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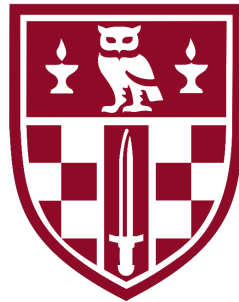
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The Role of Moral Elevation in the Workplace

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Birkbeck, University of London

2024



Supervised by

Dr Rachel Lewis and Dr Joanna Yarker

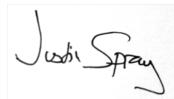
Thesis submitted in partial fulfilment for the degree of

Professional Doctorate in Occupational Psychology (DOccPsy)

Declaration

The work presented in this thesis is confirmed as my own.

Signed:

A handwritten signature in black ink that reads "Justin Spray". The signature is written in a cursive style with a clear, legible font.

Justin Spray

Acknowledgements

Before I embarked on this research, I anticipated that this would be a lonely, solo effort. I couldn't have been more wrong. It is now clear to me that as with any endeavour worth pursuing, it is only possible to complete a doctorate with the help, encouragement, and input of myriad supporters.

First and foremost, among these are Dr Jo Yarker and Dr Rachel Lewis, my research supervisors. Not only would I never have completed this research without them, quite simply I would not have started. Their vision of creating the doctoral programme is testament to their dedication to our profession and I feel humbled to have been within their orbit for the last few years. They have left an indelible mark on my career and offer a role model of how to contribute to society as an occupational psychologist. At its heart, this research is about kindness and how it raises our spirits and propels us forward. Jo and Rachel have been the embodiment of this for which I will be forever grateful.

While my research seeks to nudge our understanding of the psychological world forward, I must acknowledge the work of those that came before me and in particular those whose work I have drawn upon for inspiration and understanding. I recognise that I am but a tiny cog in the machine of scientific endeavour. Of equal importance are the participants who generously offered their time for nothing more than to contribute to research.

I offer a special thank you to my fellow doctoral students. I fondly recall the times we spent together from initial inception of ideas to submission. As a group they offered me insights from their own learning and during the tougher times, picked me up. In particular, I have to thank Tim Gore and Jerry Martin. Tim became my informal coach, chivvying me along and offering wise advice. Jerry is one of those rare people you meet in life who makes you want to be a better person. I've tried.

Finally, I thank Gill, my partner. Without her encouragement and love, I achieve nothing.

Abstract

This thesis aims to examine the measurement and application of moral elevation, one of the other praising emotions, in the workplace. It argues that while relatively little research has been conducted involving moral elevation in the workplace, it offers the potential to contribute to addressing issues relating to prosocial behaviour and wellbeing at work.

To address the aims of this thesis, two studies were conducted. The first study was a systematic literature review (n = 6) which examined the application and measurement of moral elevation. Despite the limited research, these studies suggest that moral elevation may be elicited in work contexts and could be associated with prosocial behaviour and wellbeing. However, conceptual and methodological challenges undermine the validity of the findings, and the review recommends more rigorous future research to address these limitations.

The second study was empirical research which built on the learnings of the systematic literature review. The study investigated the impact of sustained exposure to videos depicting acts of kindness on prosocial intentions, the specific prosocial behaviour of knowledge sharing at work, and general wellbeing. In an experiment involving 227 participants, individuals were repeatedly exposed to either (a) videos showcasing exceptional acts of kindness or (b) nature video stimuli over an 11-day period. The findings, at odds with the systematic literature review studies, indicated that extended exposure to videos depicting acts of kindness does not directly affect participants' prosocial intentions, prosocial behaviour, or general wellbeing. However, it was found that videos portraying acts of human kindness could indirectly enhance prosocial intentions, with this effect mediated through the experience of moral elevation.

Synthesizing the findings from both the systematic literature review and empirical study, we cannot definitively conclude the existence of relationships between moral elevation, prosocial intentions, prosocial behaviour, and wellbeing. However, the evidence underscores the importance of paying attention to the details and specifics of the context in which elevating experiences are occurring, as well as maintaining clear definitions of concepts.

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Professional Practice Statement

As a Chartered Occupational Psychologist, I am exempt from the first module (Professional Practice Portfolio) of the Professional Doctorate. This thesis therefore satisfies the requirements for Part 2 of the doctorate (Research Thesis). I provide a summary of my professional practice as context to this thesis.

I gained a BSc (Hons) in Psychology in 1990, an MSc in Occupational Psychology in 1994 and became a Chartered Occupational Psychologist with the British Psychological Society in 1998. In 2004 I gained a post-graduate certificate in Conflict Resolution and in 2016 an MA in Filmmaking.

After spells early in my career working with the area of homelessness and as a recruitment and selection specialist within the finance sector, I founded the occupational psychology consultancy, Mendas, in London. We delivered a broad range of occupational psychology services (assessments, learning and development, leadership, engagement and motivation, wellbeing and work, work design, organisational change and development) to commercial and public sector organisations with a particular focus on the financial services sector and Central Government. Since selling the business, I have worked as an independent consultant focusing more of my time on communication issues within organisations.

Alongside my career, I have continuously worked in the not-for profit sector as a volunteer and activist. Amongst other endeavours, I have set up a school in Honduras, lived and worked in a therapeutic community in Florida, been chairperson of a mediation charity in the UK and volunteered as a communications specialist for a development NGO in East Africa.

My career and education have been characterised by pursuing and joining together disparate avenues of interest. It is in doing so that I have been able to offer clients insights and evidence-based solutions that take in a wide range of perspectives.

It is as a continuation of this approach that I have pursued the Professional Doctorate. My interest and desire were fuelled by two factors. Firstly, I recognised that with three decades

passing since I first studied psychology, a deep dive into recent research methodologies and current evidence would significantly improve my psychological practice. Secondly it afforded me an opportunity to explore in depth the areas of communication and behavioural change within organisations that have increasingly become an area of interest to me in recent years.

Chapter 1: Introduction

In 1998 Barbara Fredrickson (1998) published a paper that she hoped would “unlock scientific curiosity about positive emotions”. Over two decades have passed since she published her proposal for a Broaden and Build theory of positive emotions and its influence on the psychological understanding and application of positive emotions remains undimmed.

Prior to the publication of her theory, Fredrickson argued, little attention had been given to the study of positive emotions such as joy and contentment with the focus being on negative emotions such as anger and sadness. She argued that while negative emotions such as fear and anger had been adequately explained in evolutionary terms as prompting physiological responses to prepare the individual for potentially life-threatening situations, little research had been undertaken to explain the role of positive emotions.

Over the two and half decades that have followed the publication of Fredrickson’s paper, numerous researchers including Fredrickson and her colleagues have studied positive emotions and have explored their value in domains ranging from creativity (Ziv, 1976; Kellerman, 2023) to wellbeing (Folman, 1997; Tugade and Fredrickson, 2004; Kok and Fredrickson, 2015). Several of the findings have implications for occupational psychology practitioners and the organisations in which they work (Straw, Suttin and Pelled, 1994; Fredrickson, 2000; Lin, Kao, Chen and Lu, 2016) as will be laid out in the following sections.

In this introduction, I will set out a case for studying one particular positive emotion, moral elevation. Moral elevation, sometimes referred to in the literature simply as elevation, is the emotion prompted by exceptional examples of moral behaviour that are not directed at oneself. For example, witnessing someone going out of their way to help a stranger or observing a colleague going out of their way to support a new-joiner (Haidt, 2000).

I will place moral elevation within the body of research addressing positive emotions and their value. I will explore how the specific emotion of elevation may improve wellbeing and

prosocial behaviour in the workplace and how these benefits may be realised from the application of learning about positive emotions.

The need to address wellbeing and promote positive working relationships has never been more pressing: the Chartered Institute of Personnel and Development (CIPD 2023) estimates that 32.5 million working days were lost to work-related ill health in 2019/20, with stress, anxiety and depression accounting for almost 18 million of these. COVID-19, it argues, “has forced employee wellbeing more urgently into focus for many organisations. The adverse impact of the pandemic on many people’s mental wellbeing means that employers increasingly need to take effective steps to manage the main risks of stress and mental ill health among their workforces”. While the pandemic’s acceleration of the shift to homeworking has brought benefits to many, the CIPD’s research (CIPD, 2020) has found that this change has led to significant damage to knowledge-sharing and team relationships. Research that addresses these issues is therefore of significant potential value.

1.1 Broaden and Build Approach

Nesse (1990) proposed that for our understanding of emotions to increase we must not only ask how they work, but also ask what functions they serve. Their argument follows that each emotion is useful only in certain situations. If an emotion is aroused only in specific circumstances, its functions can only be understood once a detailed examination of the characteristics of the situation have been undertaken.

Answering this question Frederickson (1998) made a series of hypotheses relating to positive emotions. Firstly, she proposed that it is unhelpful and unnecessary to assume that the adaptive value of positive emotions is similar to the adaptive value of negative emotions. So, whereas negative emotions were understood to prompt specific action tendencies that were likely to save our ancestors' lives - for example, disgust upon smelling food that is decaying prompts us to avoid eating that food which might save us from a gastrointestinal infection - positive emotions might function in very different ways. Put another way, a model that accounts for positive emotions does not also need to account for negative emotions. She proposed that while negative emotions narrow the focus of the individual and limit the

individual's access to novel cognitive solutions to a problem, positive emotions lead an individual to be more open to novel ideas and be more likely to behave in a playful, open, exploratory manner.

Furthermore, she proposed that positive emotions do not necessarily prompt a physical response as do negative emotions but also cognitive responses. She labelled the more diffuse responses to positive emotions *thought-action tendencies*. Fredrickson described this as broadening the thought-action repertoire. She argued that positive emotions lead us to explore and experiment; to be open to the environment around us and the opportunities that it offers. While, she argues, there is no specific or particular urge experienced as a result of positive emotions, the more nebulous tendency to explore and experiment while experiencing a positive emotion offers an evolutionary advantage as it leads to the building of resources that can be drawn on at a later time. Resources would include new physical capabilities, social networks, or intellectual abilities. For example, our ancestors playing a chase game with another person may have developed survival skills that enabled an individual to escape prey while also increasing a social connection that in turn offered more opportunities to reproduce. Thus, she argued, while negative emotions offer an immediate opportunity to survive and learn, positive emotion broaden our thoughts and actions which contribute over a sustained period to building our resources.

The research examining positive emotions and the broaden and build theory have tended to address four areas: broadening thought and attention; undoing lingering negative emotions; building psychological resilience; and building wellbeing and health.

In the following sections I will briefly address each of these in turn before I link research findings to the world of work as we build the case for further exploration from an occupational psychology perspective of positive emotions and moral elevation in particular.

1.1.1 Broadening thought and attention

A key component of the broaden and build theory is that positive emotions broaden thought and attention rather than narrow it (Fredrickson, 2004). Evidence for this has often,

unsurprisingly, focused on creativity given that creative thinking in the research literature is described as involving broadening of perspectives and opening thought patterns to novel possibilities (Newell et al., 1962; Kellerman & Seligman, 2023). Fredrickson (2004) drew on the research of Isen (1987) to support her initial hypotheses.

Isen developed a number of experimental designs to elicit positive emotions including giving bags of sweets, showing humorous cartoons, providing feedback of success, sharing short funny videos, and having participants read a series of positive words. The research was able to show that people experiencing positive affect (1) offer more unusual cognitive association (2) create more inclusive cognitive categories, and (3) score more highly on creative thinking tests.

Similar work by Ziv (1976) observed increased creativity among participants in a study asked to generate unusual uses for everyday object after experiencing positive emotions. Research has also demonstrated positive emotions facilitate an expanded locus of attention (Basso, Schefft, Ris, & Dember, 1996)

Similarly, those experiencing positive emotions appear to be better able to focus on a big picture as opposed to small details compared to those primed to experience negative or neutral emotions (Fredrickson & Branigan, 2005).

1.1.2 Undoing negative emotions

Building on the theory of Levenson (1988) that proposed that the positive emotions serve to undo negative emotions, Fredrickson proposed that while negative emotions narrow thought-action repertoires towards behavioural urges which are likely to increase chances of survival in life threatening situations, positive emotions broaden this same repertoire. This means that positive emotions should 'undo' the lingering effects of negative emotions by facilitating this broadening process.

