to them... To notice those positive relationships and want to spend more time with those people.”

Participant 1

**Reactions of colleagues**
Participants spoke less often about the reactions of their colleagues than they did their own behaviours and feelings. As such, some connections in this section are more speculative and feature less extracts from the data. Some colleague reactions were discussed, which mostly focused on assumptions around colleague thoughts and feelings, and these were grouped in to the themes below.

**Colleagues felt rejected by participants.** In response to participants creating space from their colleagues, it was reported participants thought their colleagues felt rejected, which sometimes led to feelings getting hurt.

“I think those people definitely felt distanced from me.”

Participant 6

“I sat there and I said you can’t do that to people while they’re meditating. She felt very hurt by this, as she’s quite a sensitive soul too.”

Participant 8

**Colleagues felt participants were calm.** The steps participants had taken to regulate their emotional response, and the reduction in reactions to negative experiences, led some participants to feel their colleagues experienced them as calm and respected.

“That probably does have an effect on relationships in terms of just coming across as a much more calm less frantic or less stressed person.”

Participant 1

“I’m seen as somebody who is strong and thoughtful and calm. People see me as someone who can deal with a tough situation.”
Participant 6

At times it was reported that these feelings had been verbally fed back to participants.

“A lot of my co-workers come to me and say as a peer I [am] more respected”

Participant 5

“People were noticing that I was appearing less stressed, and handling things better... People would say how you doing this, how you handling this, how can you stand this?”

Participant 6

Colleagues felt participants were avoidant. An alternative reaction to feeling calmer colleagues were calm and respected, was experiencing them as avoidant. This was especially the case with colleagues who were reported to “like the fight”.

“I used to come up against that culture in a previous job. Sometimes maybe people thought I was weak or I was sitting on the fence, or I was not getting into the fight.”

Participant 7

Colleagues felt valued by participants. For participants who chose to show more gratitude, it was reported some colleagues enjoyed feeling noticed and appreciated.

“I found myself saying those things. Which in turn has strengthened relationships... People like to be noticed and they like to be appreciated. I think that also helps.”
Colleagues sought out participants for help and support. It was reported in some cases colleagues sought out support from participants, especially those who held values about teamwork. This also had a link with emotional regulation.

“Maybe they perceived me as a little bit calmer and not as worrisome... maybe that had an impact on their anxiety. I think it meant that if someone was worried they would call me up.”

Participant 2

“It’s about not carrying anger or resentment with you. It’s something that I continue to pass on to other people. People I know come to me and confide in me with their problems.”

Participant 5

Colleagues felt participants were condescending. A different reaction to participants helping and sharing mindfulness was feeling condescended to.

“She saw that as, I thought I was better than her; “you just think you’re better than me.”

Participant 6

Although in some instances this was fed back more directly, there were also instances where participants described colleagues being reluctant to take advice, perhaps suggesting they did not feel genuinely helped. Despite this, it often seemed that participants felt that mindfulness would eventually help their colleagues.
“It’s funny I think a lot of people just don’t buy into it... I’ve just been suggesting and sharing how it’s helped me, they kind of smile, say yeah yeah yeah, but they haven’t embraced it yet.”

Participant 6

**Colleagues felt uncomfortable about mindfulness.** One of the most commonly discussed reactions was discomfort in response to the nature of the practise. Often participants felt their colleagues were reluctant to engage in anything mindfulness related, and at times referred to the practise in ways that were derogatory. This could make the relationship uncomfortable and at times engendered negative feelings from both the participant and their colleague.

“One person called it the cuddly group ... and it did give us the hump when people were talking about it like that.”

Participant 2

“It’s overlooked or seen something kind of hippie.”

Participant 6

“One of them did call me a hippie child.”

Participant 8

**Discussion**

This research intended to develop theory on how mindfulness practise influenced colleague relationships. Participants reported skills associated with mindfulness practise allowed for change in interpersonal behaviours, in line with
their values. Behaviours were suggested to result in positive or negative reactions from colleagues.

**Mindfulness leads to internal changes**

Participants reported they found mindfulness facilitated the development of internal changes. The first, slowing down, is not often reported as a facet of mindfulness (Baer, Smith, Hopkins, Krietemeyer & Toney, 2006). There is evidence mindfulness practise influences an individual’s experience of time passing. Studies have shown mindfulness both increases time sensitivity and that attentional changes in mindfulness cause longer perceived time duration (Drior-Violet, Fagget & Dambrun, 2015; Kramer, Weger & Sharma, 2015). Older models suggest physiological effects of mindfulness, such as lowering pulse rate, cause slowing of the internal clock, through a reduction in arousal. Studies which have shown sedatives to cause perceived slowing, support this model (Meck, 1996). It may be considered the lowering of physiological arousal often seen after mindfulness practise, leads to a perceived slowing of time passing.

Although the current study did not investigate physiological arousal, the idea that mindfulness may reduce emotional arousal was reported by these participants under the theme Emotional Regulation. In neuropsychological research, this link has been displayed through neuroimaging and self-report of regular meditators (Lutz, Bruhl, Doerig, Scheerer, Achermann, Weibel, Janke & Kerwig, 2016). A review of studies investigating changes in brain structure found differences in the anterior cingulate cortex, mid-cingulate cortex and orbitofrontal cortex of regular meditators, areas related to self and emotional regulation (Tang, Holzel & Posner, 2015). It has been seen in neuroimaging, that active mindfulness during a stressful experience
reduces activation in neural circuits which fire during emotional arousal (Opialla, Lutz, Scherpiet, Hittmeye, Janke, Rufer, Holtforth, Herwig & Bruhl, 2015). Studies in the workplace have shown engaging in self-help mindfulness increases emotional regulation and decreases emotional exhaustion (Hulsheger, Alberts, Feinholdt & Lang, 2013). A small number of regular meditators reported mindfulness improved relationships in the workplace through emotional regulation (Hunter and McCormick, 2008). Both experimental and neuroimaging findings offer strong support to the idea that mindfulness would improve emotional regulation. Research that this could in turn influence relationships in the workplace is at present still developing.

In addition to the brain areas related to emotional regulation, mindfulness has been found to create brain structure changes in the frontopolar cortex, an area related to self-reflection (Tang et al., 2015). Researchers have found mindfulness training facilitates Metacognitive insight (the experience of one's thoughts and emotions as events in the mind rather than direct experience of reality) (Teasdale, Moore, Hayhurst, Pope, Williams & Segal, 2002). Several models which have sought to explain the mechanism of mindfulness in psychiatric illness, suggest that metacognitive processing develops with mindfulness practise, protecting individuals from being completely immersed in experiences (Wells, 2005; Wells, 2002; Shapiro, Carlson, Astin & Freedman, 2006). As such, it appears mindfulness allows individuals to take a lesser stance on their experience leading to increased reflection and improved emotional regulation. It is of note, that these links have not been previously reported within the context of workplace relationships.
Another area not previously researched within the workplace is mindfulness and intentionality. Two studies of mindfulness' influence of health behaviour suggested mindfulness moderated the link between intention and behaviour in both positive and negative health behaviours (Chatzisarantis & Hagger, 2007). The paper also drew attention to an inverse relationship between Mindfulness and habit. Individuals were seen to carry out behaviours based more on intention than habitual pattern.

Empirical findings support the claims within this research that mindfulness allows individuals to develop skills in order to manage their internal worlds. Although participants felt these themes were linked, the specific relationships between these were not commonly discussed by participants. The discussed research suggests mindfulness practise allows an individual to self-reflect. This detached reflection may allow for improved emotional regulation (e.g. Wells, 2002), which in turn leads to the experience of slowing down (e.g. Meck, 1996). From participant reports it may be concluded the combination of these three related skills, in turn, lead to increased intentionality.

**Mindfulness leads to behaviour in line with values**

The finding that interpersonal behaviour change is influenced by values related to workplace functioning, has not been previously investigated. This relationship however, has been seen in a range of problem areas, including substance abuse, depression, eating disorders, overeating, and chronic pain (Levin, Luoma & Haeger, 2015). The idea that mindfulness, values and behavioural change are linked, is not new, but forms a partial basis for Acceptance and Commitment Therapy (ACT).
There is no current evidence that ACT could improve relationships in the workplace. Its value as an intervention, which combines mindfulness and consideration of values, is well documented in depression, anxiety, addiction and some somatic health conditions (A-Tjak, Davis, Morina, Powers, Smits & Emmelkamp, 2015). The role of ACT in interpersonal relationships has not yet been empirically researched, though the ideas behind the approach have been applied to relationships theoretically. It has been suggested values allow individuals to consider what is important for them in relationships. The awareness of these values allow the individual to take the actions needed to maintain the relationship. Mindfulness also allows people to connect with all aspects of their relationships (Dahl, Stewart, Martell & Kaplan, 2015). The theory also suggests there are behaviours which maintain maladaptive interpersonal relationships.

The same theory applied to these findings may suggest mindfulness practice, and the internal changes that come with it, led individuals to a higher awareness of the values they held around their workplace relationships. This awareness may have led to an understanding of the actions needed to maintain these. Dahl et al (2015) suggest ACT has a role in creating fulfilling relationships. This could provide an interesting route for further research and the development of interpersonal interventions, which may be applicable to the workplace.

During analysis it was unclear where in the process values should be placed. Discussion with participants resulted in values being placed after the effects of mindfulness, and before behaviour change, acting as filters, in the present model. On reflection, values could well pre-date mindfulness, belonging before the effects of mindfulness. If this were the case, then it may be certain values influence whether a
person wishes to engage in mindfulness at all. Alternatively, they may be generated or reinforced by mindfulness, belonging further down in the process model. Exploration of these ideas could provide an interesting avenue for future research.

**Mindfulness can lead to interpersonal behaviour change**

Participants within the current study reported a range of interpersonal behaviours had increased, decreased or changed since taking part in mindfulness practice. Although previous research predominantly focused on the feelings and thoughts of participants (Dekeyser, Raes, Layssen, Leysen & Dewulf, 2008), there is some evidence mindfulness can lead to interpersonal behaviour change in the workplace. Studies found individuals who engage in mindfulness feel they are more selfless, helpful, tolerant, and assertive (Hunter & McCormick, 2008; Richards et al. 2006; Mulvaney, 1994; Forbes, 1999), with better team working (Singh et al., 2006; Cleirigh & Greaney, 2014) and better communication (Forbes, 1999; Good et al, 2016). Outside of the workplace, a review found mindfulness had been shown to lead to increased closeness, improved communication, increased capacity to communicate emotional information, increased helping behaviour (Good et al, 2016)

Other behavioural changes were more unique to the current research. Creating distance from colleagues, increasing time spent with colleagues, sharing feelings and sharing mindfulness have not been seen in research conducted on this topic. It may be the open question and nature of Grounded Theory allowed for individuals to speak about changes in behaviour that may not have been hypothesised in other methods of research. As such, these may provide interesting avenues for further research.
Reactions of Colleagues

The current research was original in its qualitative investigation of the perceived reactions of colleagues of a mindfulness practitioner. Only one available quantitative study investigated colleague ratings of relationship quality (Giluk, 2010). That study found a negative correlation between mindfulness and colleague rated relationship quality, however the study used a mindfulness intervention which was short term, and may not have produced significant change in mindfulness skills (Giluk, 2010). The findings of the two studies compared, provides several new questions that may point to new avenues for research. These include whether the length of time a person practises mindfulness has an effect on their colleague’s reactions to this.

In addition, Giluk (2010) made use of an aggregate score from five colleagues. This may have removed the differences in reaction from different colleagues, which could be seen in the present study. This research’s participants felt there was variation in their colleague’s reactions, which was difficult to predict. Participants were asked about this, but struggled to explain a reason. As such, speculative hypotheses about this outcome have been explored by the researcher using existing theory and empirical support. Some memos around this outcome focussed on the approach or avoid nature of the interpersonal behaviours and their reactions. This led the researcher to consider whether attachment style (Bowlby, 2005) could have role in colleague reactions to behavioural changes.

Studies have suggested individuals have different preferences for interaction styles at work, depending on attachment style (Harms, 2011; Sias, Gallagher, Kopaneva & Pederson, 2012). This collection of empirical evidence suggests that
those with an avoidant attachment type prefer less interaction with colleagues. The approach behaviours of others are likely to be threatening. Those with anxious attachment styles are likely to be connection seeking, and prefer comfort, attention and psychological support from colleagues. For these individuals, retreat behaviours are likely to be threatening. Secure individuals are likely to be able to tolerate both the approach and retreat of others (Harms, 2011; Sias et al., 2012). It could be considered the combined findings of these studies, and the current research, point to the hypothesis that while secure colleagues may be more able to tolerate Participant changes in behaviour, insecurely attached colleagues may be more likely to find these changes threatening and react negatively. Specifically, avoidant colleagues may have reacted negatively to participants being helpful and spending time with colleagues, while anxious colleagues may have felt threatened by participants creating space from colleagues or being more assertive. In addition, it could be considered the attachment style of the mindfulness practitioner could have some effect on the outcome of an interaction. Though tentative, this perceived possible link between mindfulness interventions, attachment style, and colleague relationships may benefit from further investigation.

A finding unique to this research was the perceived negative reactions of colleagues to Teaching values. Although perhaps explained by attachment, this unusual finding prompted some reflection. If colleagues who are unhappy at work, are more likely to attempt to change (or teach) themselves and their colleagues, those who are unhappy at work may also have the worst workplace relationships (Abbey, 2015) both before and after mindfulness training. Further analysis of this idea may prove an interesting direction for the research.
In conclusion, the findings of the current study and the research discussed above suggest Mindfulness practice allows for the development of detached self-reflection, leading to improved emotional regulation, which in turn leads to a slowing down sensation. Participants perceived the combination of these skills to lead to an increase in intentional behaviour. The values individuals hold about how relationships in the workplace are exhibited in the behaviours they choose. The reactions of others to these behaviours are perceived as unpredictable by the participants, and as such further investigation of these reactions is required.

**Limitations**

Grounded Theory appeared well selected for the current study. The use of constant comparison, letting the theory emerge from the data, allowed for interesting new avenues not considered in the previous literature review (Millward, 2014), or during the planning of the study. Findings included previously un-researched links, such as that between mindfulness and values in workplace relationships. However, the extent to which the researcher developed the theory may form the first limitation. The breadth the theory covered proved hard to finalise in the available time, and some avenues could have been explored further, such as interviewing current participants about attachment or investigating how “relationship focussed” each individual’s mindfulness practise was. As such, some areas of this theory are sparser than others, especially those that were harder to ground in data. These avenues perhaps form the most useful and interesting for future research. With more time, the theory may have focussed more on these areas of the model, with further interviews to clarify and expand on the interesting findings within the third and fourth overarching themes. As such, this theory can be best understood as an abbreviated Grounded Theory (Willig, 2001).
Although participants were selected using theoretical sampling, it is necessary to consider perhaps those with particularly difficult workplace relationships, a high expectation of mindfulness, or a particular need to portray themselves as a mindful colleague, volunteered. Interviewing individuals who do not practise mindfulness may have provided useful information for comparison. Further theoretical sampling to test these hypotheses would have bolstered the theory. In addition, interviewing the colleagues of the participants would have been an interesting avenue to explore, and would have strengthened development of the theory considerably.