The idea that positive emotions might "correct," "restore," or "undo" the aftereffects of negative emotions has been developed by several researchers (e.g., Cabanac, 1971; Folkman & Lazarus, 1980).

To test this part of the theory, Fredrickson and her team (Fredrickson, Mancuso, Branigan, & Tugade, 2000) ran an experiment where participants were told they had just one minute to prepare a speech to be delivered to their peers while physiological markers were monitored. These induced cardiovascular symptoms of anxiety, such as raised heart rate and increased blood pressure.

Following the preparation of the speech, participants were told that they would not in fact have to present the speech and their cardiovascular recovery was measured (lowering of heart rate and blood pressure). Participants were randomly assigned to view video clips that primarily elicited the emotions of joy, contentment, or sadness. A 'neutral' film was used as a control condition.

Those who viewed the films eliciting the positive emotions exhibited quicker cardiovascular recovery than those in the negative and baseline conditions, supporting the 'undoing' hypothesis.

While early research in this area was generally supportive of the theory of positive emotions undoing negative emotions, reviews by Cavanagh and Larkin (2018) and Behnke et al. (2023) have presented mixed results - positive emotions have not been found to speed sympathetic recovery but may support cardiovascular recovery. The reviews have highlighted the of the studies such as using different physiological assessment strategies and methods for inducing positive emotions. Behnke et al. (2023) noted that while watching film clips, reading stories and watching pictures of facial expressions are common methods used to induce positive emotions, the differences in elicitation may influence the strength of the undoing effect of positive emotions.

1.1.3 Building psychological resilience

Perhaps most critical from an evolutionary perspective is the connection between positive emotions and resource building. While emotions are short, transient experiences that broaden an individual's thought-action repertoires, the theory proposes that the

accumulative effect of positive emotions is the development of personal resources that are more durable and stable than the emotions that led to them.

Resilience is one area that researchers have examined as detailed below. If experiencing positive emotions can undo the effects of negative emotions, we are led to ask if experiencing positive emotions can build psychological resilience through the same broaden and build mechanism.

Prior to Fredrickson's work, Lazarus and Folkman (1984) had shown that maintaining a positive outlook and experiencing positive emotions during times of stress protects wellbeing. Individuals protected in this way are described as resilient. Individuals who are resilient appear to experience more positive emotion, be more optimistic and be more energetic.

Tugade and Fredrickson (2004) hypothesized that an ability to bounce back using positive emotions may manifest physiologically. To test this, they conducted an experiment using the same speech-preparation task as before and asked participants to report their psychological resilience using a self-report scale.

The findings revealed that higher levels of resilience positively predicted participants' reports of positive emotions during the stressful speech-preparation task; resilient participants were more likely to report experiencing happiness and interest alongside their anxiety. These participants also experienced quicker cardiovascular recovery, which was accounted for by their experience of positive emotions.

Extending upon the above findings, evidence has shown that positive emotions may not only indicate the presence of resilience but serve to build it as an enduring resource that aids in long-term coping (Fredrickson, 2004).

1.1. Building Wellbeing and Health

While initial research following the publication of the theory focussed on finding evidence for the psychological mechanisms of broaden and build, a significant amount of the research in the years since has asked whether positive emotions lead to improved wellbeing and health.

(Cohen, et al., 2006; Kok et al., 2013; Steptoe et al., 2008; Fredrickson, Cohn, Coffey, Pek, & Finkel, 2008; Kubzansky et al., 2018, Boehm et al., 2022; Danner, Snowdon, & Friesen, 2001; Levy, Slade, Kunkel, & Kasl, 2002). Do people who experience more positive emotions live longer and enjoy healthier lives? A growing body of evidence suggests they do.

Having a positive emotional style – being happy, lively and calm, for example, forecasts having fewer colds in a study where participants were exposed to a cold virus (Cohen, et al., 2006), and in a study by Steptoe et al. (2008) it was found that indicators for inflammation in samples of saliva were inversely associated with positive mood when momentary measures of positive mood were recorded throughout the day.

A longitudinal field experiment found that individuals randomly assigned to self-generate positive emotions reported experiencing fewer headaches and less chest pain, congestion, and weakness compared with a control group (Fredrickson, Cohn, Coffey, Pek, & Finkel, 2008). Lower likelihood of cardiovascular disease (Kubzansky et al., 2018; Boehm et al., 2022) has also been found in correlational studies. Longitudinal studies have also been able to identify a link between frequent positive affect and longevity (Danner, Snowdon, & Friesen, 2001; Levy, Slade, Kunkel, & Kasl, 2002).

Kok et al. (2013) sought to establish stronger evidence of causality in a study in which they elicited positive emotions while measuring what they described as an objective marker for physical health, vagal tone. The vagal tone is considered to be a useful marker of physical health as it reflects the functioning of the vagus nerve, a core component of the parasympathetic nervous system, which regulates the heart rate in response to signals of safety and interest (Porges, 2007). Lower vagal tone has been linked to high inflammation (Thayer & Sternberg, 2006), greater risk for myocardial infarction and lower odds of survival after heart failure (Bibeovski & Dunlap, 2011).

Participants were assigned either to an intervention group that self-generated positive emotions via loving-kindness meditation (LKM) or to a waiting-list control group. LKM focuses on generating loving-kindness toward oneself and others through a series of mantra-led meditative steps (Griffin, 2022).

Participants in the LKM group increased in positive emotions relative to those in the control group. This effect was moderated by baseline vagal tone. Increased positive emotions, in turn, produced increases in vagal tone, an effect mediated by increased perceptions of social connections. The results suggest that positive emotions, positive social connections, and physical health influence one another in a self-sustaining upward-spiral dynamic.

The study, having drawn significant attention in the mainstream media with its bold claims, (Don't bother with the gym today, 2013) has not been without its critics, however. Heathers et al. (2015) argues that as well as flawed statistical analysis, and a questionable use of the vagal tone measurement, the research implies that LKM leads to health benefits when there was in fact no main effect for LKM and no indication of the amount of LKM – if any – the participants engaged in. Kok (2015) responded to the criticism by challenging the assessment of the statistics and repudiating the assertion that they had suggested that LKM itself leads to improved health. It was restated that it was the mechanism and mediators that had been identified, not a particular intervention. Nevertheless, the research and the response highlights that such is the relevance and interest in research of this topic that it behoves researchers to ensure that complex findings are reported unambiguously.

This study is also important in that while researchers had previously focused on relationships and correlations, this study pointed towards potential interventions: how engaging in the generation of positive emotions can improve health.

An equally contentious area of study is the relationship of positive emotions with flourishing. Fredrickson and Losada (2005) contested that the effects of positive emotions may compound over time, fuelling the psychological state of *flourishing*.

Flourishing as a psychological concept was brought to the attention of researchers by Corey Keyes (2002) who described it as the presence of mental health in contrast with the absence of mental health which he called languishing. Building on this work and refining the definition of flourishing as living “*within an optimal range of human functioning, one that connotes*

goodness, generativity (the concern for and commitment to the well-being of future generations (McAdams et al., 2004)), *growth, and resilience*”, Fredrickson and Losada (2005) asserted that a key predictor of flourishing is the ratio of positive emotions experienced to negative emotions. Their research developed what they called a positivity ratio with an optimal value of between 2.9013 and 11.6346. A ratio outside of this range, they asserted, would lead to languishing.

Challenges of the mathematical model of the study (Brown et al., 2014) led the authors to issue a correction (2013) in which they accepted that the equations were flawed but that nevertheless the ratio of positive affect to negative effect is an important component of flourishing. This incident underlines the importance of not overstating or overclaiming findings. There is a significant danger that as elements of a study are discredited, the entire thesis is dismissed. Nevertheless, a recent SLR (Blasco-Belled et al., 2023) looked at nine positive psychology interventions (PPIs) for chronic pain patients and found PPIs to be effective in promoting subjective well-being post-treatment and reducing anxiety.

1.2 Positive Emotions in the Workplace

Fredrickson (2000) makes a case for recognising the importance of positive emotions in the work setting. Her proposition is that as positive emotions promote creativity, resilience, relationships and wellbeing, individuals who experience them will be continually growing and developing – key components of organisational human resources strategies. She proposed that the “upward spirals” resulting from positive emotions will lead to significant improvements in functioning and well-being at work.

Studies that look at the relationship of positive emotions and productivity include the work of Straw and co-researchers (1994) that predates Fredrickson’s work. They measured positive emotions and job outcomes in a longitudinal study of 272 employees in the car industry over 18 months. A combination of felt and expressed positive emotions at Time 1 predicted improvements in supervisor evaluations at Time 2, as well as pay increases. Likewise, they found that positive emotions at Time 1 predicted improvements in social support from supervisors and marginally co-workers. Fredrickson argued that this study

provides evidence of the transformative nature of positive emotions: individuals exhibiting positive emotions had made themselves more effective and better integrated into the workplace. Among the equally plausible explanations, however, are that individuals exhibiting positive emotions were perceived as more effective across the achievement measures as a result of a 'halo' effect and were consequently rewarded: colleagues liked happy co-workers. It was also not clear if the job roles that were involved necessitated positivity and enthusiasm. We therefore are unclear if positive emotions are a specific role requirement. Nevertheless, this study points out the potential importance of the study of positive emotions in the workplace.

A more recent study by Oswald and colleagues (2015) is illustrative of the limitations that are typical of much of this area of research. The researchers used a series of experiments to test the relationship in a lab-based setting and found that those who undergo what were described as "happiness treatments" such as enjoying a funny film respond with a 10–18% increase in productivity at tasks such as answering additions of two numbers over a ten-minute period for small monetary incentives. The researchers proposed that the task is analogous to a white-collar role. An alternative perspective is that these tasks are trivial in comparison to the kinds of task undertaken by most white-collar workers and that we need to be cautious about equating the positive affect of an intervention in a lab setting with sustained increases in real-world performance.

We turn now specifically to creativity, wellbeing and prosocial behaviour. Further caution is needed when interpreting the role of positive emotions in promoting creativity. Shih et al. (2022) looked specifically at the role of humour in eliciting positive emotions. Seeking to establish a link between leader humour and creativity, they conducted research with 220 leader-follower dyads in Taiwan. They found that that congruence between the humour styles of the leader and the follower enhance psychological capital (PsyCap) - which includes self-efficacy, optimism, hope and resilience (Luthans et al., 2007) - leading to greater confidence, flexibility and persistence which in turn leads to individuals exhibiting greater creativity.

While creativity is undoubtedly important within a work setting, when researchers in the studies described in the preceding sections adopt the term creativity, it is not necessarily the creativity detailed in studies of organisations where its application to creative problem solving is considered to be of importance (Kellerman & Seligman, 2023). Kellerman and Seligman propose a typology that breaks creative thinking into four types: integration, splitting, figure-ground reversal, and distal thinking. Integration involves showing that two things that may initially appear different are, in fact, the same or share common elements, connections and similarities between seemingly unrelated concepts or ideas. Splitting, the opposite of integration, involves seeing how things that may initially look the same are actually different. It involves breaking down complex ideas into their constituent elements. Figure-ground reversal refers to a shift in perspective where you realize that what is crucial or significant is not in the foreground but rather in the background. It involves recognizing significant hidden or overlooked aspects of a situation or problem. Distal thinking involves imagining things that are very different from the current context or the "here and now." to generate innovative ideas or solutions.

A study that investigates how, for example, we can influence students to generate more uses for an object (Ziv, 1976), arguably has poor ecological validity if evaluated against typologies such as that of Kellerman and Seligman (2023). I argue that research that attends to a greater extent to its ecological validity is likely to have wider applicability to the workplace. This issue will be addressed further in this thesis as I detail how to employ moral elevation research for the benefit of individuals and organisations.

The case for positive emotions having an impact on wellbeing is more compelling. The role of positive emotions has been examined in the broader context of psychological capital (PsyCap). Lin et al. (2016), for example, found in a study of 248 participants and 40 direct leaders that positive affect as a result of leader follower interactions impacts on follower PsyCap. PsyCap in turn impacts on proactive change behaviours of taking control and creative performance.