In addition to recruiting non-practitioners as comparison, interviewing colleagues of participants to further explore a non-practitioner colleague’s experience would have provided an interesting avenue for exploration. Unfortunately, non-practitioners were difficult to recruit. It may be the high level of input required from participants (an hour long interview plus further correspondence) made the study unattractive to these individuals. Future studies may benefit from recruiting from this pool by limiting the input needed from participants. This may be achieved through using shorter interviews, online surveys, or through email interview. **Implications**

**Furthering theory.** This study found participants perceived their practise to slow them down, increase self-reflection and improve emotional regulation in the workplace. Although these outcomes have been investigated individually, the links between them have not been analysed previously. A larger scale quantitative investigation of these variables in mindfulness practitioners in the workplace, compared to non-practitioners may be useful in better understanding the mechanisms of mindfulness in the workplace. Path analysis could be used to investigate these links, and possibly to extend the analysis to workplace relationship satisfaction.
Reviewing the research base showed that while there was empirical evidence for mindfulness leading to some behavioural changes, others such as creating distance from colleagues, increasing time spent with colleagues, sharing feelings and sharing mindfulness were not previously investigated. Thus, analysis of these workplace behaviours in mindfulness practitioners compared to non-practitioners may provide a future direction for mindfulness and colleague relationship research. Such investigations could be carried out quantitatively with self-report measures, or observation. Alternatively, qualitative interviews of mindfulness practitioners focussing on this subject would provide rich supporting data for this theory.

The hypothesised role of attachment in this study provides a new avenue for future research, which could serve to link the mindfulness and attachment literatures on workplace relationships. Tentative hypotheses in this research included the suggestion that colleague reactions to behaviour change caused by mindfulness practise, is mediated by colleague attachment style. Due to its lack of current empirical evidence, it would be appropriate for this to be investigated using a qualitative approach, interviewing both participants and colleagues, and perhaps analysing thematically to develop understanding. This could then be followed up with more quantitative methods.

A final theoretical direction could be the investigation of variables not investigated here due to time constraints. Contradictions in the research base for mindfulness’ influence on workplace relationships caused the researcher to question what affects these outcomes. Two key variables which arose from this research were whether length of time a person has practised mindfulness has an effect on their colleague’s reactions, and whether perceived reactions of participants are different
from their colleague’s perceptions. These could be investigated through the sampling of practitioners who have practised for different amounts of time, and of colleagues of mindfulness practitioners.

**Further interventions.** One of the aims of the present study was to move toward interventions to improve workplace relationships. Although this study does not identify a specific workplace intervention, it does identify some possible avenues for intervention studies in the future.

Giluk’s (2010) study concluded mindfulness interventions in the workplace may benefit from a specific relationship focussed component. Specific relationship focussed modifications, such as partner exercises, a focus on loving-kindness meditation, application of mindfulness to relationship issues, and homework assignments focussing on shared mindfulness practice, produced good outcomes. These included higher levels of relationship satisfaction, closeness, acceptance and a reduction in stress (Carson, Carson, Gil & Baucom, 2004). Such an intervention has not been applied in a workplace environment and tested empirically, but this may form another avenue for future research. Some of these interventions would require both individuals involved in the colleague relationship to engage in the mindfulness course, which may not always be achievable in a workplace environment.

The finding that behaviours associated with the teaching values seemed to be most associated with negative colleague reactions, may identify this as a possible area for intervention. If we assume these participants felt their colleagues were not mindful enough, it may be interventions in the workplace would benefit from some focus on the acceptance of other’s views and experiences, as well the acceptance of one’s own experience which is inherent to the practise (Fruzetti & Iverson, 2004).
This idea has been explored theoretically in the context of intimate relationships (Fruzetti & Iverson, 2004), and is proposed to be achievable through mindfulness as used in Integrative Behavioral Couples Therapy (IBCT) (Jacobson, Christenson, Prince, Cordova & Eldridge, 2000), through empathic joining, unified detachment, and tolerance building. The IBCT evidence base suggests it has good utility in distressed intimate couples, but as yet has not been tested in workplace dyads (Fruzetti & Iverson, 2004). An intervention which borrows elements from this therapy may serve to reduce some of this negative effect.

An alternative intervention may be the use of ACT approaches. The link between ACT approaches and workplace relationships was suggested in this discussion. An intervention study which investigated the utility of ACT as a workplace intervention which influences workplace relationships may be of use, especially if this was conducted as a good quality qualitative study or randomised control trial.

References


University of Surrey. (2001). *Faculty of Arts and Human Sciences Good Research Practise Guidelines*. Guildford, UK: University of Surrey


# Appendices

<table>
<thead>
<tr>
<th>Appendix 1: Evidence of Ethics Approval</th>
<th>139</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appendix 2a: Supporting Information: Grounded Theory Canon Consideration</td>
<td>140</td>
</tr>
<tr>
<td>Appendix 2b: Supporting Information: Credibility Consideration</td>
<td>145</td>
</tr>
<tr>
<td>Appendix 2c: Supporting Information: Free writing excerpts and commentary</td>
<td>147</td>
</tr>
<tr>
<td>Appendix 3a: Recruitment materials: Correspondence</td>
<td>150</td>
</tr>
<tr>
<td>Appendix 3b: Recruitment Materials: Flyer (A5)</td>
<td>151</td>
</tr>
<tr>
<td>Appendix 3b: Recruitment Materials: Poster (A4)</td>
<td>152</td>
</tr>
<tr>
<td>Appendix 4: Consent Form</td>
<td>152</td>
</tr>
<tr>
<td>Appendix 5: Information Form</td>
<td>154</td>
</tr>
<tr>
<td>Appendix 6: Interview Schedules</td>
<td>156</td>
</tr>
<tr>
<td>Appendix 7: Coded Examples from Transcripts</td>
<td>157</td>
</tr>
<tr>
<td>Appendix 8: The development of a theme: Intentionality</td>
<td>158</td>
</tr>
<tr>
<td>Appendix 9: Journal Guidelines</td>
<td>162</td>
</tr>
<tr>
<td>Appendices References</td>
<td>177</td>
</tr>
</tbody>
</table>
Appendix 1: Evidence of Ethics Approval

Faculty of Arts and Human Sciences
Ethics Committee

Chair’s Action
Proposal Ref: 1076-PSY-14
Name of Student/Trainee: ELIZABETH MILLWARD
Title of Project: A Grounded Theory Investigation into Mindfulness’ influence on Colleague Relationships
Supervisor: Linda Morison
Date of submission: 15th December 2014
Date of re-submission: 13th February 2015

The above Research Project has been re-submitted to the FAHS Ethics Committee and has received a favourable ethical opinion from the Faculty of Arts and Human Sciences Ethics Committee on the basis described in the protocol and supporting documentation.

The final list of documents reviewed by the Committee is as follows:

Protocol Cover sheet
Summary of the project
Detailed protocol for the project
Participant Information sheet
Consent Form

This documentation should be retained by the student/trainee in case this project is audited by the Faculty Ethics Committee.

Signed and Dated: [Signature]

Professor Bertram Opitz
Chair

Please note:
If there are any significant changes to your proposal which require further scrutiny, please contact the Faculty Ethics Committee before proceeding with your project.
Appendix 2a: Supporting Information: Grounded Theory Canon Consideration

1. Data Collection and Analysis Are Interrelated Processes. The process of analysis began early in the data, after the first interview, which then informed participant selection, interview schedule and data analysis in subsequent interviews. This process is intended to lead to the collection of the most pertinent data to deepen and refine categories and later ideas (Charmaz, 2014). Throughout data collection, the data was being screened for provisional avenues of investigation, especially those that gave ideas of conditions, actions or consequences.

2. Concepts Are the Basic Units of Analysis. Coding focused on concepts discovered rather than the raw data. I asked questions of the phenomena described, during the coding process, such as who, what, when, why and how, to thicken concepts.

3. Categories Must Be Developed and Related. Related categories were grouped to form categories where possible, thus raising the theory to a more abstract level.

4. Sampling in Grounded Theory Proceeds on Theoretical Grounds. The analysis made use of theoretical sampling throughout to develop concepts and categories and further inform theory. Early coding and memos identified ideas that emerged from the data which informed sampling. Following the first two interviews, analysis revealed that there may be something specific to working in healthcare that was having an effect on these individuals’ relationships at work. To further elaborate on this idea, individuals that did not work in health care were selected next, and another individual in health care subsequently. Commonly repeating codes about the influence of the mindfulness group prompted me to consider involving individuals
that learnt and practised mindfulness alone. Diagrams showing this process can be found in Appendix 8.

5. Analysis Makes Use of Constant Comparisons. Every incident noted was compared back across other incidents already identified. Once concepts began to form these were compared to delineate concepts from one another, or combine those that were theoretically similar. I compared categories across transcripts and other data sources, and the theory was applied to the text repeatedly, amended and reapplied to ensure grounding in data.

6. Patterns and Variations Must Be Accounted For. Patterns and variations were noted in memos and often discussed in interviews or meetings. These often induced theoretical sampling or further analysis of the data, to result in theoretical explanations that were well grounded in the data examined. The interview schedule used was in line with Glaser’s (1992) account of Grounded Theory. The initial interview schedule contained only ‘warm-up’ questions about demographics, the type of mindfulness the person practiced and their work, followed by two open questions about the research topic (How do you feel mindfulness influences you at work? How does mindfulness influence how you relate to your colleagues?). I used further prompts to allow the participant to expand or clarify relevant topics. It is of note that Charmaz (2014) notes that conducting interviews without a schedule would be an ideal way to keep with the participant’s agenda, but this approach can lead to missed leads and tangents, which would be worrisome in research with such a strict time limit. As analysis progressed, the interviewer used prompts for specifically sensitized topics and added additional questions. This process can be seen in full in Appendix 6.
7. **Process Must Be Built In To the Theory.** Coding and analysis were focussed on the process of how participants responded to conditions and the consequences of these actions. Interview questions and analysis were intended to “catch” this interplay (Corbin & Strauss, 1990). Process analysis was used to, at times, identify stages in theory, but also to determine where actions or interactions made changes to conditions or consequences.

8. **Writing Theoretical Memos Is an Integral Part of Doing Grounded Theory.** I kept memos from the stage of developing the research question, to the final writing stages of this research. Early memos focused on issues and gaps in the data or pertinent topics that related to the research question. Throughout the process memos were used to track categories, apply theory, ask questions of the data, expand thinking and develop a theoretical thread. All memos were coded and implemented into the analysis.

9. **Hypotheses About Relationships among Categories Should Be Developed and Verified as Much as Possible during the Research Process.** Initially, the analysis took the form of line by line coding of the typed transcripts (Appendix 7). Active codes were used to identify process, and theoretically meaningful concepts were identified as opposed to purely descriptive codes, as recommended by Charmaz (2014). The codes were then used to determine focused codes, through the classification of regularly occurring or particularly relevant codes into larger categories. These codes were compared back to the original transcripts to preserve the participants meaning, and grouped into higher-order categories. I presented higher-order categories to participants to get further feedback and clarification. Their responses were then coded and worked into the analysis. Throughout the entire
process, memos were kept. These focussed on research related decision making, my assumptions, links between concepts and personal reflections on interviews and theory emergence. [code lists in appendices]. As hypothesis developed into abstraction, they were also verified with participants and supervisors, developed, and checked back against the data.

**10. A Grounded Theorist Need Not Work Alone.** I often met with a peer support group of qualitative researchers and discussed progress with two research supervisors regularly. Also, I frequently discussed findings with colleagues and friends who had an interest in either the functioning of work teams or mindfulness. Discussion opened up new questions and criticism for me to consider, resulting in further Memos.

**11. Broader Structural Conditions Must Be Analyzed, However Microscopic the Research.** Wider contextual conditions of this research are explored in the discussion section of this research and implemented in the final theory explained in the conclusion. As recommended by Glaser & Strauss (1967), the data used to form the theory came from various sources. Participants sent emails, articles, letters and called to further the researchers understanding of their experience. The information held in these interactions was coded and analysed in the same way as the transcripts. Also, in writing this report, the theory was altered with increasing knowledge of the subject area. Although the theory and description included in the Analysis section of this report contains only data found in contact with the eight participants, memos and conversations with other researchers, the theory presented in the conclusion also makes use of theoretical and empirical evidence which has been coded and analysed using the categories from analysis. Such a separation was intended as a precaution, to
protect the original data from participants becoming too swayed by current literature (Corbin & Strauss, 1990).
Appendix 2b: Supporting Information: Credibility Consideration

Yardley (2000) highlights four areas of credibility in qualitative research. These areas were considered in the formation of this report according to Yardley’s (2000) guidance;

**Sensitivity to context.** Sensitivity to context was achieved through both analysis of theory in the prior literature review, and additional reading. I examined the philosophical and theoretical background of the research approach to properly apply the method. Comparisons have been drawn between this research and previous literature in both the analysis and discussion of this report. I attempted to engage with, and account for, findings that were unusual or unexpected. Reflection sections of this report have been used to ground the data in the interpersonal context of the interview.

**Commitment and rigour.** Yardley (2000) describes commitment as the prolonged engagement with the topic. I had been involved in mindfulness in a variety of contexts over the last three years, to strengthen their understanding of the subject. Also, I have been developing competence and skill in grounded theory over the past two years. Finally, I conducted interviews, transcribed, and analysed the data myself, to ensure true immersion in the data. Rigour refers to the completeness of the data collection and analysis. I continued to recruit participants until saturation of concepts was reached. No new codes were found after interview seven; two subsequent interviews were conducted to confirm saturation. Also, interviews were sometimes repeated to ensure completeness of data. Rigour also includes the completeness of interpretation. The analysis was drafted and redrafted several times during the writing of this report. Participants were regularly consulted on the findings and fit.
Transparency and coherence. Transparency and coherence refer to the clarity and persuasiveness of the description and arguments. According to Bruner (1991), the function of a report of this nature is not to describe but construct a version of reality. It is important that this version of reality be convincing, and grounded in the data. The transparency and coherence of the model explored here were increased through regular feedback from the participants, other grounded theory researchers, and supervisors. Feedback was used to create a realistic and meaningful theoretical story that was familiar to its readers. Transparency in the presentation of the analysis and data was achieved by detailing data collection processes in detail. The process of coding, memo writing, and subsequent analysis are detailed in excerpts found in the appendices (Appendix 7 and 8). All relevant aspects of the research process were disclosed. My assumptions intentions and actions were openly reflected on to explore how these factors affected the research investigation.

Impact and importance. The impact and importance of this report are discussed in the discussion and introduction sections of this document.
Commentary: Charmaz (2006) highlights the importance of self-reflection throughout grounded theory research to develop good quality theory. I conducted this research throughout my second and final year of a doctoral program in clinical psychology. I worked in three services, two NHS mental health services, and a military facility. During this time, I used mindfulness in therapeutic work, both explicitly and implicitly, and continued to practise mindfulness in my personal life, in both individual and group contexts. The grounded theory approach asks that researchers continually reflect on the effect their assumptions and bias may have on the research outcomes (Strauss & Corbin, 1990).

Before completing this research, I had assumed that other people would find that mindfulness had alleviated emotional difficulties, and that this would allow them to reflect on their relationships. This assumption arose from reading previous research into mindfulness as a therapeutic approach for low mood, and my own experience of mindfulness. I have found that the more I practise mindfulness, the more I able to reflect on how my relationships make me feel and monitor my reactions to this. As such these findings did not often draw my attention in my analysis as much as those to contrary. It took large amounts of reflection with my supervisors for me to give this phenomena equal credence as that which was contrary to my assumptions. My understanding of the skill also meant that the description of the experience of developing mindfulness practise by participants was initially underdeveloped. I was brought up with Buddhist values and ideas throughout my life, and as such carry much of the philosophy in high regard and may have been more receptive to positive sides of my participant’s reports. I was also aware of previous research that suggested negative outcomes and was interested in this
finding, which may have made me more sensitised to outcomes that were negative. I had no ‘before and after’ experience of mindfulness and its influence in the workplace and was interested to hear about this. As such the interview schedule often had a chronological element to it, with questions often posed around when they learnt mindfulness, at a discrete moment in time. It soon became apparent this was rarely people’s experience of mindfulness, and instead their knowledge and skills continued to develop over time.

Commentary: As mentioned in the excerpt, early drafts often focussed much more heavily on negative reports than positive. It took reflection to move the analysis to something more balanced which was more closely grounded in data than my own interests. The resulting theory gave equal weight to negative and positive outcomes, which also allowed for more useful implications than a largely negative theory may have done.

The focus on before and after took a long time to shift. A closer focus on process through coding actions was useful and resulted in a theory that showed progression through stages for the practitioner, with other links that were more cyclical or without clear chronology which more accurately showed, mindfulness practitioner experience.

I had more experience in quantitative data and as such the nature of sampling and interview maybe started more concrete than is recommended in Grounded Theory Research. Throughout the process, and as I learnt more about the approach, interviews and sampling became more lead by the emerging theory and the interaction between my participant and myself.
Commentary: My lack of confidence in this type of analysis meant that it took longer for me to hit my stride and multiple drafts were needed. There were downsides to this approach; at times I felt lost and was not sure about how well the model fit the actual data after all of the modifications. This was rectified by going over the data with the model each time an analysis draft was amended, and checking back with my participants.

Throughout sampling, various mindfulness providers had been in touch and discussed the research. Many were very interested in the findings and asked to be informed when I had completed the research. However, these individuals had a vested interest in the research having a positive outcome, and I was aware of some pressure to feedback good news. I feel I am particularly susceptible to feeling pressure to help people and make others feel good, though I am unsure whether this is the result of my role as a trainee psychologist or whether this drive pushed me towards the vocation in the first place.

Commentary: The pressure to report good results or have implications that would help those who had helped me in the process of compiling this report continued throughout. Revisiting the aims of Grounded Theory, and considering the importance of developing new directions for research was useful in helping me to consider the ‘So What’ of this paper, and helped me feel comfortable in submitting a paper that makes a contribution that may not immediately serve the purpose of helping others.
Appendix 3a: Recruitment materials: Correspondence

Liz Millward
Trainee Clinical Psychologist

Faculty of Arts and Human Sciences
University of Surrey
Guildford
Surrey

[Insert Date]

Dear [Insert name of Mindfulness provider]

I am a Trainee Clinical Psychologist, investigating Mindfulness and its influence on workplace relationships. The research is taking place at the University of Surrey, and is overseen by Dr Linda Morison. I intend to collect data through interviews, and will be contacting possible participants in the near future.

If you are aware of any individuals that may be interested in this research, I would be grateful if you could pass my details on to them. Alternatively, flyers are enclosed should you wish to distribute these to your trainees, and posters which can be displayed if you find this more suitable.

It is not expected that participants of this study will experience any psychological or physiological discomfort as a result of taking part.

It is the participant’s choice to take part in the study, and they are able to withdraw from the study at any time. Individuals will be asked to sign a consent form, and information collected will be kept completely confidential.

I thank you in advance for your co-operation.

Yours Sincerely,

Liz Millward
Trainee Clinical Psychologist
Tel: 07982719995
Email: e.l.millward@surrey.ac.uk
Appendix 3b: Recruitment Materials: Flyer (A5)

Research starting soon:

A grounded Theory Investigation into Mindfulness’ influence on Colleague Relationships

Liz Millward, a Trainee Clinical Psychologist, is due to start investigating Mindfulness and its influence on workplace relationships. She intends to collect data through interviews, and will be contacting possible participants in the near future.

The interviews will last up to an hour, and will have a conversational style. This will allow participants to speak openly about the effects of Mindfulness training that they have found interesting. It is not expected that participants of this study will experience any psychological or physiological discomfort as a result of taking part.

It is the participant’s choice to take part in the study, and they are able to withdraw from the study at any time. Individuals will be asked to sign a consent form, and information collected will be kept completely confidential.

Are you interested in taking part in psychological research?

Contact

Should you wish to know more about this research, or have any further questions, please do not hesitate to contact Liz Millward, Principle Investigator on e.l.millward@surrey.ac.uk
Appendix 3b: Recruitment Materials: Poster (A4)

Research starting soon:

A grounded Theory Investigation into Mindfulness’ influence on Colleague Relationships

Are you interested in taking part in psychological research?  
Have you recently taken part in Mindfulness training?  
Would you like to explore how it has influenced your relationships at work?

Liz Millward, a Trainee Clinical Psychologist, is due to start investigating Mindfulness and its influence on workplace relationships. She intends to collect data through interviews, and will be contacting possible participants in the near future.

The interviews will last up to an hour, and will have a conversational style. This will allow participants to speak openly about the effects of Mindfulness training that they have found interesting.

It is not expected that participants of this study will experience any psychological or physiological discomfort as a result of taking part.

It is the participant’s choice to take part in the study, and they are able to withdraw from the study at any time. Individuals will be asked to sign a consent form, and information collected will be kept completely confidential.

Contact

Should you wish to know more about this research, or have any further questions, please do not hesitate to contact Liz Millward, Principle Investigator on e.l.millward@surrey.ac.uk or take a tear off tab below.
Appendix 4: Consent Form

Consent Form

- I the undersigned voluntarily agree to take part in the study on Mindfulness and workplace relationships.
- I have read and understood the Information Sheet provided. I have been given a full explanation by the investigators of the nature, purpose, and likely duration of the study, and of what I will be expected to do. I have been advised about any discomfort and possible ill-effects on my health and well-being which may result. I have been given the opportunity to ask questions on all aspects of the study and have understood the advice and information given as a result.
- I agree to comply with any instruction given to me during the study and to cooperate fully with the investigators. I shall inform them immediately if I suffer any deterioration of any kind in my health or well-being, or experience any unexpected or unusual symptoms.
- I understand that all personal data relating to volunteers is held and processed in the strictest confidence, and in accordance with the Data Protection Act (1998). I agree that I will not seek to restrict the use of the results of the study on the understanding that my anonymity is preserved.
- I understand that I am free to withdraw from the study at any time without needing to justify my decision and without prejudice.
- I understand that in the event of my suffering a significant and enduring injury (including illness or disease) as a direct result of my participation in the study, compensation will be paid to me by the University, subject to certain provisos and limitations. The amount of compensation will be appropriate to the nature, severity and persistence of the injury and will, in general terms, be consistent with the amount of damages commonly awarded for similar injury by an English court in cases where the liability has been admitted.
- I confirm that I have read and understood the above and freely consent to participating in this study. I have been given adequate time to consider my participation and agree to comply with the instructions and restrictions of the study.

Name of volunteer (BLOCK CAPITALS)...........................................
Signed ..................................................................................
Date .....................................................................................

Name of researcher taking consent (BLOCK CAPITALS) .......................................
Signed ..................................................................................
Date .....................................................................................
Appendix 5: Information Form

The Study

The present study is looking into how Mindfulness training might have influenced relationships within the workplace. We are using an interview format to collect information on how this sort of training might have influenced you. After this, we will look for patterns and common themes in the information you, and our other participants have given us, in order to build on our ideas of how Mindfulness might influence workplace relationships.

Potential Benefits

We hope that this study will help us to understand how Mindfulness influences workplace relationships. We hope that the findings of this study may inform workplace Mindfulness interventions, which aim to improve workplace relationships.

What will happen?

Having read this information sheet, you will have a chance to ask any questions you have about the study, before completing a consent form. We will then begin the interview, which we do not expect to last more than one hour. We have few pre-planned questions, so we hope this will feel like a conversation, and will give you a chance to talk about the effects of Mindfulness training that you have found most interesting. This will be recorded on a Dictaphone. Once the interview is complete, the researcher will take the Dictaphone and copy the audio file to a secure location, and delete your original audio file. Your interview will then be transcribed and analysed, before the research is written up.

We do not expect that participation in this study will cause you any psychological or physical harm. If you do at any point feel distress or discomfort, please let the researcher know. If you would like a contact list for local services that you can contact to discuss any distressing feelings, please ask.

Contacting other services

Other services should not need to be informed of your participation. Although we think it unlikely, should you or others be in danger, the researchers would contact relevant services as appropriate. Were this to be necessary, we would always try to discuss this with you first.

Your obligations and rights

It is up to you to decide to take part in the study. Before we begin we will describe the study and go through this information sheet. You may ask questions and we will try to answer them. If you agree to take part, we will ask you to sign a consent form. You are free to withdraw at any time without giving a reason. You may also ask that your data is not included in the research, up until [date].

If you do take part in the study, the information you give us will be anonymised and kept confidential. This is done through removing identifiable information, and replacing it with anonymous participant identifiers, and encrypted software. If you have further questions about how your information is kept confidential, please ask. Should you think that it will not be possible to make your information anonymous
(for example if there is only one person of your gender in your workplace) please let us know, and we will discuss how best to keep your information confidential.

**Complaints or concerns**

Any complaint or concerns about any aspects of the way you have been treated during the course of the study will be addressed; please contact Liz Millward, Principle Investigator on [email].

**Contact**

Should you wish to know more about this research, or have any further questions, please do not hesitate to contact Liz Millward, Principle Investigator [email].
Appendix 6: Interview Schedules

**Beginning**

**Warm up questions:**
Where did you do your Mindfulness training?
What was it like?
What do you do for a living?
Who else do you work with?

**Open Questions:**
How do you feel Mindfulness influences you at work?
How does Mindfulness influence how you relate to your colleagues?

**Prompts:**
You mentioned ……. Can you tell me about that?
Your experience of …….. sounds really interesting, would you mind expanding on that?
Could you give me an example?

**End**

Where did you do your Mindfulness training?
What was it like?
What do you do for a living?
Who else do you work with?

What is important to you in terms of the people you work with?
How do you feel Mindfulness influences you at work?
How does Mindfulness influence how you relate to your colleagues?
What elements of your Mindfulness training do you notice in how you relate to colleagues?
Do you notice any changes in how your colleagues relate to you, or how they behave, since training?
How do you think they might feel about you or your Mindfulness training?

**Prompts:**
You mentioned ……. Can you tell me about that?
Your experience of …….. sounds really interesting, would you mind expanding on that?
Could you give me an example?
Appendix 7: Coded Examples from Transcripts

Line by line

It was a real eye-opening experience. The courses increased my awareness of my emotions and my ability to choose my reactions. I became aware that although I could not control everything that happened to me, I could control my reactions, and learned to be more responsive rather than reactive. The courses encouraged me to be more compassionate to myself and consequently to others.

Interviewer: Do you think it just passing time... or... not progressing as much? What do you think has changed there that needs [inaudible]?

Person 2: Well I must admit my mindfulness practice has kind of it has been put on the back burner a little bit when I was doing the course before I would kind of do a mindful practice two or three times a week but now I tend to only do it when I am stressed. Which I know is naughty but I do other things like mindful running instead, which I guess is similar but yeah I don't know I think I think that maybe it is maybe it's just that I have been put in different teams and I am used to being in this role and in a large team and maybe that has made me more confident in putting my views across and I think the nature of the job that I do know is that we are encouraged to be more critical and to speak up and suggest ideas. But I think as well like when I was doing the mindfulness course we were kind of kind of given a name for things so I guess when we are given the opportunity to talk about a situation at work we had people using the language like being non-judgemental and accepting and all that kind of thing which I don't really have so maybe that is another reason why I don't do as... I know I am still doing things mindfully but I haven't got like the language or kind of the labels at the back of my mind now.

Interviewer: Yeah

Person 2: And I'm not running mindfulness groups for psychosis which

Focussed Coding and Early Comparisons/ Questions
Appendix 8: The development of a theme: Intentionality

NB: these processes are not necessarily linear, but have been presented as such to aid understanding.

- Initial line by line codes point to making choices and reducing habit

An example:

Research is sensitised to this and explores in later interviews through more open questioning

An example from transcripts:

**Participant:** But especially when you’re in my situation which was as a junior member of the team, and temporary I think you are naturally more wary about what you can or can’t say so Mindfulness helps with that

**Interviewer:** that’s interesting. So how do you think it helps with that wariness?

**Participant:** Like I said it gives you a bit of space. Between taking something in and reacting or not reacting to it. I think one of the key things in Mindfulness, as sure you know, is that it helps you not be on autopilot and for me one aspect of being on autopilot is reacting in kind of time honoured ways. I mean by that, reacting in the way of reacted all of my adult life, certain things might push your buttons and your immediate response is to go on the attack, or to make a
humorous comment, or perhaps kind of deflect it or anything like that.

And I think Mindfulness allows you to what the error I think it gives you the option to not go to that automatic response. Either to respond in a different way or not to respond at all. I think that’s what it does it gives you a bit of a pause, I think.