Kukucsá and colleagues (2023) conducted an SLR that reviewed the use of positive psychology interventions (PPIs) among police staff across eight different countries. Of the 15 studies

included in the final review, intervention types included mindfulness-based resilience training ($n = 11$), physical or wellness practice classes ($n = 1$), role-play and scenario-based interventions ($n = 2$) and expressive writing ($n = 1$). Mindfulness-based programs were shown to have positive effects on various aspects of self-reported psychological well-being, including reducing anxiety, depression, negative emotions, and enhancing overall quality of life. However, they showed limited effectiveness in addressing certain health behaviours like alcohol consumption and self-reported general health. Expressive writing and role-play-based interventions were also found to be successful in reducing stress and anxiety. Positive psychology interventions have therefore been shown to hold promise for promoting the health and well-being of police personnel.

A number of studies have looked at the relationship between positive emotions and prosocial behaviour at work, variously referred to in the literature as Organisational Citizenship Behaviour (OCB) and Discretionary Prosocial Work (DPW). In the following paragraphs I will detail these findings, link them to the challenges identified by the CIPD (2020) regarding remote working and suggest what might be learned from these studies for future research.

OCBs take the form of behaviours such as helping colleagues and being conscientious at work. These discretionary behaviours are important elements of effective organisational functioning (Deckop et al., 1999).

DPW is a domain of behaviour that covers a range of activities in work settings from informal altruistic behaviour in the context of Organisational Citizenship Behaviour (OCB), through to formal engagement in Corporate Volunteering (CV) activities in which employees offer their time and expertise to charitable organisations (Organ, 1997).

The demonstration of these prosocial behaviours at work are the antithesis of the behaviours such as decreased knowledge sharing post the lockdowns described by the CIPD (2020). As such, the study of these areas, may provide insights into how to address the challenges identified pertaining to knowledge sharing.

Cooper and her colleagues (2018) looking at humour sought to identify links between leader humour, positive emotions and OCBs. They found that leader humour was positively related

to the quality of the relationship with the leader which was positively related to OCBs. The role of positive emotions was identified as acting as a mediator. They found that leader humour was positively related to leader-triggered positive emotion which in turn was positively related to the relationship with the leader. This study indicates how the influence of positive emotions within the workplace may extend beyond the individual to the interaction between individuals.

A further illustration of the relevance of interactions between people to this area may be found in research examining the relationship between positive emotions and helping behaviours. Research from as far back as the 1990s (George, 1991) has shown how positive emotion can lead to individuals being more helpful. George (1991) found with a sample of 221 salespeople that experiencing positive emotions is positively related to being more prosocial – helpful - to their customers. Furthermore, when a person is helped it leads to the positive emotion of gratitude in the person who is helped. This in turn, it is argued by the researchers, often creates the urge to reciprocate and thus form the basis for an ongoing cooperative relationship (Oatley & Jenkins, 1996).

It was the examination of such prosocial behaviours that led Social Psychologist, Jonathan Haidt to propose that gratitude is one of a specific group of positive emotions which he called the 'other-praising moral emotions' (Algoe & Haidt, 2009). The group of other-praising emotions also include admiration and moral elevation, sometimes referred to in the literature simply as elevation, the focus of this thesis.

1.3 Other Praising Emotions and Moral Elevation

The following sections will outline what moral elevation is and offer evidence for why it is an area that deserves greater attention within occupational psychology.

Haidt proposed that moral elevation was a 'new' specific positive emotion (Haidt, 2000). Haidt (2003a) noted that Thomas Jefferson, the American founding father, had detailed the concept and its value when responding to a request for reading recommendations two centuries earlier. Upon recommending works of fiction, Jefferson proposed:

When any original act of charity or of gratitude, for instance, is presented either to our sight or imagination, we are deeply impressed with its beauty and feel a strong desire in ourselves of doing charitable and grateful acts also. On the contrary when we see or read of any atrocious deed, we are disgusted with its deformity, and conceive an abhorrence of vice.

Now every emotion of this kind is an exercise of our virtuous dispositions, and dispositions of the mind, like limbs of the body acquire strength by exercise. But exercise produces habit, and in the instance of which we speak the exercise being of the moral feelings produces a habit of thinking and acting virtuously...

His letter includes the physiological manifestations of the emotion and the thought-action tendencies it engenders.

...And whether the fidelity of Nelson and generosity of Blandford in Marmontel do not dilate his breast and elevate his sentiments as much as any similar incident which real history can furnish? Does he not in fact feel himself a better man while reading them, and privately covenant to copy the fair example?

He concludes with a reflection on the power of the emotion to impact on the behaviour of those experiencing it:

...Thus a lively and lasting sense of filial duty is more effectually impressed on the mind of a son or daughter by reading King Lear, than by all the dry volumes of ethics, and divinity that ever were written. (Jefferson, 1975).

Haidt described the physiological manifestations of moral elevation as being the warm, uplifting feeling that people experience when they see unexpected acts of human goodness, kindness, compassion, love, gratitude, forgiveness, courage, loyalty, self-sacrifice or any other strong display of virtue (Algoe & Haidt, 2009). Haidt (2000) proposed that witnessing moral excellence would lead to individuals feeling 'lifted up, optimistic about humanity'. This, he suggested could reduce feelings of cynicism and encourage 'feelings of hope, love, and optimism and a sense of moral inspiration'. This, he concludes is likely to lead to motivational outcomes in line with broaden and build theory of opening up to and desiring to help others.

Haidt (2000) was able to differentiate moral elevation from gratitude and admiration in a series of studies involving participants recalling and diarising experiences of the other praising emotions along with recounting their feelings and thoughts following watching videos designed to elicit the other praising emotions. Moral elevation, Haidt proposed, is prompted by exceptional examples of moral behaviour that are not directed at oneself whereas gratitude is elicited by good deeds that benefit the self. Admiration is triggered by skills, talent or achievement that may not have a moral component, (Algoe, 2012) and Siegel (Siegel et al., 2014) further differentiate between moral elevation and gratitude in the thought-action tendencies they engender: gratitude drives the individual to develop and improve the relationship with the person they are interacting with, while elevation involves a more diffuse desire to be a better person for the sake of others.

Their findings, summarized in Table 1, illustrate the discreet nature of the other praising emotions.

Table 1: Summary of other praising emotions

	Elevation	Gratitude	Admiration	Happiness (Joy)
Elicitor	Others exceeding standards of virtue	Others doing good deeds for the self	Others exceeding standards of skill or talent	Progress toward or achieving a goal
Motivations	Do good deeds, emulate, become better person	Repay benefactor, praise benefactor publicly	Emulate, work harder towards success, praise other	Celebrate, expend energy, tell others about good feelings
Relationship consequences	Openness to others in general	Want closer relationship with benefactor	Want proximity; ingratiation	None

Haidt (2003a) describes a three-dimensional model that starts to link the emotion of moral elevation to prosocial behaviours of the elevated. The dimensions of the model are *solidarity*,

the degree of closeness to others; *hierarchy*, the degree of social status or power; and *divinity*, the degree of purity of behaviour. Contrasting moral elevation with social disgust, Haidt (2000) argues that disgust results from observing someone move “down” the divinity dimension who has committed morally repugnant actions. Moral elevation is the reaction to observing someone moving “up” the divinity dimension. Van de Vyver and Abrams (2017) further clarified the nature of the emotion as being an approach emotion in a study in which participants watched an elevating video and completed self-report measures of approach orientation.

1.3.1 Physiology of moral elevation

When people were asked to describe elevating experiences by Haidt (2003a), they often reported feeling a "warm or glowing feeling in the chest" and "pleasant or tingling feelings" in line with the dilation of the breast detailed in Jefferson's letter. Haidt (2003a) suggested that these chest-related sensations might be linked to the vagus nerve, causing various changes in the heart, lungs, and throat. Subsequent studies were conducted to elicit moral elevation in experimental conditions such as having participants undertake autobiographical recall (Algoe & Haidt, 2009) where they reported feeling their muscles being relaxed, and viewing elevating film clips (Oliver, Hartmann, & Woolly, 2012) following which they reported chills or goosebumps.

Silvers and Haidt (2008) examined the release of the hormone oxytocin during the elevating experience of watching a video of a musician recounting being saved from a life of crime by a mentor. They found that mothers who watched this elevating video rather than a humorous video were more likely to experience lactation, indirectly suggesting oxytocin release. Piper and colleagues (Piper, Saslow, & Saturn, 2015) undertook research to identify what brain activity is accompanying the feeling of being morally elevated and found that watching an elevating video led to the unusual activation of both the sympathetic (fight or flight) and parasympathetic (relaxing and calming) nervous systems. Their explanation for this dual activation is that witnessing acts of kindness or compassion can be arousing due to the empathetic stress of seeing someone in need while also promoting a calming and warm feeling associated with a desire to connect socially and act altruistically.

Studies indicate that the physiological and neural mechanisms associated with affiliation's system's experience of falling in love may be the same as the feelings experienced when being morally elevated (Carter, 2014), thus shedding light on why moral elevation prompts people to seek affiliation and feel love for humanity (Janicke & Oliver, 2015).

Englander and colleagues (Englander et al., 2012) employed functional Magnetic Resonance Imaging (fMRI), a non-invasive neuroimaging technique, to identify the areas of the brain that are active when an individual is elevated. Ten participants viewed the same nine video clips. Three clips elicited moral elevation, three elicited admiration, and three were emotionally neutral. Videos in the elevation condition evoked particular activity in the medial prefrontal cortex, precuneus, and insula. The strongest markers of activity occurred during portions of the videos that were independently rated as most emotionally arousing. The activity in these same brain regions was not consistently observed during the admiration videos and was absent for the neutral videos.

1.3.2 Mechanisms of moral elevation

Haidt (2000, 2003) and Algoe and Haidt (2009) suggested that the positive emotions associated with elevation would lead to more favourable views toward humanity and a desire to emulate moral exemplars, which in turn should predict prosocial outcomes.

Studies have supported this idea. For example, Thomson and Siegel (2013) conducted an online experimental study revealing that elevating experiences lead to prosocial behaviour (e.g., charitable donations) indirectly through elevating emotions, favourable views toward humanity, and increased desires to emulate moral exemplars. Additionally, Van Cappellen and colleagues (2013) found that self-reported feelings of benevolence (seeing people in a positive way) mediated the relationship between elevation and self-transcendence, supporting the idea that elevation fosters positive perceptions of others.

Other researchers (Ellithorpe, Ewoldsen, & Oliver, 2015; Schnall & Roper, 2012) have investigated moral elevation through the lenses of moral licensing and prosocial goals. Moral licensing is the phenomenon whereby increased confidence in self-image leads an individual

to be less concerned about consequences of subsequent immoral behaviour. Individuals have in essence 'banked' virtue and so can act immorally without going into deficit (Sachdeva et al., 2009).

In a study by Schnall and Roper (2012) participants who affirmed their moral identity were more likely to engage in prosocial actions compared to those who did not. The study suggested that elevating experiences might inoculate against moral licensing by turning core values into action. Ellithorpe and colleagues (2015) suggested that elevating experiences might not necessarily mitigate moral licensing effects. They found that participants exposed to an elevating video were less likely to behave prosocially on a second prosocial task. They proposed that moral licensing processes took over. It is clear that further research is needed to fully understand the complex mechanisms underlying elevation and its effects on prosocial behaviour.

1.3.3 Outcomes of moral elevation

While the mechanisms of moral elevation are still unclear, significant focus has been placed on the outcomes of moral elevation. For example, an intriguing study in which participants were offered the chance to buy samples of a spurious medical treatment (Hamby & Dahl, 2022) found that people who were elevated after watching a meaningful video were less likely to be gullible: they parted with less of the money the researchers provided them with to buy the wonder drug. The focus of much of the research, which will be detailed in the following paragraphs, has been wellbeing and prosocial behaviour. Both of these domains are of potential relevance in a work setting.

1.3.3.1 Wellbeing and health outcomes

Algoe and Haidt (2009) hypothesized that because feeling elevated turns a person's attention outwards towards others it could relieve symptoms associated with self-focused rumination found among individuals with depression and anxiety. Erickson and Abelson (2012) did find this to be the case in a study over ten days in which patients self-reported elevation along with other measures associated with depressive feelings. On high affiliation days, patients

showed fewer depressive symptoms. In a six-week post-test, elevation predicted increases in compassionate goals and relationships with others.