**Interviewer:** How are your colleagues reacting to that?

- Comparison of memos and highlighted text across transcripts

For example comparison of words from Participant 1 to Participant 3 and considering if this is the same theme:

- Diagramming relationships between codes and tentative themes. Memos are written about diagrams and continuous editing and refining takes place as diagrams are applied to the transcripts and new interviews take place.
Some excerpts from earlier examples:
- Code is raised to tentative theme and applied to future interview coding

- Negative case analysis: No negative cases found. Theory continues to develop
Appendix 9: Journal Guidelines

Instructions for Authors

EDITORIAL PROCEDURE

Double-blind peer review

This journal follows a double-blind reviewing procedure. Authors are therefore requested to submit:

- A blinded manuscript without any author names and affiliations in the text or on the title page. Self-identifying citations and references in the article text should be avoided.

- A separate title page, containing title, all author names, affiliations, and the contact information of the corresponding author. Any acknowledgements, disclosures, or funding information should also be included on this page.

MANUSCRIPT SUBMISSION

Manuscript Submission

Submission of a manuscript implies: that the work described has not been published before; that it is not under consideration for publication anywhere else; that its publication has been approved by all co-authors, if any, as well as by the responsible authorities – tacitly or explicitly – at the institute where the work has been carried out. The publisher will not be held legally responsible should there be any claims for compensation.

Permissions

Authors wishing to include figures, tables, or text passages that have already been published elsewhere are required to obtain permission from the copyright owner(s) for both the print and online format and to include evidence that such permission has been granted when submitting their papers. Any material received without such evidence will be assumed to originate from the authors.

Online Submission

Please follow the hyperlink “Submit online” on the right and upload all of your manuscript files following the instructions given on the screen.

SUGGESTED REVIEWERS

Authors of research and review papers, excluding editorial and book review submissions, are allowed to provide the names and contact information for, maximum, 4 to 6 possible reviewers of their paper. When uploading a paper to the Editorial Manager site, authors must provide complete contact information for each recommended reviewer, along with a specific reason for your suggestion in the comments box for each person. The journal will consider reviewers recommended by the authors only if the reviewers’ institutional email is provided. A minimum of two suggested reviewers should be from a university or research institute in the United States. You may not suggest the Editor or Associate Editors of the journal as potential reviewers. Although there is no guarantee that the editorial office will use your suggested reviewers, your help is appreciated and may speed up the selection of appropriate reviewers.

Authors should note that it is inappropriate to list as preferred reviewers researchers from the same institution as any of the authors, collaborators and co-authors from the past five years as well as anyone whose relationship with one of the authors may present a conflict of interest. The journal will not tolerate this practice and reserves the right to reject submissions on this basis.

TITLE PAGE

Title Page

The title page should include:

The name(s) of the author(s)
A concise and informative title
The affiliation(s) and address(es) of the author(s)
The e-mail address, telephone and fax numbers of the corresponding author

Abstract
Please provide an abstract of 150 to 250 words. The abstract should not contain any undefined abbreviations or unspecified references.

Keywords
Please provide 4 to 6 keywords which can be used for indexing purposes.

TEXT

Text Formatting
Manuscripts should be submitted in Word.
Use a normal, plain font (e.g., 10-point Times Roman) for text.
Use italics for emphasis.
Use the automatic page numbering function to number the pages.
Do not use field functions.
Use tab stops or other commands for indents, not the space bar.
Use the table function, not spreadsheets, to make tables.
Use the equation editor or MathType for equations.
Save your file in docx format (Word 2007 or higher) or doc format (older Word versions).
Manuscripts with mathematical content can also be submitted in LaTeX.

LaTeX macro package (zip, 182 kB)

Headings
Please use no more than three levels of displayed headings.

Abbreviations
Abbreviations should be defined at first mention and used consistently thereafter.

Footnotes
Footnotes can be used to give additional information, which may include the citation of a reference included in the reference list. They should not consist solely of a reference citation, and they should never include the bibliographic details of a reference. They should also not contain any figures or tables.

Footnotes to the text are numbered consecutively; those to tables should be indicated by superscript lower-case letters (or asterisks for significance values and other statistical data). Footnotes to the title or the authors of the article are not given reference symbols.

Always use footnotes instead of endnotes.

Acknowledgments
Acknowledgments of people, grants, funds, etc. should be placed in a separate section on the title page. The names of funding organizations should be written in full.

TERMINOLOGY
• Please always use internationally accepted signs and symbols for units (SI units).

SCIENTIFIC STYLE

Generic names of drugs and pesticides are preferred; if trade names are used, the generic name should be given at first mention.

Please use the standard mathematical notation for formulae, symbols etc.:

Italic for single letters that denote mathematical constants, variables, and unknown quantities

Roman/upright for numerals, operators, and punctuation, and commonly defined functions or abbreviations, e.g., cos, det, e or exp, lim, log, max, min, sin, tan, d (for derivative)

Bold for vectors, tensors, and matrices.

REFERENCES

Citation

Cite references in the text by name and year in parentheses. Some examples:

Negotiation research spans many disciplines (Thompson 1990).

This result was later contradicted by Becker and Seligman (1996).

This effect has been widely studied (Abbott 1991; Barakat et al. 1995; Kelso and Smith 1998; Medvec et al. 1999).

Reference list

The list of references should only include works that are cited in the text and that have been published or accepted for publication. Personal communications and unpublished works should only be mentioned in the text. Do not use footnotes or endnotes as a substitute for a reference list.

Reference list entries should be alphabetized by the last names of the first author of each work.

Journal article


Article by DOI


Book


Book chapter


Online document


Journal names and book titles should be italicized.
For authors using EndNote, Springer provides an output style that supports the formatting of in-text citations and reference list.

**EndNote style (zip, 3 kB)**

**ARTICLE LENGTH**

"The average article length is approximately 30 manuscript pages. For manuscripts exceeding the standard 30 pages, authors should contact the Editor in Chief, Nirbhay N. Singh directly at nirbsingh52@aol.com."

**TABLES**

All tables are to be numbered using Arabic numerals.

Tables should always be cited in text in consecutive numerical order.

For each table, please supply a table caption (title) explaining the components of the table.

Identify any previously published material by giving the original source in the form of a reference at the end of the table caption.

Footnotes to tables should be indicated by superscript lower-case letters (or asterisks for significance values and other statistical data) and included beneath the table body.

**ARTWORK AND ILLUSTRATIONS GUIDELINES**

Electronic Figure Submission

Supply all figures electronically.

Indicate what graphics program was used to create the artwork.

For vector graphics, the preferred format is EPS; for halftones, please use TIFF format. MSOffice files are also acceptable.

Vector graphics containing fonts must have the fonts embedded in the files.

Name your figure files with "Fig" and the figure number, e.g., Fig1.eps.

Line Art
Definition: Black and white graphic with no shading.

Do not use faint lines and/or lettering and check that all lines and lettering within the figures are legible at final size.

All lines should be at least 0.1 mm (0.3 pt) wide.

Scanned line drawings and line drawings in bitmap format should have a minimum resolution of 1200 dpi.

Vector graphics containing fonts must have the fonts embedded in the files.

Halftone Art

Definition: Photographs, drawings, or paintings with fine shading, etc.
If any magnification is used in the photographs, indicate this by using scale bars within the figures themselves.

Halftones should have a minimum resolution of 300 dpi.

**Combination Art**

**Definition:** a combination of halftone and line art, e.g., halftones containing line drawing, extensive lettering, color diagrams, etc.

Combination artwork should have a minimum resolution of 600 dpi.

**Color Art**

Color art is free of charge for online publication.

If black and white will be shown in the print version, make sure that the main information will still be visible. Many colors are not distinguishable from one another when converted to black and white. A simple way to check this is to make a xerographic copy to see if the necessary distinctions between the different colors are still apparent.

If the figures will be printed in black and white, do not refer to color in the captions.

Color illustrations should be submitted as RGB (8 bits per channel).

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RESEARCH PROPOSAL: The Influence of Mindfulness on Workplace Relationships: A Research Proposal

Word Count:

2972 Words
1.0 Introduction

1.1 Background and Theoretical Rationale

The proposed research will investigate whether mindfulness has a role in facilitating positive work relationships. At present, research suggests that mindfulness influences relationships through increased trust, forgiveness and empathy (Kleinman, 2011). Although this is the case in supervisory (Birnbaum, 2008), therapeutic (Wach & Cordova, 2007) and intimate relationships (Segal, 2010), little is known about applications of mindfulness in the workplace. Methodological concerns give rise to further questions about the mechanisms through which mindfulness has an influence, and how this is experienced by individuals.

Before exploring how mindfulness may influence workplace relationships, this document will outline why workplace relationships are important. Research suggests that positive workplace relationships contribute to a range of outcomes. Positive relationships with co-workers improve job satisfaction (Morrison, 2005), and help to mould our careers, our identities and our wellbeing (Gersick, Dutton & Bartunek, 2000). Heimer (1992) suggested that damaged workplace relationships could result in a drop in productivity and performance and elicit workplace incivility, which in turn precipitates psychological distress, withdrawal and a lack of job satisfaction (Cortina, Magley, Williams & Langhout, 2001). Workplace relationships can be improved by increasing capacity for trust, forgiveness and empathy (Caldwell & Dixon, 2010), while burnout, past interpersonal difficulties, and bullying can lead to ruptures in these delicate interpersonal structures (Boyas & Wind, 2010; Morrison, 2005; Jennifer, Cowie & Ananiadou, 2003).

Research has established that mindfulness interventions or meditation practise increases trust, compassion, empathy and patience in the workplace (Richards,
Oman, Hedberg, Thoresen & Bowden, 2006; Sawhney, 2012). In addition, increased mindfulness has been observed to decrease conflict and ostracism in the workplace (Ramsey, 2012; Trahan, 2010). However, few studies have explored the feelings of both individuals in a reciprocal colleague relationship, where one or both have been involved in mindfulness training. Research that investigated regular meditators in the workplace found individuals reported improved relationships at work (Hunter & McCormick, 2008; Forbes, 1999). Using thematic analysis, researchers discovered that meditators felt their practice made them more compassionate, calmer, less blaming, and more able to manage conflict at work. The study highlighted some interesting hypotheses about how mindful meditation might influence work relationships, but did not build a conceptual framework. They recommended further testing of their hypothesis; “people who practise mindfulness have more positive interpersonal relations at work” (Hunter & McCormick, 2008, p.27).

Investigations into Transcendental Meditation (TM) and work related outcomes found practise led to better work relations (Alexander, Swanson, Rainforth, Carlisle, Todd & Oates, 1993). Although the studies main interest was workplace stress, the researchers used the Centre for Management Research Questionnaire (Alexander et al., 1993) to assess personal relationships at work and found significant differences between those that undertook the course and practised regularly, those who undertook the course and did not practise regularly, and those who did not undertake the course. The study did not comment on what elements of training produced this change in perception, and, in discussion, contemplated whether it was an effect of TM, experience related to training (for example more time spent with colleagues or a shared interest) or placebo effect.
One study which investigated the effects of mindfulness training on relationships in the workplace found mindfulness to have a moderate negative relationship with citizenship behaviour. This conclusion was at odds with previous research, which showed mindfulness increased empathy, a concept linked with citizenship behaviour (Settoon & Mossholder, 2002). In addition, mindfulness was found to have a moderate negative relationship with relationship quality at work, mediated through positive affect.

Mindfulness has a positive effect on aspects that are necessary for good workplace relationships; from the elements that allow individuals to form these relationships, such as being open to interaction (Prazak, Critelli, Martin, Miranda, Purdum & Powers, 2012), to maintaining those relationships through compassion, positive behaviours and good communication (Kleinman, 2011; Frisvold, Lindquist & McAlpine, 2012). In addition, mindfulness has been shown to improve skills in overcoming and repairing conflicts, and protect against burnout (Horton-Deutsch & Horton, 2003; Boellinghaus, 2011; McCracken & Yang, 2008). The relationships between afore mentioned positive aspects and mindfulness, suggest mindfulness training may be able to facilitate positive relationships in the workplace. Further research in supervisory (Birnbaum, 2008), therapeutic (Wach & Cordova, 2007) and intimate relationships (Segal, 2010), supports this hypothesis, that increasing mindfulness could lead to better colleague relationships. However, the research conducted in the workplace, sparse as it is, does not suggest a clear relationship. Future research should focus on why these findings are not translating to a work environment. A further focus may be why self-reports suggest a link, while aggregate scores from others do not.
Previous research suggests that mindfulness training could have a useful application as a way to improve workplace relationships in the following ways. The studies detailed in this introduction suggest workplace relationships are important, for the individual and the organisation, and that relationships within these settings are improved through trust, forgiveness and empathy (Caldwell & Dixon, 2010). Research demonstrates that mindfulness interventions can increase trust, forgiveness and empathy (Kleinman, 2011; Wach & Cordova, 2007; Segal, Hick & Bien, 2010), yet very little research has looked specifically at these concepts within work relationships.

The proposed study intends to investigate employee perceptions of their workplace relationships after mindfulness training. The study will provide insight into how those that undertake training experience these relationships, as well as the experiences of others in their workplace. An exploratory approach is needed, as there is little information on the topic. Gaps in current research make it difficult to reconcile current findings into a coherent model, in order to inform a more theory driven approach. As such the study will aim to explain how mindfulness is having an influence (if an influence is suggested) and what other concepts may be playing a part in this.

It is hoped that this study could inform workplace mindfulness interventions, thus improving workplace relationships. This in turn could increase individual wellbeing and increase resilience to mental health difficulties (Dutton & Heaphy, 2003; Harter, Schmidt, & Hayes, 2002; Thau, Aquino, & Poortvliet, 2007).

**Defining Mindfulness**

The definition of mindfulness is disputed within academic literature (Grossman & Van Dam, 2011). John Kabat-Zinn (2003) defined mindfulness as;
“The awareness that emerges through paying attention on purpose, in the present moment, and nonjudgementally to the unfolding of experience moment by moment.”

The rationale for selecting this definition was that it informs mindfulness based stress reduction (MBSR). The mindfulness training providers selected for contact, use abbreviated or altered forms of the MBSR protocol. As such it is assumed that the majority of participants in this study will have experience of mindfulness within the context of this definition.

1.2 Research questions

Do colleagues perceive mindfulness training to have an influence on their relationships at work? If so, what is the nature of this influence?

2.0 Method

2.1 Design

The researcher intends to use an Abbreviated Grounded Theory Approach.

Grounded theory approach

A grounded theory approach has been selected for several reasons. Firstly, within grounded theory methodology there is a focus on building new theory (Urquhart, 2013). Within the topic area of mindfulness and workplace relationships, there is currently no theoretical framework. Studies that have attempted to form such a framework using other methodologies have not succeeded (Hunter & McCormick, 2008).

Secondly, grounded theory allows the researcher to focus on how individuals interact with the phenomena being explored (Urquhart, 2013). Thus the approach is
suitable for exploring the effects of mindfulness on workplace relationships, as the main interest is individual experience.

Thirdly, the epistemological stance is most suited to the aims of the researcher. Charmaz’s (2014) approach has been selected, as the post-positivist, constructivist position is appropriate for theorising phenomena, which are subject to a range of contextual considerations. This is the case with workplace relationships. At least two peoples’ personal contexts within the relationship, the context of the wider workplace, and the context of the time in which the study was taking place, must be considered in order to form a comprehensive theory. This is possible using Charmaz’s (2014) approach.

Finally, the subject area also makes it difficult for the researcher to be a ‘blank slate’, as they have experienced workplaces, and have an understanding of mindfulness. Through interaction with the participants and the data, the researcher will have an effect on the outcomes. This reciprocity is acceptable within Charmaz’s (2014) model, as the researcher and participant are endeavouring to come to a shared understanding of the phenomena.

In sum, as the evidence base does not currently explain the way in which mindfulness is perceived by individuals within the workplace, a more specific hypothesis to test, cannot be developed. Grounded Theory will allow the researcher to develop a comprehensive understanding of the phenomena, to form a theory, which can be tested in future research.

Abbreviation

The approach will be abbreviated for practical reasons. As there is a time constraint on this research, it cannot be guaranteed that saturation will be reached through on-going theoretical sampling. A limit will be applied to the amount of
participants interviewed. After this point, theoretical sensitivity, theoretical saturation and negative case analysis will be implemented, but only within the data already collected (Willig, 2001). Other principles of Grounded Theory analysis will be employed throughout.

2.2 Participants

The research aims to recruit up to 15 participants. As the researcher intends to use a Grounded Theory approach, it may be that saturation is reached before this point. Should the participant limit of 15 be reached, the researcher will strive for saturation using pre-existing data.

Sampling will be theoretically guided, and as such, the exact nature of the participants is not known in advance. The research question does limit the participant group to individuals who are working and have experience of a mindfulness course, and those who are colleagues of these individuals.

Participants could be recruited through a number of avenues. This includes: a contact that supplies mindfulness training to a range of organisations; participants of mindfulness courses in Southeast England, contacted through the course providers; and the researcher’s social network. Advertising materials will be made available to mindfulness providers and researcher contacts. It is assumed that participants will then contact the researcher to take part in the study.

2.3 Procedure

The first step will be to create and send out flyers advertising the study to individuals that have taken part in mindfulness training. The researcher anticipates that participants will make contact, at which point, a time will be arranged to meet and conduct an interview.
The research will be based at the University of Surrey, but in order to increase the chances of participation, interviews can be conducted at workplaces providing an area where confidentiality will be maintained is available. Alternatively interviews can be conducted through Skype should individuals not wish to meet face to face. Field notes will also be taken and included in analysis. These may include observations about the individual’s behaviour, the environment, or other factors not captured in transcripts.

Each interview will be recorded on a Dictaphone and transcribed verbatim shortly after. Recordings will be copied on to an encrypted hard drive within 24 hours of the data being recorded, during which time the Dictaphone will be kept by the researcher. After this, data will be transcribed, before coding begins. It has been suggested that line by line coding is especially important in abbreviated models, in order to compensate for the limited data set (Willig, 2001). After each interview, data analysis will be conducted in order to ensure the theory continues to develop, and to inform evolution of participant selection and interview format.

2.4 Equipment/ Interviews

Interviews will be conducted in line with Glaser’s (1992) account of Grounded Theory, which is consistent with Charmaz’s (2014) constructionist approach. The majority of the interview will be open questions. The researcher will ask for clarification or expansion, when topics that the researcher is sensitised to are mentioned. As the data are analysed, the researcher will continue to be sensitised to different topics and will ask the participant to expand on these. The purpose of the research, and steps taken to ensure anonymity and confidentiality, will be reiterated immediately before the interview begins. The interview schedule will develop from the initial script as concepts become apparent.
Other materials needed are a Dictaphone, an area to conduct the interview and access to Skype, all of which are available to the researcher.

2.5 Ethical Considerations

An application will be made to the university ethics panel.

Consent: Individuals will be made fully aware of the studies aims before attending the interview. Furthermore they will be given an information sheet and consent form at the beginning of the interview. Individuals will be informed that they are allowed to withdraw participation from the study, with no negative consequences.

Confidentiality: As interviews will be recorded on a Dictaphone, there may be identifiable information on this device. Only the researcher will have access to this data. Files will remain on the Dictaphone for no more than 24 hours, and will be held by the researcher during this time. The files will then be transferred on to an encrypted, password protected pen drive. Recordings will be transcribed by the researcher, and will be anonymised. These anonymised transcripts may be seen by supervisors, examiners, and may be used for future research or teaching purposes with the participants’ permission.

Confidentiality would only be broken in the unlikely event of someone being at risk, or if professional codes of conduct required the researcher to report the information.

Harm: The questions are not inherently sensitive, but conversations about relationships could elicit difficult feelings. Participants will be reminded that they are welcome to withdraw from the study should they become distressed. They will also be reminded they can withdraw their data, at any time, up until submission. The topic will be presented before the individual consents to the study, so if they felt talking
about the topic would cause them harm, they could elect not to. Details of how to access support will be given after the interview.

Normal procedures will be followed if it seems a child or vulnerable person is at harm (local safeguarding procedures). Emergency services will be contacted if it seems somebody is at or putting others at serious risk. This will be discussed with the individual should any issues of this type arise.

Honesty and Integrity: The above information will be presented to participants in the information sheet. The researcher will be clear about the aims and nature of the study as no deception is necessary. In addition, the steps within the analysis of data will be made clear within the write up, and the researchers influence on the data will be explicitly reflected on within the text.

2.6 R&D Considerations

N/A

3.0 Project costing

Printing of transcripts and interview schedules                      Up to £40
(Estimated)

Participant travel reimbursement                                  Up to £160
(Estimated)

4.0 Proposed Data Analysis

Data will be analysed using Charmaz’ (2014) guidance. The planned data analysis will begin with reading each unannotated transcript, in order to achieve some immersion in the data. Within Charmaz’ (2014) guidance, coding is conducted in two phases: initial coding and focussed coding. Initial coding, which the researcher has elected to conduct line by line following guidance by Willig (2001),
should quickly elicit concise terms that describe each line. At this stage memos will form early ideas of what these terms indicate, and the meanings constructed. As suggested by Charmaz (2006), the researcher will ask throughout this process; “What is this data a study of? What does the data suggest? From whose point of view? What theoretical category does this specific datum indicate?”

In focussed coding, these codes will be synthesised in order to explain larger chunks of text. Through memo writing and linking codes, focussed codes will be raised to tentative categories, and memos written about these categories. Consideration of these codes will inform further sampling.

Consideration of memos and categories will be prompted by theoretical sorting, whereby the researcher considers the order and the logic of the categories that exist to start building theory. Once this theory is becoming coherent, the researcher will begin refining the theory. This will be achieved through selective coding; attempting to explain the transcripts with the new codes from the theory. After this, the researcher will check for any gaps, ensuring the data are saturated and accounted for within the theory. Negative case analysis will be conducted if possible within the existing data.

5.0 Consulting interested parties

The researcher has been liaising with Susan Peacock, a provider of mindfulness training within organisations, throughout the formation of this proposal. In addition, the researcher has had conversations with peers that are undergoing mindfulness training and are currently in work. They were enthusiastic about taking part, as they feel their work relationships are sometimes difficult to manage, and had hoped mindfulness would help them with this.

6.0 Contingency plan
As the nature of a Grounded Theory approach is inherently flexible, contingency plans are difficult to define. Difficulties may arise in the employ of participants. Should this prove difficult, the limit of individuals who have undertaken mindfulness courses, will be extended to those who practise mindfulness personally (e.g. through meditation). Should there be no initial participants, the researcher will expand the initial participant pool, contacting mindfulness practitioners that have internet blogs on mindfulness. Finally, should saturation not be reached with the participant pool or time exhausted, original data will be analysed further in an attempt to reach saturation.

7.0 Dissemination Plan

It is the researcher’s intention that the research be submitted for publication through the peer reviewed journal, ‘Mindfulness’. This journal was selected because of its close relation to the subject matter. It is the only scholarly source dedicated to mindfulness theory and multidisciplinary research. In addition, summaries of the findings may be disseminated through mindfulness provider websites and mindfulness blogs.

8.0 References


Trahan, K. (2010). *A grounded theory of building capacity in organizational leadership through the cultivation of awareness, attention, and caring.* (Doctoral dissertation) Saybrook Graduate School and Research Centre, US.


LITERATURE REVIEW: Mindfulness and its Influence on Collegiality in the Workplace: A Review of the Literature

Word Count
6932
Abstract

It has been claimed that mindfulness can improve workplace relationships. This review aims to assess whether this claim is supported by the literature. Four databases were searched for relevant papers, and strict inclusion/exclusion criteria applied. This resulted in 10 studies being included in this review. The literature suggests that mindfulness influences how people relate to their colleagues in the workplace, but whether this influence is positive or not is still unclear. Eight main themes arose from the data: the varied definitions of Mindfulness; the influence of mindfulness and managing emotions at work; feelings of increased empathy, compassion, generosity, trust and tolerance toward co-workers; interpersonal skills including perspective taking, listening, attention and concentration; reducing conflict, ostracism and bullying in the workplace environment; increased awareness of individuals’ effect on others, and responding in more appropriate ways; the nature of practise, with variation of types and durations of mindfulness practise; and methodological concerns. Findings suggest that mindfulness could have an influence on workplace relationships, mediated through related constructs of emotional intelligence, awareness and improved communication skills. However, other variables may cause mindfulness to have a negative influence. There is a lack of coherent theory explaining these relationships suggesting that future research should address this.
Statement of Journal Choice

The Journal of choice for this literature review is Mindfulness. Mindfulness describes its aim as to advance research, clinical practice and theory on mindfulness. This journal was selected because of its close relation to the subject matter of this review. In addition, it is the only scholarly source dedicated to mindfulness theory and multidisciplinary research. It accepts review articles. Instructions for Authors can be found in Appendix 1.
Introduction

“A growing body of empirical research is showing striking benefits... making the corporate world sit up and take mindfulness seriously. Research evidence shows improvements in... employer/employee and client relationships.”

O’Malley, 2013

Mindfulness has recently experienced a surge in interest. A Google Scholar search reveals around 16,000 ‘hits’ for the term when searching before 2004, compared to an additional 49,000 found from the last decade (correct as of April 2014). Amongst those ‘hits’, are the webpages of mindfulness trainers who expound the benefits for employers if their employees were more mindful. One aspect of these claims is that increased mindfulness improves workplace relationships and collegiality. However, the evidence base suggests a less clear picture.

The majority of the literature relating to mindfulness and relationships, applies to romantic relationships (Giluk, 2010). Mindfulness interventions have been found to improve relationship satisfaction, and reduce emotional stress in couples (Kozlowski, 2013). In relationships generally, researchers found increased empathy, perceived closeness to others, and an increased sense of social connectedness (Block-Lerner, Adair, Plumb, Rhatigan, & Orsillo, 2007). However, despite claims of a beneficial effect by mindfulness trainers, there is no systematic review of how mindfulness influences workplace relationships, if it does.

Mindfulness has been found to have a role in increasing elements related to positive workplace relationships such as understanding, compassion (Baer, Lykins, & Peters, 2012; Boellinghaus, Jones, & Hutton, 2013; Kleinman, 2011), and communication skills (Kleinman, 2011) as well as decreases in conflict (Grace, 1976;
Horton- Deutsch & Horton, 2003). Most of these studies, however, have been carried out on student populations.

The few studies that have investigated workplace relationships do not seem to converge on a single explanation of its influence. For example, research has established that mindfulness interventions or meditation practise increases trust, compassion, empathy and patience for colleagues (Richards, Oman, Hedberg, Thoresen & Bowden, 2006; Sawhney, 2012), as well as decreasing conflict and ostracism in the workplace (Ramsey, 2012; Trahan, 2010). Conversely, some research suggests a negative influence on colleague relationships (Giluk, 2010; Mulvaney, 1994). It is hoped a review in this area will expand on and assimilate these findings.

**Defining Mindfulness**

The underpinnings of mindfulness stem mainly from Buddhist ideology, evolving initially from teachings of Siddhartha Gautama in the 5th century B.C.E. Within Buddhist spiritual practice it is believed that mindfulness can be evoked through practising meditation and mindful activity (Hanh, 1976), and that this is the key to the cessation of human suffering (Thera, 1962). In 1982, Kabat-Zinn developed a programme to manage chronic pain, drawing on Buddhist practices of mindfulness, known as Mindfulness Based Stress Reduction (MBSR). It has since been applied to the management of psychological wellbeing in medical illness, and emotional wellbeing in healthy participants. It displays positive effects in controlled trials (Reibel, Greenson, Brainard & Rosenzweig, 2001; Astin, 1997; Shapiro, Schwartz & Bonner, 1998). It was this application of mindfulness that sparked interest in clinical circles (Bishop, Lau, Shapiro, Carlson, Anderson, Carmody... & Devins, 2004).
Despite this interest developing in the eighties, the first attempt to reach a unified and operationalized definition of mindfulness was not published until 2004 (Bishop et al., 2004). This defined mindfulness as two psychological processes; self-regulation of attention, the act of observing and attending to thoughts feelings and sensations, by regulating attention; and orientation to experience, attempting to maintain curiosity about thoughts and situations. Furthermore, mindfulness was defined as a skill that could be developed through practice.

The development of mindfulness has been investigated for a range of interventions. Mindfulness has been found to be increased by MBSR, Easwaren’s (1978) Eight Point Program (Shapiro, Oman, Thoresen, Plante, & Flinders, 2008), and Mindfulness Based Cognitive Therapy (MBCT) (Kuyken, Watkins, Holden, White, Taylor, Byford ... & Dalgleish, 2010). Some scholars have suggested activities that reduce ‘mindlessness’: the use of habitual or automatic processing, bring about a level of consciousness akin to mindfulness (Langer, 1992). As such Transcendental, Zen, Loving-Kindness and Mindful Meditations could be considered to have a role in increasing mindfulness.

Workplace Relationships

The phrase “Workplace relationships” refers to the interpersonal relationships between colleagues. Workplace relationships have been a topic of interest for researchers for many decades. The first formal publication in this area, by Elton Mayo (1933), suggested that social factors in the workplace influenced worker behaviour. Since then, several studies have suggested that relationships with colleagues contribute to a range of outcomes. Positive relationships with co-workers improve job satisfaction (Morrison, 2005), and help to mould careers, identities and wellbeing (Gersick, Dutton & Bartunek, 2000). Heimer (1992) suggested that
damaged workplace relationships could result in a drop in productivity and performance and elicit workplace incivility, which in turn precipitates psychological distress, withdrawal and a lack of job satisfaction (Cortina, Magley, Williams & Langhout, 2001).