Neubaum, Krämer and Alt (2020) investigated how viewing elevating videos over a prolonged period might impact on individuals. Results showed that it did not have a direct, lasting effect on viewers' psychological flourishing but repeatedly viewing acts of human kindness in online videos did indirectly increase prosocial motivation and improve recipients' conceptions of human beings—mediated through the sense of elevation.

1.3.3.2 Prosocial behaviour

A number of studies have offered evidence of how moral elevation might lead to prosocial behaviour and increasingly researchers are examining how moral elevation might be utilized to influence behaviour.

A number of studies have found that elevation reduces prejudice against outgroup members such as straights' view of gay men or Whites' views of BAME individuals (Ash, 2014; Freeman et al., 2009; Lai et al., 2014; Oliver et al., 2015) as well as intended interactions with stereotyped groups (Kramer et al., 2015). Diessner, Iyer, Smith, and Haidt (2013) reported a strong correlation between elevation and self-reported love for all humanity among an online sample, and elevation has been linked to increased optimism about humanity in general (Aquino, McFerran, & Laven, 2011) and an increased feeling of connectedness with others (Erickson & Abelson, 2012; Oliver et al., 2015).

Haidt (2000, 2003) proposed that these feelings would lead to people wanting to help others and to become a better person. Numerous experimental studies, detailed below, have demonstrated short term motivational outcomes that support this hypothesis. Tingey's research following a mass shooting at a school in the USA (Tingey et al., 2019) showed that individuals may experience distress, but also feel morally elevated by others' prosocial responses to the trauma. Those experiencing elevation were also more likely to strive to support others (compassionate goals) and to endorse post-traumatic growth (PTG: positive personal changes following a traumatic experience).

Subjects have been shown to be more likely to behave cooperatively in economic games if they experience elevation (Pohling et al., 2019), increase the intention to register as an organ donor (Siegel, Navarro &, Thomson, 2015) and increase donating to a charity (Siegel et al., 2014; Van de Vyver & Abrams, 2015). Further to this, Thompson and Siegel (2013) were also able to demonstrate how feelings of elevation, influenced by the perceived character and effort of the protagonist in a moral story, led to increased donor behaviour in a series of experimental conditions.

Experiments have also found that elevated participants are more likely to volunteer for extra tasks within an experiment when asked to do so by the researcher. (Schnall & Roper, 2012; Ding et al., 2018) and a study by Cox (2010) investigated the relationship between self-reported elevation during a trip to Nicaragua to work with orphans and future volunteering. It was found that levels of elevation measured during the experience of the trip predicted volunteering behaviours 2 days, 1 week and 3 months later. The effect was restricted to the domain within which they had volunteered rather than being a predictor of general volunteering.

1.4 Research Aims

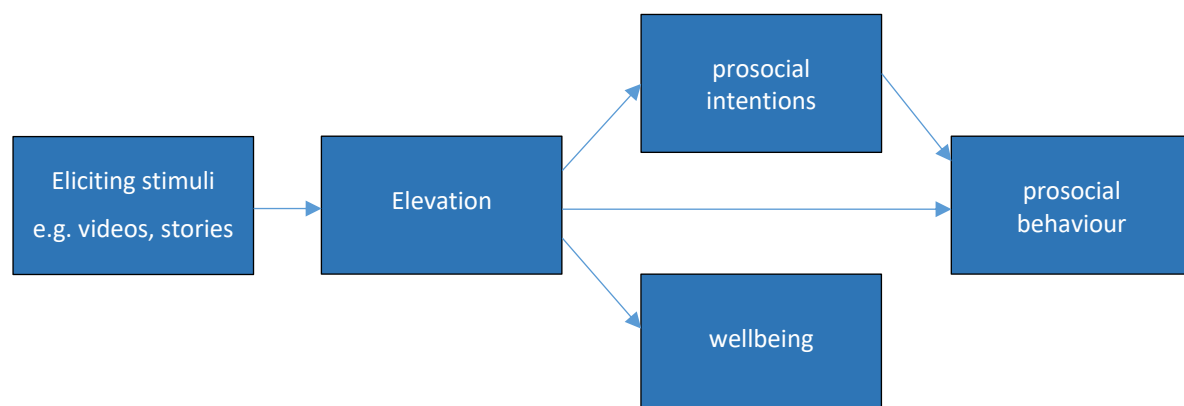
In the decades since it was first described in the literature, social psychologists and positive psychologists have sought to understand the mechanisms and outcomes of moral elevation as part of the broader group of positive emotions (Ellithorpe et al., 2015; Erickson, 2017; Haidt, 2003; Neubaum et al., 2020; Thompson, 2016; Van Cappellen et al., 2013), yet its role within an organisational setting has been largely neglected reflecting the often siloed nature of current psychological research and practice (Shaw, 2015; Mead & Kemp, 2021).

While the moral elevation studies detailed above variously address issues that are undoubtedly of importance in a work setting such as behaving cooperatively (Pohling et al, 2019), reduction of prejudice (Oliver et al. , 2015), volunteering for additional tasks (Ding et al., 2018) and reduction of depressive symptoms (Algoe and Haidt, 2009), these studies do not directly attempt to address the work experience nor develop studies or ecological validity that can be transferred to the workplace.

Therefore, research that looks specifically at the role of moral elevation in the workplace may support the development of targeted interventions that encourage the prosocial behaviours identified as under threat by the CIPD (CIPD, 2020) and ameliorate the erosion of wellbeing also identified by the CIPD (CIPD, 2023). Such research is therefore of significant importance to the economy and the wider wellbeing of society.

What is particularly tantalizing and promising is that several studies have demonstrated that it is possible to induce elevation through the presentation of stimuli such as stories of kind acts and meaningful videos (Haidt., 2009; Neubaum et al., 2020; Kramer et al., 2017). We may not only be able to identify the role of moral elevation in the workplace but do something valuable with this understanding. Figure 1 summarises the pathways identified.

Figure 1. *Summary of elevation pathways*



This research therefore seeks to identify the role moral elevation plays in the work setting to include, but not be limited to, wellbeing and prosocial work behaviour. The aim is to contribute to the work of practitioners and organisations developing ways to utilize moral elevation for the benefit of individuals and the organisations in which they work.

Chapter 2: Methodology

This thesis set out to examine the role of moral elevation in the workplace and how it contributes to engendering wellbeing and prosocial behaviour at work. Specifically, the thesis aims to examine how the concept of moral elevation has been applied to work settings and in particular how it has been measured in these settings. Further to this the thesis aims to examine the extent to which morally elevated individuals are more likely to experience enhanced wellbeing and engage in prosocial work behaviour. In addressing these questions, the intention is to shed light on the mechanisms underpinning these possible relationships.

To answer these questions, i) a systematic literature review (SLR) was conducted to gain an understanding of the existing literature in this field and the results of the SLR were used to inform the design of the second study; and ii) an empirical study employing a quantitative approach was adopted to understand the mediating effect of moral elevation on the wellbeing and prosocial behaviour of people at work.

In the subsequent chapters covering the SLR and empirical study that I conducted, I have provided details of what was done. In this chapter I shall elucidate why I adopted the methodological approach that I did. These decisions will be framed within my epistemological approach and a reflection upon why that approach was adopted. I will include rationale as well as a discussion of the biases and educational history that I brought to this research. The chapter will conclude with a discussion of ethical considerations. The aim of this chapter is to provide sufficient transparency to enable a reader to replicate what was been done and to critique it.

2.1 Research Philosophy

Before I explore my epistemological approach, it is first worth expressing my axiological position as this has had a significant influence on my choice of career, my initial decision to pursue this doctoral research and the specific area of research even before I had decided to adopt a particular epistemological approach.

While I would not claim that it guides my every decision, significant choices are influenced heavily by Aristotle's views on eudaimonia, a fundamental concept in his ethical philosophy (Crisp, 2014; Deci, 2008). Aristotle posited that eudaimonia, which he defined as 'doing and living well' is the ultimate aim that individuals should seek in life. According to Aristotle, eudaimonia is not achieved through fleeting pleasures, material wealth, or external factors: hedonistic pursuits. Instead, it is attained through the cultivation of virtuous character traits (virtues), such as courage, wisdom, justice, and temperance.

These virtues, he argues, are developed through ethical behaviour and moral excellence with an emphasis on finding a balance between extremes. For example, courage is a virtuous balance between cowardice and recklessness.

Aristotle believed that human beings are inherently social creatures, and eudaimonia is best achieved in a well-ordered and just community. Moral virtues, Aristotle argued, are developed and demonstrated as part of living an eudaimonic life through active participation in the community and by contributing to its wellbeing.

Achieving eudaimonia is not a static state but a continuous process of self-improvement and growth requiring ongoing self-reflection, learning, and ethical choices. As such its position chimes with the broaden and build work of Frederickson (1998), detailed in Chapter 1.

Haidt (2000) also drew on the work of Aristotle in his development of his concept of moral elevation that was reviewed in Chapter 1 and is the central focus of this thesis. It is the connection between my moral philosophy and the application of the psychological constructs of broaden and build, and moral elevation that led me to this research.

Ontologically, I am a product of functionalism's grip on much of psychological research in the 20th century (Green, 2009). The fact that I pursued as a career one of its offspring, occupational psychology, highlights the impact it has had on the way I approach my psychological practice.

Aristotle himself explored the idea that things have their functions or purposes – something he called *telos*. In contemporary psychological research these functions are taken to be those that mediate between stimuli and outputs – both psychological and behavioural.

In relation to this thesis this is pertinent as the focus of my research has been on what may be described as the function of moral elevation, how it might be elicited and the psychological (wellbeing) and behavioural (prosocial behaviour) outputs that it engenders.

My first degree in psychology at the University of York in the 1980s essentially offered only two perspectives: behaviourism and positivism. Indeed, I would argue that these were presented as complementary truths and no other perspective was entertained nor explored. Both these positions went hand in hand with the emphasis on the importance of empirical observation and measurable data as the primary means of acquiring knowledge and understanding the world (Park et al., 2020). We unquestionably sought an objective reality, studied and understood through systematic experimentation.

Without really being aware of its hold on me, it was this epistemological stance that I brought to my doctoral research, and it was to areas of study that lent themselves to this kind of scrutiny that I was drawn. In the literature summarised in Chapter 1, the behaviours associated with moral elevation are observable. Moral elevation has been researched as a measurable construct with correlations with other measures that lend themselves to experimental manipulation. As such, such a stance is both appropriate and justifiable and the empirical study described in chapter four is a rational next step following the findings of the SLR presented in chapter three.

Throughout the course of this study, however, I have been exposed to contrasting perspectives and approaches. Before embarking on this research, for example, I would have been very wary of conducting qualitative research having been schooled to believe in its lack of rigour and generalizability.

As this thesis germinated, I recognised the importance of developing an understanding of the importance of incorporating the work context into the study of moral elevation. In essence I adopted a post-positivist stance of the critical realist (Bhaskar, 1989) in rejecting a search for a generalizable truth about moral reasoning and set about devising an empirical study set within the narrow confines of work and knowledge sharing.

In the following sections detailing the reasoning behind the SLR and the empirical study, I will further highlight how the epistemological stance influenced specific elements of the research.

2.2 Systematic Literature Review

Since epidemiologist, Archie Cochrane, advocated for the use of systematic reviews in healthcare and medicine in the 1970s, Systematic Literature Reviews (SLRs) have become a cornerstone of medical decision-making (Higgins et al., 2023) and an increasingly valued tool of occupational psychologists (Rojon & McDowall, 2021).

Cochrane's advocacy was based in the belief that systematic reviews would provide a rigorous and evidence-based approach to assessing the effectiveness of healthcare interventions. In this section I will address how appropriate an SLR is for this thesis. I will ask what an SLR might achieve, set out its strengths and weaknesses and offer a conclusion regarding its value for my study of moral elevation.

An SLR can provide a comprehensive summary of existing research on a specific topic, helping to consolidate and synthesize the current state of knowledge (Rojon & McDowall, 2021). By conducting an SLR, researchers are able to identify gaps in the literature where additional research is needed, providing direction for future studies. An SLR also facilitates an evaluation of the methodologies and quality of studies, ensuring a critical assessment of the literature. A key feature of an SLR is that it offers an opportunity to synthesize evidence from multiple sources, providing a reliable foundation for decision-making and policy development (Petticrew et al., 2006).

Proponents of SLRs argue that among other things an SLR goes some way towards eliminating subjectivity and bias while offering transparency and replicability (Higgins et al., 2023).