The factors that make for positive workplace relationships have also been investigated. Capacity for trust, forgiveness and empathy (Caldwell & Dixon, 2010) can lead to positive relationships, while burnout, past interpersonal difficulties, and bullying can lead to ruptures in these delicate interpersonal structures (Boyas & Wind, 2010; Morrison, 2005; Jennifer, Cowie & Ananiadou, 2003). It has been proposed that high quality workplace relationships can be recognised through three key identifiers: they withstand processing of difficult and complex emotion, they are flexible enough to survive change and the individuals within them have a high level of connectivity (Carmelli, Brueller & Dutton, 2009). These positive relationships may in turn lead to better workplace performance (Beal, Cohen, Burke & McLendon, 2003; Chiaburu & Harrison, 2008; Gerstner & Day, 1997) and wellbeing (Daniels & Guppy, 1994). These relationships are not considered static, but dynamic (Gabarro, 1987), and as such may be improved by workplace interventions.

**Rationale for literature review**

The literature suggests an association between mindfulness and improved relationships with the majority of studies investigating this association within romantic couples. Few studies have investigated the role of mindfulness practise on workplace relationships and there are no systematic and critical reviews of the available literature. This review aims to fill this gap in order to consider where future research efforts should be directed.
If mindfulness were to have a positive effect on workplace relationships, and the mechanisms made clear, this could lead to a workplace specific mindfulness interventions to improve workplace relationships. The importance of good relationships at work has been shown by several studies (Dutton & Heaphy, 2003; Harter, Schmidt, & Hayes, 2002; Thau, Aquino, & Poortvliet, 2007). Most people spend a third of their adult lives at work (World Health Organisation, 1994) and social support is important for wellbeing (Daniels & Guppy, 1994). This suggests a broader importance of colleague relationships to the population’s well-being – an area appropriate for research by Clinical Psychologists.

This literature review therefore aims to collect and consolidate the current research on mindfulness and workplace relationships. Ideally, the research would have been limited to mindfulness interventions conducted in the workplace, and to participant, and participant colleague views on relationship quality. The literature of this nature, however, was very scarce. As such, this review will investigate the influence of mindfulness related practises (MBSR, MBCT, Eight Point Program and meditation), on aspects found to improve colleague relationships, within a workplace setting.
Method

Four databases were searched: PsychInfo, MedLine, Scopus, and Web of Science. Search terms were informed by language used in studies which featured in the introduction of this document. Synonyms of identified terms were included, as well as the operator ‘*’ to increase the chance of identifying relevant literature. Full text of articles needed to include: mindful*, yoga, Zen, transcendental, “loving kindness”, meditation, LKM, MBSR, MBCT or “Eight Point Program”. In addition, papers were searched for key words work*, colleague, office or employ*. Lastly, the papers needed to include one of the following keywords: Relat*, social*, interpersonal, collegiality, empathy, metallisation, “reflective functioning”, “Theory of Mind”, affect, “emotional intelligence”, “distress contagion”, team, cooperation, communication, conflict or compassion. Boolean operators were used to insure that any combination of words from each of the three strings were identified.

Once papers were identified, the following inclusion/ exclusion criteria were applied:

1. Must refer to mindfulness in title or abstract
2. Must refer to workplace relationships in title or abstract
3. Main text must be investigating mindfulness practise and influence on workplace relationships
4. Must be an empirical study (including qualitative, quantitative, cross-sectional and longitudinal studies)
5. Must be investigating adults of working age (Between 18 and 65)
6. Must not use a clinical sample
7. Must not be referring to therapeutic relationships
8. Must be in English
9. Participants must working, commenting on work, or the study be set in the workplace

10. Must be published before 1st August 2014

Google Scholar was then used to identify papers that had referenced research identified through the steps above. Titles and abstracts of documents that cited these initial papers were scanned for relevance. Inclusion/ exclusion criteria were then applied. The process is described in figure 1. Following this, a critical analysis of the resultant papers was organised according to the main themes which arose on thorough reading.
Search string applied to all text: (Mindful* OR yoga OR zen OR transcendental OR “loving kindness” OR meditation OR LKM OR MBSR OR MBCT OR “Eight Point Program”) AND (work* OR colleague OR office OR employ*) AND (Relat* OR social* OR interpersonal OR collegiality OR empathy OR mentalisation OR “reflective functioning” OR “Theory of Mind” OR affect OR “emotional intelligence” OR “distress contagion” OR team OR cooperation OR communication OR conflict OR compassion)

Figure 1: A flow chart showing the selection of relevant papers.
<table>
<thead>
<tr>
<th>Name and Date</th>
<th>Participants</th>
<th>Work Settings</th>
<th>Practise or Intervention</th>
<th>Method and Measures</th>
<th>Outcomes</th>
<th>Quality criteria (1dp)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alexander, Swanson, Rainforth, Carlisle, Todd &amp; Oates, 1993</td>
<td>27 + 18 experimental 23 + 18 control Dual base</td>
<td>2 settings, both automotive industry.</td>
<td>3 months of daily transcendental meditation practise Weekly meetings No program for control group</td>
<td>Intervention/control comparison study Measures Centre for Management Questionnaire (Work and personal relationships subscale)</td>
<td>Regular meditation improved on relationships subscale</td>
<td>0.8 Not randomised Not controlled for confounding variables No investigator blinding</td>
</tr>
<tr>
<td>Feinholdt, 2012</td>
<td>7 experimental group 51 control group</td>
<td>“Emotional labour”</td>
<td>8 mindfulness exercises based on: Breathing Body Scan Raisin or nut Informal practise Loving kindness meditation</td>
<td>Randomised repeated measures Measures Mindful Attention Awareness Scale Perspective Taking</td>
<td>No significant relationship between mindfulness practise and perspective taking</td>
<td>0.7 No investigator blinding No control of confounding variables No mention of power analysis Non significant result not reported in more detail.</td>
</tr>
<tr>
<td>Forbes, 1999</td>
<td>8 business people</td>
<td>Various: IT, finance, consultancy, manufacturing</td>
<td>2.5 – 33 years of meditation experience</td>
<td>Qualitative Investigation Interviews</td>
<td>More compassion More respectful More forgiving Improved listening Improved Concentration</td>
<td>0.9 No credibility check Unclear design</td>
</tr>
<tr>
<td>Study (Year)</td>
<td>Sample Size</td>
<td>Setting</td>
<td>Intervention Details</td>
<td>Control Details</td>
<td>Measures</td>
<td>Findings</td>
</tr>
<tr>
<td>-------------</td>
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<td>---------</td>
</tr>
<tr>
<td>Giluk, 2010</td>
<td>29/52</td>
<td>University setting/education</td>
<td>27 Mindfulness Based Stress Reduction 2 Mindfulness Based Cognitive Therapy 8 weeks, 2 hours a week, plus 45 minute practice and day retreat.</td>
<td>Intervention/control comparison study Measures FFMQ May et al. Co Worker Scale Settoon &amp; Mossholder Citizenship scale</td>
<td>No significant change in citizenship behaviour No significant change in colleague relationship Negative change in colleague relationship when mediated through affect and mindfulness</td>
<td>0.7</td>
</tr>
<tr>
<td>Hunter &amp; McCormick, 2008</td>
<td>8</td>
<td>Various: Arts, science, education, finance</td>
<td>‘Mindfulness’ practise</td>
<td>Exploratory qualitative study Interviews</td>
<td>Better emotional tolerance, calmer More selflessness Less need for others approval Aware of environment More compassionate More compromising</td>
<td>0.4</td>
</tr>
<tr>
<td>Mulvaney, 1994</td>
<td>5 teachers</td>
<td>School setting/education</td>
<td>At least 2 years meditation practise. Transcendental, Mantra, Vipassana, breath and visualisation meditations. 1. 40 minutes twice a day (TM) 2. 90-120 minutes</td>
<td>Narrative enquiry Using semi structured interview and journals</td>
<td>Feeling more integrated Feelings more connected Speaking up more More tolerant, patient Feeling vulnerable More detached Sensitive to others</td>
<td>0.7</td>
</tr>
<tr>
<td>Ramsey, 2012</td>
<td>51 teachers</td>
<td>School setting/education</td>
<td>Mindfulness training Discussion based, encouraged to use skills at work. Once a day</td>
<td>Intervention/Control comparison Measures Organisational Citizenship Behaviour Scale Need Fortification Scale Workplace Ostracism Scale Instigated Ostracism Scale Mindful Attention Awareness Scale Interpersonal Conflict Scale</td>
<td>Mindfulness reduced instigated ostracism Made experience of ostracism harder (wellbeing outcomes)</td>
<td>partially met.</td>
</tr>
<tr>
<td>Richards, Oman, Hedberg, Theresen &amp; Bowden, 2006</td>
<td>12 Nurses</td>
<td>Hospital based/Healthcare</td>
<td>Eight Point Program</td>
<td>Thematic analysis of interviews</td>
<td>More calm Priority of focussing on others More perspective taking More helpful and trusting Putting others first</td>
<td>0.7 No credibility check No reflexivity Sampling and analysis not very clear</td>
</tr>
<tr>
<td>Authors</td>
<td>Sample Size</td>
<td>Sample Description</td>
<td>Methodology</td>
<td>Findings</td>
<td>Notes</td>
<td></td>
</tr>
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<td>------------------</td>
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<td>----------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
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<td></td>
</tr>
<tr>
<td>Sawhney, 2012</td>
<td>323</td>
<td>26 service and manufacturing companies in Iowa.</td>
<td>TM practise</td>
<td>TM increased trust through mediators of anxiety and emotional intelligence</td>
<td>No blinding, Measures not well defined/robust, Only partially controlled for confounding variables</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Quasi-experimental design Measures Higher states of consciousness Emotional Intelligence Dispositional Trust</td>
<td>TM increased emotional intelligence through mediators of higher states of consciousness and anxiety</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trahan, 2010</td>
<td>19</td>
<td>Various: science and technology, law, education, government, publishing, consulting, religion/spirituality, healthcare, service, and finance</td>
<td>Western mindfulness/ Buddhist practise Grounded theory Interviews</td>
<td>Resulted in a stage theory of mindfulness whereby the individual moves through being; a state of self-related mindfulness, then relating; a state of mindfulness about others and finally engaging; when the individual has built interpersonal skills to use in the workplace.</td>
<td>No credibility check</td>
<td></td>
</tr>
</tbody>
</table>


Results

The above search strategy resulted in ten relevant papers. These papers are summarised in table 1. Collectively, the papers covered all mindfulness related practises previously highlighted in this document. Within this review, the terms ‘mindfulness practise’, ‘practising mindfulness’ and ‘the practise’ refers to any one of these activities.

Papers were assessed for quality using the Standard Quality Assessment Criteria for Evaluating Primary Research Papers (Kmet, Lee & Cook, 2004). This scoring system was selected as it has a good level of inter-rater reliability, and provides a systematic and reproducible means of assessing a wide range of research (Kmet et al., 2004). Papers receive a rating from 0-1, a score of one indicating ‘gold-standard’ quality research. The papers in this review had a mean rating of 0.7, and a range of 0.4 to 0.9. Although the overall rating of this evidence base is good, the quality of the papers varies, and this will be taken in to consideration when synthesising findings. Due to concerns around removal of poorer quality research biasing a review (Kmet et al., 2004), articles were not excluded on this basis, especially because in this review a relatively small number of articles were available.

Only two papers directly investigated the effect of a mindfulness intervention in the workplace, on colleague relationships quantitatively. One study investigated a transcendental meditation programme (Alexander, Swanson, Rainforth, Carlisle, Todd & Oates, 1993). They found that regular meditators experienced an improvement in relationships when compared to controls ($t(67)= 1.92$, $p<.05$), and also when compared to irregular meditators ($t(67)= 1.62$, $p< .10$) as measured by the Centre for Management Questionnaire (Speilberger, 1983).
A second study used an aggregate measure of relationship quality completed by five of the colleagues of an individual who had taken part in a mindfulness intervention (Giluk, 2010). Analysis of the relationship between mindfulness and aggregate scores of relationship quality found that the relationship was not significant, and in the opposite direction to that hypothesised ($r = -.14$, 95% CI is $-.34 < -.14 < .07$) with higher mindfulness showing lower relationship satisfaction scores. The study's small experimental group size may account for a lack of significance in this relationship. However, correlations between mindfulness and relationship satisfaction in the larger control group also showed a non-significant, negative correlation at all three time points. When mediated through positive affect, mindfulness was a significant predictor of relationship quality ($\beta = -.32$, 95% CI is $-.62 < -.32 < -.02$). This relationship is in the opposite direction to that proposed by Alexander et al. (1993). Giluk’s (2010) measure, previously used by May, Gilson and Harter (2004), was found to have excellent internal consistency ($\alpha = .96$), but aggregating the score across the five scorers may have damaged its reliability. Aggregating the score may have meant that the study was not sensitive to different types of relationships developing in different ways.

Three papers used quantitative methods to assess constructs related to positive colleague relationships. A study by Ramsey (2012) examined whether state mindfulness may have a role in reducing individuals’ likelihood to partake in ostracising behaviours, and how mindfulness influenced those being ostracised. The study made use of a control group who took part in a mindfulness intervention at work, and a wait-list condition. Despite the study having a strong design, with well-validated measures, and a comparison group. The participant group was small, and the experimental group suffered high levels of attrition ($P=22$ at time 1, $P=13$ at time 2).
Ramsey (2012) used the Organizational Citizenship Behaviour Scale (OCBS) (Bateman & Organ, 1983), to assess helping behaviours at work and the Workplace Ostracism Scale (Ferris, Brown, Berry & Lian, 2008) to measure how much individuals felt they were being ostracised. No significant relationships were found for these variables. Scores on a measure of perceived instigated ostracism adapted from the Workplace Ostracism Scale (Ferris et al., 2008) revealed that those in the intervention group reported instigating less ostracism after the training ($F(1,35)=5.28$, $p= .28$). However, a closer investigation of the data reveals that the intervention group had a higher mean score for instigated ostracism at the outset, which remained higher than the control group even after training (Experimental group: time 1 $M=2.18$, time 2 $M=1.67$, Control group: time 1 $M=1.33$, time 2 $M= 1.34$). All internal consistency estimates were in the ‘acceptable’ to ‘excellent’ range ($\alpha= .72$ to .94) apart from the OCBS at time three, when the internal consistency was estimated at .56. This may suggest variance in how different constructs are affected by mindfulness, as this low score was not obtained at all data capture points.

A study by Feinholdt (2012) investigated the effect of brief daily mindfulness exercises on perspective taking using a randomized repeated measures between-subject experimental design. A final sample size of 88 was reasonable for the study design, however, this study also suffered from high levels of attrition, with an initial sample of 203. It should therefore be considered that individuals that chose to not complete the study may have varied from those who did, skewing the final results. Using the Mindful Awareness Attention Scale (MAAS, Brown & Ryan, 2003), Feinholdt (2012) confirmed the intervention did increase state mindfulness ($\Upsilon= .257$, SE= .131), $t= 1.971$, $p< .1$). Its designers suggested the MAAS measures a “unique quality of consciousness that is related to a variety of well-being constructs” (Brown
& Ryan, 2003). Further studies have suggested the theories behind the MAAS correlated well with neuroimagery findings and treatment outcomes (Creswell, Way, Eisenberge & Lieberman, 2007; Michalak, Heidenreich, Meibert & Schulte, 2008). Initial correlations between mindfulness and perspective taking were not significant when calculating average scores day to day (r= .128, p> .05) or weekly (r= .151, p> .05). Between groups comparisons of perspective taking were not significant, and were not reported.

A final quantitative study investigated the role of transcendental meditation and its effect on trust and emotional intelligence in the workplace (Sawhney, 2012). The study proposed a model whereby there would be a positive relationship between regular practice of TM technique and higher states of consciousness, and between higher states of consciousness and disposition to trust. The researchers also suggested that regular practice of TM technique is related to lower trait anxiety and higher emotional intelligence. There was no manipulation of the TM variable, instead, the researchers used surveys to assess TM practise, and other variables. Using the Higher States of Consciousness Scale (Alexander, 1982) (α= .9, composite reliability= .9), the Trait Anxiety Inventory (Speilberger, Gorsuch, Lushene, Vagg & Jacobs, 1970) (α= .9), the Trait Emotional Intelligence instrument (Furnham and Petrides, 2003) (α= .8) and a measure of dispositional trust (McKnight, Cummings & Chervany, 1998) (α= .8, composite reliability= .9), a regression model was designed to explain how this practise influences individuals in the workplace. A large response of 387 returned surveys, were used to test the hypothesised model using partial least squares analysis.

The study found that transcendental meditation has a non-significant direct effect on emotional intelligence (ϒ= 0.040), but a significant indirect effect (p< .01) mediated through higher states of consciousness alone, as well as trait anxiety and
higher states of consciousness combined. In addition transcendental meditation practise was seen to increase dispositional trust ($\gamma = 0.1427$, $p = .0001$), through indirect relationships with all variables. Although the model had a respectable overall goodness of fit (51.5%), and a moderate to good account of the variance in emotional intelligence (52.8%), the model only accounted for 12% of the variance in dispositional trust.

The five remaining papers used qualitative approaches to explore the phenomenon of mindfulness in the workplace. Four of these studies investigated the role that long term personal meditation practise has on workplace relationships. The earliest (Mulvaney, 1994) looked into a range of types of meditation (TM, Vipassana, breath and visualisation). All eight individuals meditated for at least thirty minutes a day for at least two years. Using a narrative enquiry, Mulvaney (1994) found that individuals felt more included in work as well as being more tolerant, patient and sensitive to others. Some however reported feeling more vulnerable, and more detached when at work. There were some problems with this study, in that there was no clear question defined in the paper, before the inquiry began. In addition there was no form of credibility check in terms of checking back with participants, which may mean that the interpretation of the inquiry is more based in the researcher’s interpretations than the participants. This is a methodological issue in all five qualitative studies.

Another study, with a strong methodological design, despite lacking credibility checking was carried out by Trahan (2010). The investigator found, through interviewing 19 organisational leaders, that individuals practising mindfulness and working in management pass through three stages in the process of building capacity to meet challenges at work; being, relating, and engaging skilfully
Skills, including awareness, attention and caring, are first applied to the self, then in the context of considering others, before finally in teaching and interactions with others.

Two further studies employed less clear designs in exploring mindfulness and workplace relationships. Forbes (1999) interviewed eight business people with meditation experience. These individuals reported improved concentration, patience and feeling calmer. Hunter and McCormick (2008) used previous interviews of eight different professionals. These professionals reported better emotional tolerance, feeling calmer, being more selfless, needing less approval from others and having better awareness of their environment. Despite these interesting findings, the research method, data collection and analysis are not clearly reported. There is little justification for the research taking place, and no reflexivity within the paper. Considering these flaws within its methodology, these findings can be considered as a possible base for developing more methodologically sound studies, but lend little to the research base.

The only qualitative study that made use of a mindfulness intervention was carried out by Richards, Oman, Hedberg, Theresen & Bowden (2006). The study investigated the experience of twelve nurses that took part in an Eight Point Program Intervention (Easwaren, 1978). The brief paper found that individuals were able to focus more on others, take others perspectives, be more helpful and trusting toward colleagues and put others first. The findings were limited however by a lack of reflexivity, and poor explanation of sampling and analysis within the report.

These findings and additional qualitative data in the above quantitative studies, were organised according to the main themes that arose in the papers, and were then assimilated with the quantitative findings above. The main themes
identified were; variations in the definitions of mindfulness, changes in emotion experienced as an individual becomes more mindful, changes in feelings toward co-workers, differences in communication and interpersonal skills, bringing about change in the workplace environment, the applications of awareness in the workplace, the nature and influence of practise, and methodological concerns. These themes will be explained in more detail below.

**Definitions of mindfulness**

A striking finding within the articles included in this literature review was the range of mindfulness definitions. A common theme within definitions was that of “attention”. Increased or trained attention was discussed in every study in this review. Almost as common, was the concept of “awareness”, which was referred to in four of the studies. Hunter and McCormick (2008) point out in their paper, that there is a difference between traditional eastern mindfulness, hailing from Buddhist tradition and western definitions of mindfulness, like Langer’s (1992), which are more easily operationalized.

“*Paying attention in a particular way: on purpose, in the present moment, and non-judgmentally.*”

Kabat-Zinn, (1994)

“*Mindfulness is a state of conscious awareness in which the individual is implicitly aware of the context and content of information. It is a state of openness to novelty in which the individual actively constructs categories and distinctions. In contrast, mindlessness is a state of mind characterized by an overreliance on categories and distinctions drawn in the past.*”

Langer, (1992)
The purpose of mindfulness within these definitions varies. Giluk (2010), using Kabat-Zinn’s definition, describes mindfulness as something that can “actually shape the future and quality of our lives and relationships”. In Hunter and McCormick’s (2008) definition the purpose is to open ourselves to being more curious and accepting. Ramsey (2012) and Forbes (1999) both highlight involvement and consciousness as aims of mindfulness, while Richard’s sees an application in increasing focus and putting others first. Several of the studies do not include a purpose in their definition (Feinholdt, 2012; Sawhney, 2012; Mulvaney, 1994). Feinholdt 2012) employs a more nebulous definition;

“Mindfulness is paying attention in a way that engages that heart and mind simultaneously and completely.”

Williams, Teasdale, Segal and Kabat Zinn, (2007)

This variation in definition raises a difficult question within this body of literature. With a range of definitions from two arguably separate schools, it may be that assimilation of these findings is not appropriate for informing future research, as they are measuring separate concepts and experiences.

In addition to the lack of clarity in defining mindfulness, a range of problem definitions also exist. The problem of interest in this literature review is poor workplace relationships, but the research investigating this area is incredibly limited. Three of the papers reviewed clearly defined a problem to be investigated within the workplace. These problems were; “workplace incivility, which consists of deviant behaviour with an ambiguous intent to harm a target at work” (Ramsey, 2012), fragmented Cartesian-Newtonian world view, and the related difficulties of leaders not building capacity to meet workplace demands (Trahan, 2010), and a lack of trust
in the workplace, in an ecological climate that needs trust in supply chains, linked with an increase in reliance on medication (Sawhney, 2012).

**The nature of mindfulness practise**

The research in this literature review covered a large spectrum of mindfulness practises. Only one paper considered how different types of mindfulness practise might affect outcomes. Comparison of MBSR and MBCT programmes did not show any difference in mindfulness (as measured by the Mindful Attention Awareness Scale) (Giluk, 2010). In both cases the intervention led to an increase in scores compared to baseline, which lasted at least one month. Two studies suggested that group mindfulness interventions within the workplace may improve outcomes (Giluk, 2010; Trahan, 2010), although as yet this has not been investigated.

There was also variation in the amount of practise. While Feinholdt (2012) found as little as three minutes of practise a day increased mindfulness, Sawhney (2012) found that longer, more regular practise had a much clearer effect on increasing trust in the workplace. Personal practise amounts ranged from no defined formal practise (Hunter & McCormick, 2008) to four hours a day (Mulvaney, 1994). One study made use of a day long retreat within a mindfulness course (Giluk, 2010), but despite these differences, there was no discussion around what amount of practise might affect relationships.

Qualitative studies of meditators, tended to focus on those that had several years of regular mindfulness practise behind them (Mulvaney, 1994; Hunter & McCormick, 2010; Forbes, 1999), whereas those that investigated more short term influences of meditation practise used quantitative means to assess (Sawhney, 2012; Alexander et al., 1993). Trahan (2010) posited a stage theory, whereby mindful practises are able to influence individuals views of self after a short time, but
application of the practises to views of others takes longer, and the ability to engage
skills learnt from mindfulness practise takes longer still. This may go some way to
explaining why, although short term interventions can result in self-perceived
changes, they may not lead to these changes being perceived by colleagues (e. g.
Giluk, 2010).

**Mindfulness and emotional intelligence/emotional reactivity**

The main theme of emotion predominantly covered emotional intelligence,
and participant’s emotional reactivity. Throughout seven papers identified in this
review, it was seen that individuals reported that mindfulness practise was having an
effect on emotional intelligence. In the paper by Sawney (2012), emotional
intelligence was measured by a Trait Emotional Intelligence Scale, a measure found
to provide highly reliable trait emotional intelligence scores that correlate with a
range of outcomes, including life satisfaction and perceived job control (Petrides &
Furnham, 2003). Within this measure, four elements of emotional intelligence seemed
particularly relevant to the researcher; social awareness, low impulsiveness, emotion
regulation, emotional perception and relationships. Emotional Intelligence was
increased through a transcendental meditation program, a relationship found to be
mediated by higher states of consciousness and trait anxiety (Sawhney, 2012).

In terms of emotion regulation and impulsiveness, five studies found that
those who practise mindfulness reported feeling calmer (Giluk, 2010; Hunter and
McCormick, 2008; Trahan, 2010; Richards, Oman, Hedberg, Theresen & Bowden,
2006; Forbes, 1999). Within these studies, individuals felt this new calmness made
them easier to get along with and more able to interact more fully with co-workers
(Forbes, 1999; Trahan, 2010). In a quote from Trahan’s (2010) paper, an individual
reflects on how they felt before becoming more mindful, the toll sharing this had on their co-workers, and subsequent improvement in their mood and relationships;

“I feel less anxiety and fear than I did before, so I share less... with my coworkers... I’m easier to get along with.”

Trahan (2010)

These changes were reported in difficult situations at work. Hunter and McCormick (2008) reported that individuals felt balanced, rational and cool in difficult situations since practising mindfulness. Giluk (2010) found individuals were less likely to “jump in” to difficult situations, and as such work seemed to “go smoother”. One participant reported feeling able to wait before responding to a complaint letter in order to give a more mindful response (Forbes, 1999); a behaviour that would not have occurred before she began to engage in mindfulness practise.

Similar findings were reported by Trahan, who reported that individuals that had been practising mindfulness for a long period of time, and had learnt to apply it to their work, were more able to manage difficult situations.

Feelings toward co-workers

The theme of feelings toward co-workers was centred around five experiences; empathy, compassion, trust, generosity and tolerance. Within qualitative data in the studies, empathy and compassion were regularly cited as increasing after mindfulness practise. Participants reported “holding space in their heart” for colleagues (Trahan, 2010), having more love and compassion for those that work under them (Hunter & McCormick, 2008), and being able to see those they work with as people (Forbes, 1999). Giluk (2010) had similar findings in qualitative data, with individuals reporting that they felt more compassion and empathy after MBSR.
Trust is conceived as necessary in a diverse workplace, and under the current economic climate (Sawhney, 2012). Participants in two qualitative reports, explained they felt trust for their colleagues had increased since practising mindfulness, but only after their trust in themselves increased (Forbes, 1999; Richards et al., 2006). Furthermore, some participants felt this led on to further helping behaviour (Richards et al., 2006). These reflections were supported by quantitative findings by Sawhney (2012). Although the research did not find a significant direct effect of transcendental meditation on trust, when the relationship was mediated through anxiety or emotional intelligence, a significant relationship was found. Sawhney (2012) theorised that trust was to some extent a personality trait, but this could be changed through experiences, which are in turn mediated through our emotional reactivity.

As well as trusting their colleagues more, individuals also reported that they were more generous towards them. In two studies, individuals interviewed felt this was most apparent in how they allotted time (Hunter & McCormick, 2008; Trahan, 2010).

“I double the appointment time... I don’t try to squeeze it in to a smaller slot.”

Trahan, 2010

In the above quote, the participant is referring to a particularly difficult individual they work with. As well as increased generosity, individuals reported increased tolerance for demanding and challenging colleagues and clients (Forbes, 1999; Giluk, 2010). In a narrative exploration by Mulvaney (1994), a participant muses over this change, finding that they are much more able to accommodate people’s needs and abilities after mindfulness training;

“If people didn’t measure up, I was frustrated... I’m probably a long way the other way... I give people all kinds of room.”
Interpersonal skills

The interpersonal skills that individuals felt had improved through mindfulness, tended to be those related to the skills that underpin mindful practise. Skills of taking different points of view, and remaining non-judgemental appeared regularly in the papers investigated. Individuals felt more able to imagine how another person at work might feel, even if this person was difficult (Hunter & McCormick, 2008; Richards et al., 2006). Some individuals put this change down to a sense of ‘shared humanity’, the idea that we are all striving for similar things, with similar needs (Trahan, 2010), and this allowed them to withhold negative judgements of others. Despite this, Feinholdt (2012) found that there was no quantitative increase in perspective taking scores. Despite the three items measuring this construct showing good internal consistency, it may be that perspective taking is not easy to measure objectively. Alternatively, it may be that while individuals feel they can take another’s perspective, in the heat of the moment, this is not happening any more often in mindful individuals, than other individuals. If perspective taking is increased, it may go some way to explain individual’s perceived ability to make decisions with others (Forbes, 2012). Individuals reported that they were more able to see the harm and good in a decision, and more likely to come to a beneficial agreement with business partners.