But embarking on an SLR does not come without its challenges as advocates and critics have pointed out. As well as being time-consuming and resource intensive (Petticrew et al., 2006; Bramer et al., 2017) – leading to SLRs being published long after the findings have ceased to be current or relevant – the notion of objectivity is questionable. There is still considerable room

for subjectivity and fallible human judgement. This can be found in the decisions made during the creation of the inclusion and exclusion criteria as well as during extraction, interpretation and quality assessment (Shea et al., 2007; Higgins et al., 2023).

Both Munn et al. (2018) and Greenhalgh et al. (2018) argue that the SLR approach affords such reviews a sheen of objectivity that they may not deserve. Greenhalgh et al. (2018) in defence of the narrative literature review in its richness and diversity argues that SLRs have erroneously been ascribed a higher status in academic research. She posits that there has been a conflation of the quality of the SLR with the complexity and rigour of the task of conducting the review. She contends that assiduously applying inclusion and exclusion criteria, creating tables of extracted data and aggregating findings is too often offered as a surrogate for critical analysis. She suggests that the risks of creating a generation of scholars trained in the techniques of searching, sorting and checking are not trivial but “hold the potential to significantly skew our knowledge landscape”.

Both Munn et al. (2018) and Greenhalgh et al. (2018) concede that the SLR has its place in research where there is a very specific question to be answered such as when trying to establish if a particular medical intervention is clinically significant, but this is not the territory that my research occupies. The study of moral elevation in the workplace is currently in its infancy and the few studies that do exist are not limited to interventions nor are there particular strong emerging themes as will become evident in chapter three. The aims of my research are therefore much closer to what Munn et al. (2018) sets out in his paper detailing whether to conduct a scoping review or an SLR.

Munn et al. (2018) suggests that a scoping review focuses on identifying the types of available evidence in a given field; clarifying concepts and definitions; and examining how research is conducted on a certain topic so that key characteristics of a concept may be illuminated. This, it is argued, still allows for gaps in knowledge to be identified and avenues for future research to be mapped out but it does not attempt for example, to place some numerical value on quality nor calculate an overall effect. While these elements of a scoping review might be a precursor to an SLR, they do not constitute an SLR.

It is recognised that conducting an SLR is a requirement of the doctoral programme and these criticisms do not invalidate the utility of systematic reviews but rather highlight areas where caution and transparency are necessary when conducting and interpreting them. With these issues in mind the SLR in chapter three will steer away from aggregation and ensure what Greenhalgh et al (2018) calls “interpretative critical reflection” is pursued even where such an approach comes perilously close to introducing judgement, subjectivity and bias.

2.3 Empirical Study

In this section I will address how I came to decisions about the kind of research I undertook. I will cover how and why I adopted the particular experimental design and how I chose the measurement tools for moral elevation, prosocial intentions and prosocial activity. The section will conclude with an explanation of the way data was gathered and analysed.

The primary source for all the decisions underpinning the approach to the empirical study was the SLR. In an effort to propel forward existing research, close attention was paid to the strengths and deficiencies of the papers that were examined.

2.3.1 Research design

It must be acknowledged that an initial decision to pursue a quantitative rather than a qualitative design would have been influenced by the bias for such an approach identified above but nevertheless there is a strong argument that quantitative analysis builds upon previous research: all the studies in the SLR had adopted a quantitative approach in which stimuli were presented to participants to elicit moral elevation and their impact on various outcomes measured were studied.

The SLR highlighted issues with these studies including conceptual ambiguity, methodological weaknesses, and analytical flaws, all of which are described in detail in chapter three. The limitations of these studies meant that nudging research forward could be well achieved by addressing these issues while adopting a similar approach.

One particular area that this study sought to address was the use of pre and post measures. Among the studies examined in the SLR only two attempted to attend to pre and post measures (Janicke et al., 2018; Chen & Treviño, 2022). Gathering pre and post test scores is considered to be stronger from a methodological perspective and delivers more robust statistical conclusions as it reduces error variance, allowing researchers to detect effects with greater confidence (West & Thoemmes, 2010). Such an approach was therefore adopted for the empirical study.

A second issue was the choice of stimuli to elicit moral elevation. In addition to the SLR highlighting how videos of acts of kindness have been used as stimuli in a work setting (Janicke et al., 2018; Janicke-Bowles et al., 2019), examination of the wider literature indicates that the approach of eliciting moral elevation by showing participants video clips of unexpected acts of kindness has been frequently adopted. For example, Haidt et al. (2009) adopted this approach in a much-cited study in which participants were shown a seven-minute clip from an Oprah Winfrey show in which a musician pays tribute to his mentor and former music teacher, who had saved him from a life of gang activity and violence. A control group was shown a comedy video. The Oprah clip prompted increased nursing and hugging of breastfeeding mothers (Silvers et al., 2008). This experimental approach has subsequently been adopted by several researchers including Schnall (2010) whose research led to news headlines such as 'Watching Oprah Makes You a Better Person'. In her research Schnall found that participants watching the same Oprah clip were more likely to volunteer for a subsequent research project than participants who were shown a neutral Attenborough nature show.

Upon choosing to use video as stimuli, a further consideration is the dosage of videos to share with participants. Determining this has implications for the practicality of any interventions in a workplace. The study by Neubaum et al. (2020) looked at the effects of repeated exposure to morally elevating videos. They believed this to be the first study of its kind to look at long-term effects. In a six-week study involving watching six videos per week they did not find a direct cumulative effect of prolonged exposure to elevating material but confirmed findings that mediated moral benevolence indirectly increases viewers' prosocial motivation—mediated through the sense of elevation. They found this to endure over the six weeks of the study. There was no follow up assessment to identify if the effect was lasting

but they suggested the effect might be ephemeral. They argued that further studies of duration and amount should be looked at.

Given the paucity of research examining moral elevation as in intervention, this research also looked for design guidance from the domain from which it originated: Positive Psychology. Seligman and Csikszentmihalyi (2000, p. 5) described positive psychology thus:

“The field of positive psychology at the subjective level is about valued subjective experiences: wellbeing, contentment, and satisfaction (in the past); hope and optimism (for the future); and flow and happiness (in the present). At the individual level, it is about positive individual traits: the capacity for love and vocation, courage, interpersonal skill, aesthetic sensibility, perseverance, forgiveness, originality, future mindedness, spirituality, high talent, and wisdom. At the group level, it is about the civic virtues and the institutions that move individuals toward better citizenship: responsibility, nurturance, altruism, civility, moderation, tolerance, and work ethic.”

In line with this definition, a positive psychology intervention may be understood to be any intended activity or method (training, coaching, etc.) based on (a) the cultivation of valued subjective experiences, (b) the building of positive individual traits, or (c) the building of civic virtue and positive institutions.

Taking this definition, a study of moral elevation may be described as a specific example of a Positive Psychology intervention and hence findings from this broader body of research are relevant to this research and how it may be conducted.

Several reviews have examined the efficacy of these broader Positive Psychology Interventions (PPIs) and provide guidance for any proposed intervention. Sin and Lyubomirsky’s review of 51 studies (Sin & Lyubomirsky, 2009) of Positive Psychology did not look at moral elevation specifically but did evaluate the effectiveness of interventions “aimed at raising positive feelings, positive cognitions or positive behavior as opposed to interventions aiming to reduce symptoms, problems or disorders.”. Their analysis found that while positive psychology interventions do indeed significantly enhance wellbeing (mean r 0.29), longer interventions produced greater gains.

This finding was supported by Boiler's meta-analysis of 39 Positive Psychology interventions aimed more specifically at enhancing wellbeing and alleviating depressive symptoms (Boiler, 2013). The interventions included group training and individual therapy. They also found that interventions were more effective if they were of longer duration.

Myers et al. (2012) paid particular attention to the issue of length of study in their systematic review and proposed that long studies such as the 12 + weeks studies identified in the Sin and Lyubomirsky study would be unattractive to organisations. They found that two short interventions, one study investigating the effect of a two x 45 minutes online intervention (Luthans et al., 2008) and another involving two-hour group training (Luthans et al., 2010) produced significant results.

We can conclude that there is no standard intervention duration set out in the literature for either moral elevation research nor for Positive Psychology more generally (Myers et al., 2012). While Boiler (2013) identified the increased efficacy of longer studies, Myers et al. (2012) found significant results among studies for which the mode length of intervention was less than or equal to four weeks. The research of Neubaum et al. (2020) spanned six weeks but the requirement to watch films six days/week for six weeks does not meet Myer's recommendation to decrease the burden of time when designing interventions in the workplace. In consideration of these differing perspectives, and through consultation with the supervisors, this study took place over 11 days and involved watching films over ten consecutive days.

As well as considering dosage of films, the content of the films is an important issue that has an ethical dimension. While the design of this study was influenced by that of Neubaum et al. (2020), in that study a comparison was made between videos of kind acts, neutral videos of nature and violent acts. It was decided that there were ethical concerns with showing violent acts to participants and consideration of the study aims concluded that it would still be possible to explore the influence of videos of acts of kindness without showing violent films. In this study participants were therefore only shown videos of acts of kindness and neutral nature videos. The neutral videos were employed as the control condition rather than

no video as it was concluded that this alternative would have offered too many unknown variables to reach any meaningful conclusion from the study.

2.3.2 Data gathering

Consideration was given to where the sample population resided. Hendriks et al., (2019) reviewed 188 randomly controlled trials of the efficacy of Positive Psychology Interventions (PPIs). They found that 78.2% of the studies were conducted in a Western Educated Industrialised Rich and Democratic (WEIRD) country context. They argued that with Positive Psychology research and interventions being primarily developed and tested within WEIRD populations, there is a concern that these populations are not representative of the global human experience and undermine our ability to generalise any findings to more diverse cultural contexts. The plea in the Hendriks paper is for studies to be conducted with non-WEIRD populations. It was decided to respond to this plea by actively seeking non-WEIRD participants for the empirical study.

2.3.3 Constructs and measures

The findings of the SLR informed the choice of constructs and measures used in the empirical study. All the studies used self-report questionnaires and variously examined concepts of moral elevation, wellbeing, and prosocial behaviour. To build on these studies, it was decided to also look at the same constructs but in doing so to address the measurement issues identified from the SLR.

2.3.4 Data analysis

The choice of data analytical approach was also influenced by the approaches adopted by studies in the SLR. The studies by Vianello et al. (2010), Janicke et al. (2018), Janicke-Bowles et al. (2019), Chen & Treviño (2022), and Deng et al. (2022) all chose Structured Equation Modelling (SEM) as a key component of their analyses.

Compared with traditional regressions techniques, SEM offers the possibility of modelling more complex relationships (Collier, 2020; Vianello et al. 2020). Through its handling of latent

variables, constructs which cannot be directly measured but are inferred from the observed indicators that make up a variable, SEM allows researchers to test mediating and moderating effects (Collier, 2020) and control for the inflation of Type I error from measurement error (Cole & Preacher, 2014; Wang & Eastwick, 2020).

The empirical study, in common with a number of the studies in the SLR, sought to examine mediating effects in a complex set of relationships and so consequently SEM was chosen for data analysis.

With this choice comes the significant issue of sample size. Collier (2020) points out that a major assumption is that the technique requires large sample sizes but that there is little agreement on what constitutes a large enough sample. He asserts that one of the most common suggestions for sample size is Nunnally and Bernstein's (1994) rule of ten which states that ten observations for each indicator are required. Bentler and Chou (1987), however, argue that a more accurate calculation should be based on free parameters of your model where you should have at least five cases for each parameter estimate (including error terms as well as path coefficients).

Other researchers, Collier points out, have offered a simple rule of thumb of a "critical sample size" of 200 (Garver and Mentzer 1999; Hoelter 1983;) which they argue provides stable parameter estimates and has sufficient power to test a model whereas Tabachnick and Fidell (2007) suggest a number as low as 100 to 150 participants may be sufficient.

Collier (2020) argues that adopting the critical sample size approach oversimplifies the issue as the matter of power is overlooked. To address this Westland (2010) proposes a way to calculate lower bounds on sample size requirements for SEM based on the number of observed variables, latent variables, and factor loadings. This has been operationalised by Soper (2024) in an online tool for calculating the appropriateness of a sample size for SEM which was employed by this study as will be detailed in Chapter 4.