Other skills were discussed by participants in qualitative studies. Improved listening, better attention, concentration (Trahan, 2010; Forbes, 1999) and improved speech (Trahan, 2010) were discussed. One individual reported being able to speak calmly and deliberately even when riled (Mulvaney, 1994). These changes could
explain the improved flow and ease in communication reported by Hunter and McCormick (2008).

**The workplace environment**

The papers summarised suggested that individuals felt their practise was not only influencing one to one relationships, but also influencing the wider work environment. Individuals that took part in mindfulness practise reported a higher focus on other people in the workplace (Richards et al., 2006) and a workplace more interested in people than profits (Forbes, 1999). In addition, some felt this shift had reduced conflict, and that conflict that did occur tended to be seen as a natural occurrence that could be accepted (Trahan, 2010). Participants also reported feeling able to cope better with this conflict (Hunter & McCormick, 2008). However, within the same study, some felt that they actually worried less about others after mindfulness practise, as they were less concerned by what they thought.

Another potentially negative occurrence in the workplace explored was ostracism. Ramsey (2012) looked into a mindfulness training programme, in which individuals discussed using mindfulness practises on specific work difficulties. Instigated ostracism was found to reduce, but higher mindfulness meant that individuals actually felt worse after being ostracised. Ramsey (2010) discussed reasons for this, including that an increased interest in others leading to ostracism being more painful. Findings from other papers in this review suggest that mindfulness practise makes individuals more aware of their own feelings, and as such more sensitive to negativity (Mulvaney, 1994; Richards et al., 2006).

Involvement in mindful practises may do more than just stop instigation of ostracism. Studies found that individuals are more likely to insist fair treatment of colleagues after the practise (Forbes, 1999), with individuals positing that ‘decency’ is
not ‘up for grabs’, and instilling this within their workforces. One individual told of an occasion where a colleague was being pushed out of their job, and in a meeting, having mindfully considered the colleagues feelings, and their own experience of the problem, the participant spoke up. They reflected on how this damaged some relationships with colleagues that were perpetrating this exclusion, but lead to stronger bonds with others.

**Increased awareness workplace relationships**

Qualitative papers within this review often commented on the increased awareness that comes with mindful practise, and how this had affected interactions with colleagues. Individuals felt that their increased awareness meant they could see their effect on others (Giluk, 2010), and this in turn made them more able to cope with and manage colleagues (Ramsey, 2012). It was also reported that increased awareness meant that individuals could be “optimally responsive” to their interpersonal environment, and that this added information allowed for improved interactions and made individuals more flexible (Hunter & McCormick, 2008).

**Methodology**

Looking at the research base as a whole, there are methodological concerns. Of ten studies, only four reached the conservative cut off for quality research (>0.75; Kmet et al., 2004). There are no randomised control trials in this area, nor is there a qualitative study that has made use of and explained validation techniques. Implications of this are discussed in relation to particular articles. In addition to these general concerns, there are also more specific methodological flaws.

Participant sample size was a weakness in several studies. In Giluk’s research (2010), appropriate experiment group participant numbers were hypothesised to give sufficient statistical power at around 80. However, only 29 were recruited. A similar
problem was experienced by Ramsey (2012), when large numbers of the experimental group were lost through attrition. Feinholdt (2012) also suffered from a lack of statistical power.

Further methodological issues come from the nature of the participants. Both Ramsey (2012) and Richards et al. (2006) used a participant pool from a single occupation (teachers and nurses respectively). Sawhney’s (2012) participant population was from a small geographic area. It may be that these individuals represent a particular part of society, which does not represent the diverse workplace settings of real life. In addition, all but one (Feinholdt, 2012) of the experimental studies using groups allowed participants to self-select. People who choose to do a mindfulness intervention may be different in terms of relevant variables that aren’t being measured and therefore might unknowingly confound the results.

The extensive use of self-report measures within these studies form another concern. Firstly, they rely on the honesty of the individual being investigated, and often individuals will be managing their image. This is especially pertinent in research like this, which asks people to rate socially desirable traits, such as empathy, conflict management and perspective taking. A second consideration is response bias, whereby an individual who, for instance, selects high numbers on one likert scale, is likely to select high numbers on another likert scale, forming false positive correlations. Thirdly, although all measures used have been shown to have good internal validities (Giluk, 2010; Ramsey, 2012; Feinholdt, 2012; Sawhney, 2012), many of these use ordinal measures which may not represent an individual’s experience.

Discussion
This literature review has attempted to assimilate findings from a range of studies relevant to mindfulness and its influence on relationships in the workplace. The research reviewed does not suggest a straightforward relationship between the two variables. When assessed qualitatively, it would seem that mindfulness has a positive effect on workplace relationships. This relationship is perceived by the individual to be mediated through emotional intelligence and regulation, improved communication skills and increased awareness (Forbes, 1999; Hunter & McCormick, 2008; Mulvaney, 1994; Richards et al., 2006; Trahan, 2010). Quantitative analysis of emotional intelligence and regulation suggests that these may play a mediating role (Sawhney, 2012), however, no research has investigated communication skills and awareness in this way. In the one study that asked for ratings of relationship quality from colleagues, findings suggested mindfulness may actually have a negative influence on relationships mediated through improved mood (Giluk, 2010).

Considering the research presented here, it could be hypothesised that Trahan's (2010) stage model is in some respects correct; that it takes time for mindfulness practice to start affecting an individual’s interpersonal sphere. To expand on this theory, it may be that it takes additional time, or personal characteristics, to make these changes seem positive to other members of staff, possibly explaining the difference between qualitative and self-reported results, and aggregate ratings of relationship quality by others.

Alternatively, it may be that findings are not conclusive because no study has focussed on particular types of workplace relationship. This suggestion is supported by studies that suggested individuals that undertake mindfulness training become more focussed on their work, less involved in workplace disputes and more likely to stand up for themselves (Giluk, 2010; Hunter & McCormick, 2008; Mulvaney, 1994).
These changes may not be perceived as positive within all types of relationship. The reaction of a supervisor compared to a peer or close colleague is likely to be different. The next steps for these lines of inquiry are discussed later in this discussion.

Limitations of the review

Research for this review was sourced through a systematic search for four databases, and secondary searching through citations. This resulted in a small number of papers, six of which were unpublished PhD dissertations (Giluk, 2010; Forbes, 1999; Mulvaney, 1994; Ramsey, 2012; Sawhney, 2012; Trahan, 2010). This forms both a strength and a weakness of this review. Often reviews that use only peer-review journal published articles are skewed toward positive results, as journals are unlikely to publish a paper with a null result, largely as it does not make for good reading (Hopewell, McDonald, Clarke & Egger, 2007). Furthermore, journals are likely to have a vested interest in mindfulness being seen as useful. However, the inclusion of such a high number of unpublished literature may suggest that results are less valid, as unpublished trials have been found to be less likely to conceal intervention allocation adequately and to blind outcome assessments (Egger, Juni, Bartlett, Holenstein & Sterne, 2003).

A liberal definition of mindfulness was used in order to maximise the number of articles included in this review. A negative consequence of this was that a wide range of interventions and practises were included in the review. The problem with assimilating such a wide breadth of mindfulness practises is that they may work in different ways and could well have different influences and applications. Assimilating them together in this way may disregard more subtle nuances in how these different applications of mindfulness influence workplace relationships.
As papers were limited to those written in English, the majority of the participants within the studies represent quite a specific group. Many were from Westernised countries. It’s worth considering many of these constructs within relationships, and measures relating to mindfulness have been developed with similar samples. Even within the qualitative research, the majority of the researchers were working out of American or British universities, and themes established again refer to western constructs. This relatively etic approach applies well to the majority of these participants, but it should be considered there may be groups that remain untested, whose voices are not heard within this review. No doubt a different construct of relationship quality and mindfulness may well offer different results.

In addition, the scant research base meant that papers of a relatively low quality were included in the review. In the case of this review, the poorer quality research did not provide data that was inconsistent with other research reviewed, so it seems unlikely that this would have adversely affected the synthesis of the data.

**Future research**

This review has highlighted specific gaps in the research base that would benefit from further quantitative investigation. Other writers have theorised that there is a lack of suitable mindfulness measures (Bergomi, Tschacher & Kupper, in press). It has been theorised that there are as many as nine distinguishable aspects of mindfulness, with no measure that assesses all of these (Bergomi et al., in press). Attempts at building such a measure would be a useful addition to the field.

The results of this review suggest that mindfulness does influence workplace relationships but there is as yet no coherent theory about how this occurs. Future research focusing on this would address this gap and a particular qualitative approach to building theory called “grounded theory” might be particularly appropriate. A
grounded theory project investigating this, if successful in producing a theory, would build an important foundation for testing hypothesis.

Finally, once more coherent theories are developed they could be examined quantitatively by expanding on the mediation analyses that have already been done. Quantitative exploration into the effects of increased focus on work, being less involved in workplace conflict, and increased assertiveness on this relationship could aid clarification.

**Conclusion**

This review attempts to clarify whether and how mindfulness might influence workplace relationships. The research presently available is scarce, suffers limitations, and the findings are varied. However mindfulness shows promise as a workplace intervention to improve colleague relationships and thus workforce resilience and well-being. This review has identified gaps within the evidence base, and the next steps, particularly the need for coherent theory, in order to expand and solidify understanding within this burgeoning field.

**References**


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PSYCHD CLINICAL PROGRAMME: AN OVERVIEW OF CLINICAL EXPERIENCE

Year 1, Placement 1
Adult Community Mental Health Recovery Service
Experience gained on this placement included assessing for suitability for therapy, assessing risk of harm to self and others, experience of inpatient services and sectioning process, and experience of CPA. The therapeutic approach was typically CBT although discussions in supervision sometimes focused on attachment, psychodynamic and systemic issues. Service users were from a range of socio-economic background, a range of ages and included both male and female clients. Diagnoses of clients included Borderline Personality Disorder, Depression, Psychosis, Schizophrenia and OCD. Other experience included case presentations, running and developing groups.

Year 2, Placement 2
Child and Family Tier 2 Mental Health Service
Building on previous experience, this placement included systemic therapy with families, parent and child pairs and couples. My experience with groups was increased through developing a brand new group using evidence based interventions. Therapeutic approaches also included narrative, CBT and ACT approaches. Presentations included those to schools, parents, teachers and youth centers on good mental health practices. Discussion in supervision also explored ethical and legal positions, neuropsychological testing in young people, and the commissioning of services. Service user ages ranged from 4 to 17, and came from a range of socio-economic background.

Year 2, Placement 3
Older Adults Community Mental Health Team and Memory Service
This placement’s therapeutic approach was largely integrative, formulation led interventions. A mixture of narrative, third wave CBT, traditional CBT, psychodynamic, attachment and older adult specific (life stage and life story work) approaches. Service development included the development of post diagnostic “kits” for those diagnosed with dementia. Several complex neuropsychological presentations were assessed using standardized measures. Group experience included the running of a carers information group.

Year 3, Placement 4
Specialist Placement: Military Neuro-rehabilitation Service
Expanding on my previous neuropsychological experience, I opted for a specialist placement working in an inpatient unit for active service men and women with brain injury. The placement consisted largely of a range of therapies for PTSD and mood difficulties related to adjustment, and neuropsychological assessment. Other experiences included the assessment of capacity and the development of new group intervention. I also supervised an assistant psychologist on this placement.
Year 3, Placement 5
Mental Health and Learning Disability Team
My final placement was in a Mental Health Learning Disability Team. The placement had a predominantly CBT and systemic approach, but third-wave CBT, DBT and narrative approaches were used as well as psychodynamic factors considered in formulation and supervision. Approaches needed to be heavily adapted, and my work included developing a DBT workbook for people with Learning Disability. I also developed a tandem carer and client group, and assessed outcomes from both this group and an ADHD group run by a colleague. I carried out neuropsychological assessments, and observed assessments for ASD. Services users spanned a wide range of ages, diagnoses, ethnicities and abilities.
## PSYCHD CLINICAL PROGRAMME: TABLE OF ASSESSMENTS

### COMPLETED DURING TRAINING

#### Year I Assessments

<table>
<thead>
<tr>
<th>ASSESSMENT</th>
<th>TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>WAIS-III</td>
<td>Short report of WAIS-III data and practice administration</td>
</tr>
<tr>
<td>Practice Case Report</td>
<td>A Case Study of a Man in his Late Fifties with Enduring Problems with Depression</td>
</tr>
<tr>
<td>Problem Based Learning – Reflective Account</td>
<td>PBL Reflective Account: Year 1</td>
</tr>
<tr>
<td>Major Research Project Literature Review</td>
<td>Mindfulness and its Influence on Collegiality in the Workplace: A Review of the Literature</td>
</tr>
<tr>
<td>Adult – Case Report 1</td>
<td>A Case Study of a Woman in her Sixties with Obsessive Compulsive Disorder</td>
</tr>
<tr>
<td>Adult – Case Report 2</td>
<td>A Case Study of a Man in his Late Fifties with Enduring Problems with Depression</td>
</tr>
<tr>
<td>Major Research Project Proposal</td>
<td>The Influence of Mindfulness on Workplace Relationships: A Research Proposal</td>
</tr>
</tbody>
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#### Year II Assessments

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<thead>
<tr>
<th>ASSESSMENT</th>
<th>TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Related Project</td>
<td>A quantitative analysis of the nature of referrals to a CAMHS team following service change</td>
</tr>
<tr>
<td>Problem Based Learning – Reflective Account</td>
<td>PBL Reflective Account: Year 2</td>
</tr>
<tr>
<td>Child and Family– Case Report</td>
<td>A systemic intervention with the family of a 12 year old boy with ADHD</td>
</tr>
<tr>
<td>Personal and Professional Learning Discussion Groups – Process Account</td>
<td>PPLDG Process Account</td>
</tr>
<tr>
<td>Older People – Oral Presentation of Clinical Activity</td>
<td>Developing skills in building integrative formulation, collaboratively.</td>
</tr>
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#### Year III Assessments
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<thead>
<tr>
<th>ASSESSMENT</th>
<th>TITLE</th>
</tr>
</thead>
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<tr>
<td>Major Research Project Empirical Paper</td>
<td>A Grounded Theory Investigation into the Influence of Mindfulness on Colleague Relationships</td>
</tr>
<tr>
<td>Personal and Professional Learning – Final Reflective Account</td>
<td>On becoming a clinical psychologist: A retrospective, developmental, reflective account of the experience of training</td>
</tr>
<tr>
<td>People with Learning Disabilities– Case Report</td>
<td>A Neuropsychological Case Report: The Assessment of a Woman in her Twenties with Suspected Mild Learning Disability.</td>
</tr>
</tbody>
</table>