2.4 Ethics

Ethical approval was sought and granted by Birkbeck's Board of Ethics (approval number OPEA-20/21-12) and was conducted in accordance with professional ethical guidelines set by the British Psychological Society Code of Ethics, the Health and Care Professions Council Standards of Conduct, Performance and Ethics and Birkbeck University Ethics Guidelines.

Participants were provided with information about the research before participating via email. This information included details about the purpose of the study and how the data would be gathered and stored. Information about confidentiality and the participants' right to withdraw were also shared. Data were stored confidentially on a password protected file and in an anonymised format.

As the empirical study involved sharing video footage with participants, consideration was given to ensuring that the content was neither damaging nor inappropriate. The detailed process that was undertaken to ensure this is presented in Chapter 4, the empirical study.

2.5 Reflexivity Statement

In the preceding sections of this chapter, I have sought to weave in my role as a researcher, my biases and perspectives in relation to the research process. In this section I will summarise what I have set out and expand on areas only briefly addressed.

As detailed, my approach to this research has been heavily influenced by formative psychological education at York University where behaviourism, positivism and quantitative methodologies reigned. My career has subsequently been dominated by work to address societal issues such as homelessness, poverty and access to education. In recent years I have spent a significant amount of time working in the global south and with groups in the UK where I have supported them in telling their stories and sharing their experiences. While it is clear that the content of this research thesis reflects this professional focus, I also acknowledge that despite my keenness to undertake quantitative analysis in order to avoid

bias and subjectivity, I approached the research with a vested interest in finding mechanisms that would promote prosocial behaviour. I hoped I would find such relationships.

As the research unfolded and the relationships I sought were less clear, my motivation to pursue the research was challenged until I was able to shift my focus towards a more dispassionate and rigorous investigation. While my inclination to find positive relationships was clear, I believe that the methodology adopted and the overriding desire to produce research that would stand up to scrutiny mitigated against producing biased findings.

It is stated above that there was desire on my part to conduct a non-WEIRD study. The research was ultimately unsuccessful in this aim. This failure is in part a result of my socioeconomic status and background. While I sought non-WEIRD participants, my research sample was dominated by people from similar backgrounds with similar professional experiences. Rather than be generalizable, the results more accurately reflect the views, intentions and behaviour of my own socioeconomic ghetto.

Chapter 3: Systematic Literature Review

The Role of Moral Elevation in the Workplace (Study 1)

3.1 Abstract

An understanding and application in the workplace of the other-praising emotion, moral elevation, has the potential to contribute to promoting wellbeing and prosocial behaviour at work but to date little research has been undertaken to understand its role in organisations. This systematic review aimed to examine how the concept of moral elevation has been applied to work settings and how it has been measured. A systematic literature review was conducted by searching the PsychINFO, Business Source Premier (EBSCO), SCOPUS databases. The search parameters were: TX moral elevation OR (elevation AND emotion). Titles were reviewed on the basis that they contained research into moral elevation in the workplace. 2272 titles were retrieved from the databases after removing duplicates, of which six papers met the inclusion criteria. Despite the inclusive nature of terms used, the searches yielded only a small body of research from which to draw conclusions. The studies give some insights into the nature of moral elevation at work, offering some initial and promising evidence that moral elevation may be elicited in a work context and that there is an association with organisationally important wellbeing and prosocial behaviour measures. Conceptual and methodological issues undermine the validity and generalisability of the studies. These limitations are addressed in recommendations for more rigorous further research.

3.2 Introduction

Chapter 1 introduced the psychological and emotional construct of moral elevation which is characterized by feelings of inspiration and a heightened sense of moral goodness in response to witnessing acts of kindness or altruism which physiologically produce an uplifting, warm feeling (Algoe and Haidt, 2009).

Its place within the Broaden and Build framework first postulated by Frederickson (1998)

was explored and how it has been studied as a positive emotion was detailed (Ellithorpe et al., 2015; Erickson, 2017; Haidt, 2003; Neubaum et al., 2020; Thompson, 2016; Van Cappellen et al., 2013).

Evidence was presented that demonstrated the relationship of moral elevation with, among other things, a reduction in prejudice of other groups (Ash, 2014; Freeman et al., 2009; Lai et al., 2014; Oliver et al., 2015); psychological wellbeing (Algoe & Haidt, 2009; Erickson & Abelson, 2012); greater inclination to support others (Tingey et al., 2019); cooperation (Pohling et al., 2019); donating behaviour (Thompson & Siegel, 2013; Siegel et al., 2014; Van de Vyver & Abrams, 2015); and volunteering (Cox, 2010; Schnall & Roper, 2012; Ding et al., 2018)

It is of note that none of these studies looked at the work context and therefore it is the aim of this SLR to shed light on the role of moral elevation in the workplace.

3.3 Aims and Research Questions

In summary, in the decades since it was first described in the literature, social psychologists and positive psychologists have sought to understand the mechanisms and outcomes of moral elevation as part of the broader group of positive emotions. (Ellithorpe et al., 2015; Erickson, 2017; Haidt, 2003; Neubaum et al., 2020; Thompson, 2016; Van Cappellen et al., 2013). Given the role and influence of moral elevation upon wellbeing and prosocial behaviours in non-work-related studies (e.g. Schnall & Roper, 2012; Ding et al. 2018; Neubaum et al., 2020), a logical and natural progression in occupational psychology research is to investigate the impact of this specific emotion, moral elevation, within the context of the workplace. Its value may extend to developing interventions that promote moral elevation, wellbeing and prosocial activities.

Prior to this research, no SLR of the role of moral elevation in the workplace had been undertaken. To address this gap within the promising research domain of moral elevation, this SLR therefore seeks to draw together the disparate sources of evidence relating to the

concept's relevance to the workplace with an aim both to make sense of where the research is at and to offer a road map of where research might take us.

This SLR therefore seeks to answer three questions:

How has moral elevation been measured in work settings?

How has the concept of moral elevation been applied to work settings?

What gaps are there in the research?

3.4 Method

In conducting this SLR, a systematic approach was adopted as outlined by Briner and Denyer (2012) and as applied by Donaldson-Feilder, Lewis and Yarker (2019).

3.4.1 Search strategy

A preliminary review of the literature identified that while moral elevation has been examined in disciplines covering psychology, applied psychology and management studies, the body of research is not extensive. Following discussion with research supervisors and Birkbeck's librarian, it was decided to keep search terms broad to encompass research that falls on the periphery of the area of interest. This meant that search terms were chosen that would not limit the papers in the initial search process to the workplace in case studies were inadvertently excluded that referred to work in indirect ways. It was decided that the refining of the search in this way should take place at the title and abstract sift stage where the judgement of the reviewers could be considered.

For similar reasons, the term elevation was included where it refers to the emotion. This ensured that any relevant papers referring to the concept without including the term moral would also reach the stage where human judgement could decide their appropriateness and decide whether they are addressing the area of interest in this SLR.

The choice of databases that were included in the review reflected aims of investigating the psychological construct of moral elevation in the workplace. Databases were therefore chosen that included psychological research and the broader domain of business studies. The PsychINFO, Business Source Premier (EBSCO), and SCOPUS databases were therefore searched in February 2021. To address the time delay between the initial search and the final write up of this thesis in September 2023, Scopus alerts of the search terms between February 2021 and August 2023 were also included in the review process.

The terms used in the search parameters were: **TX moral elevation OR (elevation AND emotion)**

Table 2: Inclusion and Exclusion criteria

Inclusion criteria		
No.	Criteria	Reasons for inclusion
1.	Published journal papers (peer-reviewed)	To focus review only on high-quality, published work.
2.	Organisational setting - All sectors and industries	To capture evidence across all sectors and industries.
4.	Qualitative and quantitative empirical studies	To examine empirical evidence through different methodological approaches.
5.	Time period – 2000 - 2021	The concept of moral elevation I am interested in was created in 2000.

Exclusion criteria		
No.	Criteria	Reasons for exclusion
2.	Foreign language	Exclude articles not written in English.
3.	Journal articles that are expert opinion thought pieces or commentary only	Limited trustworthiness in empirical terms.

3.4.2 Review strategy

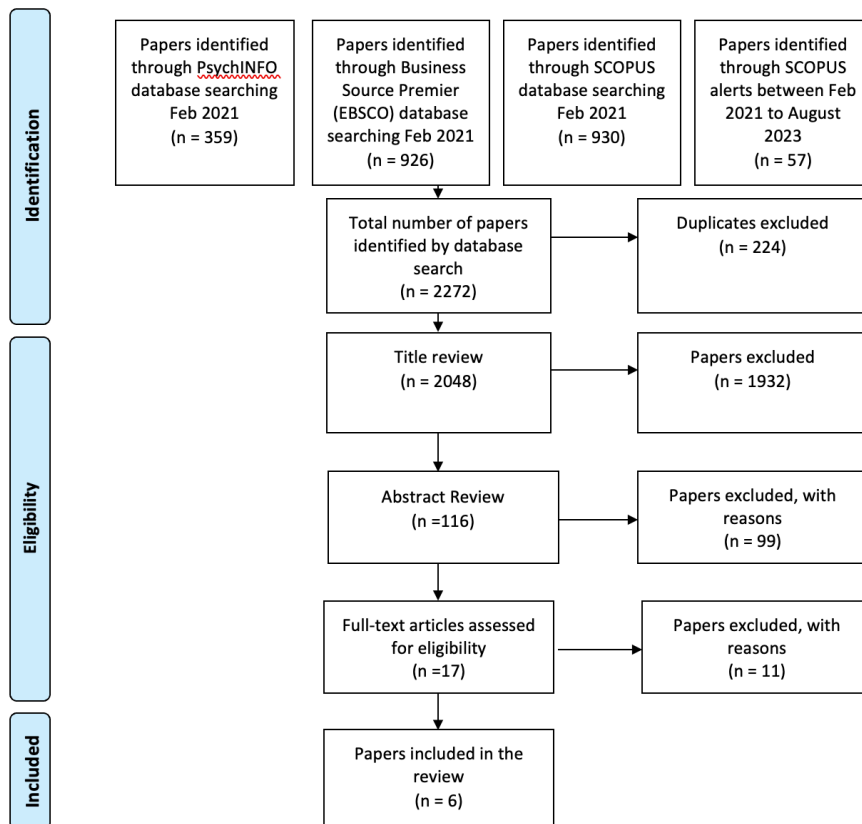
Records from each database were exported into Endnotes. An automatic duplicate check was conducted followed by a manual duplicate check. References were subsequently exported into an Excel spreadsheet where further sifting of the papers was conducted by the lead researcher. Throughout the process, an inclusive approach was taken so that where there was doubt about the appropriateness of a paper, it was retained for further consideration in the next stage of the sift. Inclusion/exclusion decisions and reasons were noted in the spreadsheet. Initially, a sift was conducted on the basis of titles. The inter-rater agreement was 97% at title review stage, with 59 out of 2,048 being included by only one or other of the independent reviewers.

To continue with the inclusive approach to the sift, all 59 papers which were included by only one or other reviewer were taken to the next stage of the sift rather than be arbitrated by a third reviewer. 116 papers in total were included in the abstract sift.

The inter-rater agreement was 89% at abstract review stage, with 13 out of 109 being referred to the third reviewer. The review by the third reviewer and subsequent discussion left 17 papers for full review. The author reviewed the resulting full papers to identify the final SLR papers from which to extract data.

To ensure the best available evidence was considered a pearl-growing exercise was conducted as recommended by Papaioannou et al. (2010) in which the reference list of each of the final SLR papers was manually searched. This exercise produced no further papers for abstract review. Figure 2 shows the literature review process and numbers at each stage.

Figure 2: Search results flow diagram



From: Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. *PLoS Med* 6(7): e1000097. doi:10.1371/journal.pmed1000097

3.4.3 Data extraction

A data extraction tool was developed by the author and discussed with the research team. The following data were extracted from the final set of full papers and recorded in an Excel spreadsheet: country of study; aims/ purpose; study design; number of participants; participant details; measures (including definitions); the outcome/ target variables (including any controls, mediators or moderators); type of analysis; key findings and recommendations; and limitations. Data from preliminary extraction by the author and reviewed by a second researcher for consistency and completeness.

3.4.4 Quality assessment

A quality assessment was undertaken of papers in the final selection. Shaffril et al. (2021) point out that while SLR methodology has advanced in recent years in health-related studies, less attention has been given to how the methodology may be applied to non-health studies. Researchers in these areas are left to adopt and adapt existing methodologies.

Hong and Pluye (2018), referencing health-related studies, offer a framework for how studies have typically been assessed for quality (see Table 3) but pull up short of recommending that this framework be adopted without critiquing its relevance for a particular SLR. Indeed, they propose that consideration of the objective of the review must be taken into consideration as we approach the issue of quality (see Table 4).

Table 3: Summary of the quality assessment framework (Hong & Pluye, 2018)

	QUALITY DIMENSION		
Features	Methodological	Conceptual	Reporting
Dimension	Extent to which a study's design, conduct and analysis have minimised selection, measurement and confounding bias.	Extent to which a concept is clearly articulated to facilitate theoretical insight.	Extent to which a paper provides information about the design, conduct and analysis of a study.
Constructs	Trustworthiness.	Insightfulness.	Accuracy, Completeness and Transparency.

Table 4: Comparison of quality assessment based on objectives of reviews (Hong & Pluye, 2018)

Objective of Review	Example of Synthesis Method	Type of Reasoning	Purpose of Appraisal	Dimension of Quality Appraised
Test Hypothesis	Meta-analysis	Deduction	Determine if studies are affected by significant bias	Methodological
Provide causal pathway or causal explanation	Realist synthesis	Abduction	Determine if studies are fit for purpose for theory development and/or testing	Conceptual and methodological
Develop conceptual understanding	Critical interpretive synthesis Meta-narrative synthesis	Induction	Determine the relevance, credibility and contribution of studies	No consensus Conceptual and methodological

The current SLR focuses on developing a conceptual understanding of moral elevation as applied in the work setting. As such, in line with the above recommendations of Hong and Pluye (2018) both methodological and conceptual issues are assessed. Furthermore, as all the studies that remain in the review are quantitative, they demand the relevant scrutiny of quantitative research. The quality assessment framework devised by Snape et al. (2016) for studies involving quantitative studies was therefore adopted as it offers a granular appraisal of each study. Two items were added to the checklist from Hong and Pluye (2018) which look more widely at whether there are relevant research questions supported by the gathering of relevant data. One researcher conducted the quality assessment, using this framework. The full quality assessment for each study may be found in Appendix 1.

Hong and Pluye (2018) caution against a reductive approach of assigning a number to an assessment of quality. One significant drawback of such an approach is that no weight is given to particularly concerning elements of a study. While reviewers of studies involving a large number of studies may feel it is necessary to undertake such a scoring process to provide clarity, with only six papers, a narrative approach to the assessment of quality has been adopted. Borrowing from Social Science research (Orme and Shemmings, 2010), the

information gathered from the quality assessment has been used to inform the following key questions which are addressed in the synthesis of the evidence:

How relevant is the study to the review question?

How much information does it contribute?

How trustworthy are its findings?

How generalisable are its findings?

Was it conducted ethically?

3.4.5 Data synthesis

The primary aims of this SLR, as stated above, are to examine how moral elevation has been measured and applied in work-based studies. A descriptive review is therefore appropriate. A textual narrative synthesis approach was adopted, as described by Xiao and Watson (2019) and detailed by Popay et al. (2006), for its greater rigour and replicability than a simple narrative review. Using the extraction spreadsheet as the basis of developing a preliminary synthesis, through iteration, the review offers:

- A theory of how the intervention works, why and for whom
- An exploration of relationships within and between studies
- An assessment of the robustness of the synthesis which integrates the quality assessment rather than treat it as a standalone element of the review.

By including the assessment of quality in the body of the review synthesis, it will avoid the risk of dismissing or accepting all elements of a study. Instead, the review comments on the merits of relevant elements of the various studies.

3.4.6 Generation of evidence statements

By integrating the results from the qualitative and quantitative syntheses, overarching conclusions were developed which are presented as evidence statements (Higgins et al.; 2023) that summarize the strength and direction of the findings.

3.5 Results

3.5.1 Papers included in the review

The databases search retrieved 2272 records after removing duplicates. After the screening process, six papers remained for data extraction. (Vianello, Galliani & Haidt, 2010; Janicke, Rieger, Reinicke & Connor, 2018; Janicke-Bowles, Rieger & Connor, 2019; Chen & Treviño, 2022; Deng, Wu, Xia, & Zhang, 2022; Huang, Ham, Varghese & Yoon, J. D., 2022). Some of the six papers included multiple studies which resulted in ten studies being eligible for data extraction.

3.5.2 Country of study and participant details

Six of the ten studies were undertaken in USA, three in Italy and one in China (see Table 5). In total, 2892 participants are included across the ten studies. All participants included in the reviewed studies were working adults. There is a range in sample size (42 - 1047; mean = 289.2) due to the different study designs.

Table 5: Participant details, method and design

Paper	Country	Participant Details	Quantitative	Qualitative	Cross-sectional	Repeated Measure	Presentation of video stimuli	Presentation of written stimuli	Self-Report Questionnaires
Vianello et al. (2010)	Italy	Study 1. 121 employees of door manufacturer. 65% male. Mean age 35.4 years. Mean duration of employment in company 'nearly 10 years'. 55% worked in production. 45% split equally between commercial, administrative and customer assistance roles.	✓					✓	✓
		Study 2. 275 nurses. 21% male, Mean age 39.8 years. Mean duration of employment in the hospital 16.8 years. Mean close contact with leader/supervisor 22.2 hours/week.	✓						✓
		Study 3. 42 full time pre-school teachers. 100% female. Mean age 42.1 years. Mean duration in role 18.21 years.	✓		✓				✓
Janicke et al. (2018)	USA	148 full time employees. 51.5% male, 47% female. Mean age 36.26, age range 20 to 68. Median length of employment 2-4 years. 65.5% Caucasian/White, 16.2% African American/Black, 9.5% Hispanic/Latin American, 4.7% Asian/Pacific Islander, 2% Native American/American Indian, 2% Other.	✓		✓		✓		✓
Janicke-Bowles et al. (2019)	USA	200 full time employees. 51.5% male, 48% female, 0.5% transgendered. Mean age 37.11, age range 20 to 68. Median length of employment 2-4 years. 63.5% Caucasian/White, 15.5% African American/Black, 12.5% Hispanic/Latin American, 5% Asian/Pacific Islander, 1.5% Native American/American Indian, 2% Other. 55% indicated they worked between 40 and 50 hours per week.	✓		✓		✓		✓
Chen & Treviño (2022)	USA	182 full time employees. 44.5% male, 80.3% White, 7.1% Asian, 6% African American. Mean age 35 (SD =9). Worked in their organisation for mean of 6.5 years (SD =6.3) The industries most represented were professional, scientific, or technical services, health care, education, finance/insurance, publishing, retail.	✓			✓		✓	✓
		171 individuals. 87% fully employed. 51% male. 70.2% White, 10.5% Asian, 8.8% African American, 5.8% Hispanic. Mean age of 39 (SD = 11). Mean work experience of 16 years (SD = 11). Industries most represented were professional and scientific services, retail, education, health care, finance, and publishing.	✓		✓			✓	✓
		340 individuals. 77% were employed full time or part time. 58% female. 79% White, 9.4% Asian, 6.5% African American, 2.9% Hispanic. Mean age 40.7 Industries most represented were professional and scientific services, education, health care, retail, and finance	✓		✓			✓	✓

Table 5 contd.: *Participant details, method and design*

Paper	Country	Participant Details	Quantitative	Qualitative	Cross-sectional	Repeated Measure	Presentation of video stimuli	Presentation of written stimuli	Self-Report Questionnaires
Deng et al. (2022)	China	366 employees of a household appliance company and a high-tech company. 63.11% male. Mean age 33.23 years (SD=6.649). Worked for organisation for mean of 5.41 years (SD=4.11). Mean dyadic tenure 2.31 years (SD = 1.436) Additional demographic data not provided.	✓		✓				✓
Huang et al. (2022)	USA	1047 Physicians. 63% male.,75% were non-Hispanic White, 16% Asian. The study also included an analysis of student data which has been ignored for this review as it does not meet the inclusion criteria of research conducted in a work setting.	✓						✓

3.5.3 Overview of studies

This section provides a brief overview of each of the studies, the measures they used and their aims which may also be found in Table 6. Further discussion of the measures and findings will be found in subsequent sections.

Six of the ten studies adopted a similar approach of presenting stimuli (independent variables) in written or video format and measuring a range of dependent variables that the researchers hypothesised would be associated with the presentation of the stimuli (Vianello et al. 2010; Janicke et al., 2018; Janicke-Bowles et al., 2019; Chen & Treviño, 2022). The remaining four studies gathered self-report questionnaire data as both independent and dependent variables with no stimuli used (Vianello et al. 2010; Deng et al., 2022; Huang et al., 2022).

Vianello et al. (2010) employed different designs across three studies to look at the role that a leader has in the moral elevation of followers and its association with Organisational Citizenship Behaviour (OCB).

In Study One 121 employees of an Italian door manufacturing company participated in a 2 x 2 factorial design. Participants were presented with scenarios about a fictitious leader in

which the leader's self-sacrifice (vs. self-benefit) and interpersonal fairness (high vs. low) were manipulated. After reading the scenarios, participants completed a questionnaire to establish the extent to which they were elevated and their intentions regarding OCB. A measure of the individual's Affective Commitment (AC) was also gathered.

In Study Two 275 nurses completed questionnaires looking at their perceptions of their managers' Interpersonal Fairness and Self Sacrifice as well as measures of Elevation, OCB and AC. The study sought to replicate the findings of Study One in a more natural work setting with refined measures. Both studies included a manipulation check in which one item measures were completed to establish if the experimental conditions elicited the expected responses.

In Study Three 42 female pre-school teachers were asked to indicate using a Likert scale the degree to which they experienced happiness, serenity and elevation related to their school principals' behaviour. They were also asked to think back over the past year and to rate (1) their average level of organisational commitment and (2) how frequently they adopted a series of behaviours relating to altruism, courtesy, and compliance (see next section about variables for more detail).

Janicke et al. (2018) employed an experimental design in which 148 full time employees watched a video as one of three experimental conditions: (a) one of two meaningful videos (n = 39), (b) one of two funny videos (n = 51) or (c) a control video of a slide show of different nature scenes without narrative. A pre-test manipulation check was used to select the video stimuli. All the videos were approximately four minutes long and downloaded from Youtube. Participants were at work while taking part in the study. After watching the videos, participants completed questionnaires addressing Affect (positive, negative, meaningful), Recovery Experiences, Vitality and Work Satisfaction. Janicke et al. (2018) report that the meaningful affect measures were developed from moral elevation research.

Janicke-Bowles et al. (2019) employed the same experimental design in their 2018 paper above to examine the relationship between moral elevation and wellbeing. 200 full time office workers watched a video as one of four experimental conditions: (a) one of two

elevating videos (n = 52), (b) one of two gratitude videos (n =39), (c) one of two funny videos (n = 51), (d) a control video (n = 58). A pre-test manipulation check was again used to select the video stimuli (see next section about variables for more details). All the videos were once more approximately four minutes long and downloaded from Youtube. Participants were also at work while taking part in the study. Before watching the video, participants provided demographic information and indicated their levels of stress and vitality. After watching the videos, the participants completed questionnaires addressing the entertainment experience, life appreciation, levels of stress and wellbeing (vitality, meaning at work and relatedness at work).

Chen and Treviño (2022) conducted three studies to examine the role of moral elevation in supporting Ethical Voice which the researchers describe as being when workers speak up about unethical behaviour at work. As such Chen & Treviño (2022) propose that Ethical Voice is an example of prosocial behaviour.

In study one, 182 participants who were able to recall a specific instance of co-worker ethical voice were asked questions about the event and how they responded. The researchers developed a three-item measure of how prohibitive (what should be avoided, what is ethically or morally wrong) or promotive (what can be done, what is morally good or ethical) they perceived the event to be. Participants were asked to complete this measure along with a measure of threat and a measure of elevation.

In study two, 171 participants took part in an experiment in which they indicated their feelings in response to comments made by a fictitious colleague about an ethically questionable HR decision. The same measures were used as in study one with the addition of a control measure to establish the degree to which participants agreed with the HR decision that had been made.

In study three, 340 participants took part in an experiment in which they were asked to respond to simulated messages about an ethically questionable HR decision in an online discussion group. The participants once again completed measures to identify how prohibitive or promotive comments were considered and measures of threat and moral

elevation were also gathered. Actual ethical voicing behaviour was measured by independently coding the chat comments of participants.

Deng et al. (2022) conducted a study of 366 employees in two different organisations – an appliance manufacturer and a high-tech company – to investigate the relationship between ethical leadership and peer monitoring – how individuals notice and respond to the behaviour of their colleagues. The study sought to identify what mediating effect moral elevation may have. Participants were asked at Time 1 to complete a survey on their manager’s ethical leadership, their own moral elevation, perceptions of leader’s moral motivation, leader-follower congruence, and their demographic details. At Time 2 they provided data on their peer monitoring, responding to items such as “I would take action if my co-workers are doing their job incorrectly”.

Huang et al. (2022) conducted a secondary data analysis of a survey of a nationally representative sample of 1047 physicians gathered in 2011. Respondents completed measures of moral elevation as well as markers of professional identity (empathic compassion, interpersonal generosity, mindfulness), and measures of well-being (life meaning, life satisfaction, spirituality, burnout) in an attempt to explore the relationships between these variables and moral elevation elicited by recalling an admired colleague. The study also included an analysis of student data. The student data has been ignored in this review as it did not meet the inclusion criteria. Table 6 details the measures employed.

Table 6: Measures, variables and references cited for measures by study authors

Study	Description of Variables/Measures	Measure of Moral Elevation	IV	Mediator	DV	
Vianello et al. (2010)	Study 1	4 different scenarios detailing the attempts of a fictitious manager, Massimo Castelli, to revive a failing company. The study manipulated content to include self-sacrifice or self-benefit, or high fairness or low fairness to staff.		✓		
		1 item Likert scale measure of self-sacrifice (<i>Do you think Massimo Castelli sacrificed himself in order to help the company?</i>)		✓ ¹		
		1 item Likert scale measure of interpersonal fairness (<i>Do you think Massimo Castelli treated his employees with politeness, respect and sensibility?</i>)		✓ ²		
		8 item moral elevation scale developed for this study	✓		✓	
		Asked to consider own jobs, measured Altruism intentions (Konovsky & Organ, 1996)				✓
		Asked to consider own jobs, measured Courtesy intentions (Smith, Organ, & Near, 1983)				✓
		Asked to consider own jobs, measured Compliance intentions (Pond, Nacoste, Mohr, & Rodriguez, 1997)				✓
		Affective Commitment (Meyer, Allen and Smith, 1993)				✓
	Study 2 ³	Interpersonal Fairness of manager (Colquitt, 2001)		✓		
		Self-Sacrifice of manager (Conger and Kanungo, 1998; Choi and Mai-Dalton, 1999)		✓		
		8 Item moral elevation scale developed for Study One with addition of item addressing Admiration for Boss. Asked to consider retrospectively in relation to manager.	✓		✓	
		Altruism as in Study One but asking for self-reported actual instances of OCB (Konovsky & Organ, 1996)				✓
		Courtesy as in Study One but asking for self-reported actual instances of OCB (Smith, Organ, & Near, 1983)				✓
		Compliance as in Study One but asking for self-reported actual instances of OCB (Pond, Nacoste, Mohr, & Rodriguez, 1997)				✓
		Affective Commitment (Meyer, Allen and Smith, 1993)				✓
	Study 3	Happiness towards school principal – 5 items from PANAS-X (Watson & Clark, 1994)		✓		
		Serenity towards school principal – 3 items from PANAS-X (Watson & Clark, 1994)		✓		
		Positive Affect towards school principal – 5 items from PANAS-X (Watson & Clark, 1994)		✓		
		moral elevation scale as developed in Study Two	✓		✓	
		Altruism as in Study One but asking for self-reported actual instances of OCB (Konovsky & Organ, 1996)				✓
		Courtesy as in Study One but asking for self-reported actual instances of OCB (Smith, Organ, & Near, 1983)				✓
		Compliance as in Study One but asking for self-reported actual instances of OCB (Pond, Nacoste, Mohr, & Rodriguez, 1997)				✓
		Affective Commitment (Meyer, Allen and Smith, 1993)				✓

¹ Served as manipulation check and proxy for independent variables

² Served as manipulation check and proxy for independent variables

³ The order of measures in questionnaire counterbalanced: half of questionnaires presented independent rather than dependent variables first.

Table 6 contd.: Measures, variables and references cited for measures by study authors

Study	Description of Variables/Measures	Measure of Moral Elevation	IV	Mediator	DV
Janicke et al. (2018)	Presented with one of three experimental conditions: (a) one of two meaningful videos (b) one of two funny videos or (c) a control video of a slide show of different nature scenes without narrative ⁴		✓		
	Meaningful Affect – 4 subscales from Oliver et al. (2012) and McCollough et al. (2004): Meaningful Affect, Positive Affect, Negative Affect, Mixed Affect	✓		✓	
	Psychological Detachment (Sonnentag and Fritz, 2007)				✓
	Relaxation (Sonnentag and Fritz, 2007)				✓
	Mastery (Sonnentag and Fritz, 2007)				✓
	Vitality – 5 items subscale of Activation-Deactivation-Checklist (Thayer, 1989)				✓
Janicke-Bowles et al. (2019)	Work Satisfaction (Parker and Hyett, 2011)				✓
	Presented with one of four experimental conditions: (a) one of two elevating videos (b) one two gratitude videos (c) one of two funny video (n (d) a control video ⁵		✓		
	State of Stress – pre and post video (Conrad et al. 2007)				✓
	Positive Affect – 4 items from Oliver et al. (2012)				✓
	Negative Affect – 4 items from Oliver et al. (2012)				✓
	Inspiring Affect (Elevation (Oliver et al. (2012) combined with Gratitude (McCollough et al., 2004)	✓		✓	
	Have Focus - 'Haves' subscale from the Appreciation Scale (Adler and Fagley, 2005)				✓
	Vitality – pre and post video - 5 items from tiredness subscale of the Activation-Deactivation-Checklist (Thayer, 1989)				✓
Meaning at Work (Steger et al. ,2012)				✓	
Huang et al. (2022) ⁶	Relatedness at Work – subscale of basic psychological needs at work scale (Baard et al. 2004)				✓
	5 item moral elevation scale adapted from Vianello (2010) for medical profession.	✓		✓	
	Empathic compassion scale - (Leffel et al, 2018)				✓
	Interpersonal generosity scale (Leffel et al, 2018)				✓
	Mindfulness scale (Leffel et al, 2018)				✓
	2 item Maslach Burnout Inventory (MBI) (Leffel et al., 2018)				✓
	Life satisfaction –1 item - I am satisfied with life				✓
	High life meaning – 1 item - I have found satisfactory meaning in life				✓
Spirituality – 1 item – to what extent do you consider yourself a spiritual person				✓	

⁴ Videos categorized following pre-test with n= 105 participants. The videos highest and lowest scores on pretest measures of meaningful and positive affect were selected for the main study.

⁵ Videos categorized following pre-test with n= 102 participants

⁶ Huang conducted exploratory research to identify preliminary associations

Table 6 contd.: *Measures, variables and references cited for measures by study authors*

Study		Description of Variables/Measures	Measure of Moral Elevation	IV	Mediator	DV	
Chen & Treviño (2022)	Study 1	Presented participants with real examples of co-worker ethical voice that they had themselves generated		✓			
		3 item measure of how prohibitive or promotive the example is perceived developed by researchers for study.		✓			
		5 item measure of threat (Higgins et al., 1986)					✓
		4 item measure of elevation (Algoe & Haidt, 2009)	✓		✓		
		5 item measures verbal support for the voicer (adapted from Burris, 2012)					✓
	Study 2	Presented with fictitious comments by a co-worker regarding an ethically questionable HR decision			✓		
		2 items to from study one to determine of comments were prohibitive or promotive			✓ ⁷		
		3 item measure of threat (Monin et al., 2008; Higgins, 1987)					✓
		4 item measure of elevation (Algoe & Haidt, 2009)	✓		✓		
		5 item measures verbal support for the voicer (adapted from Burris, 2012)					✓
	Study 3	Presented with fictitious discussions of an ethically questionable HR decision in chatroom experiment					
		3 item measure of how prohibitive or promotive the example is perceived developed by researchers for study.			✓ ⁸		
		3 item measure of threat (Monin et al., 2008; Higgins, 1987)					✓
		4 item measure of elevation (Algoe & Haidt, 2009)	✓		✓		
		Independent coding of the support offered by participants in messages they sent in response to the fictitious colleagues					✓
Deng et al. (2022)	10 item measure of ethical leadership (Brown et al., 2005)			✓			
	6 item measure of moral elevation (Vianello et al. (2010)	✓		✓			
	3 item perceived leaders' intrinsic motivation scale (Wang and Chan, 2019)			✓			
	3 item perceived leaders' extrinsic motivation scale (Wang and Chan, 2019)			✓			
	3 item measure of leader follower congruence (Jung and Avolio, 2000)			✓ ⁹			
	9 item measure of peer monitoring (Loughry and Tosi, 2008)					✓	
	Control variables of gender, age, education level, tenure						

⁷ Served as manipulation check

⁸ Served as manipulation check

⁹ Control

3.5.3.1 Summary of studies

Ten studies across six papers were found and examined in the SLR. The first question posed by this SLR was how moral elevation has been measured in work settings. In all the studies, the construct was measured using a self-report questionnaire. A detailed examination of these tools including strengths and limitations are provided in subsequent sections.

The second question addressed how research in this area has been applied. The studies addressed a range of employment sectors: manufacturing (Vianello et al., 2010; Deng et al., 2022; medical (Vianello et al., 2010; Huang et al., 2022), teaching (Vianello et al., 2010), high tech (Deng et al., 2022); unknown (Janicke et al., 2018; Janicke-Bowles et al., 2019). No theme emerged as to which areas might most benefit from research into this area nor an explanation offered why particular work activities were sought for research. We may conclude that the choices were arbitrary or a result of expediency.

Researchers have applied moral elevation to understanding leader follower relationships (Vianello et al., 2010; Deng et al., 2022), colleague relationships (Chen & Treviño, 2022; Huang et al., 2022) as well as the reaction to morally elevating stimuli in the absence of any colleague interaction (Janicke et al., 2018; Janicke-Bowles et al., 2019).

In addressing these areas, researchers have applied moral elevation to how it relates to two broad themes: wellbeing (Janicke et al., 2018; Janicke-Bowles et al., 2018; Huang et al., 2022; Vianello et al., 2010) and prosocial behaviour (Vianello et al., 2010; Chen & Treviño, 2022; Deng et al., 2022; Huang, 2022).

All the studies may be classified as having relational aims because they investigate the relationship between moral elevation at work and other variables. All variables were measured using self-report questionnaires apart from one of the Chen and Treviño (2022) studies in which independent reviewers assessed the support offered by participants in an experiment which simulated a chatroom discussion between colleagues.

A theme across the design of all these studies is the hypothesis that an individual's feelings of moral elevation may be influenced by external stimuli. All the studies further hypothesise that moral elevation acts as a mediator of wellbeing, intention and behaviour.

A detailed examination of the answers to the research questions and the findings of the studies will be provided in subsequent sections

3.6 Measures of Moral Elevation

This section provides greater detail how moral elevation was measured in each of the studies and reviews the quality of these measures. No obvious thematic grouping to the measures used was identified.

Two of the studies (Deng et al., 2022; Huang et al., 2022) indicate that they used a version of a tool created by Vianello et al. (2010) to measure moral elevation. However, there is ambiguity about how Vianello developed the scale. Vianello et al. (2010) explain that they created a scale to measure a sense of elevation by referring to the work of Algoe and Haidt (2009) which detailed physical, motivational and emotional components that differentiate moral elevation from other emotions. The explanation of its development in the Vianello et al. (2010) study is that they took these components and wrote items for them which were then included in the study. There is no reference to prior testing of the scale nor to its reliability or validity. How the items in the scales were adapted for each study by Vianello et al. (2010) is set out in Table 7.

Table 7: Comparison of elevation scales of Vianello et al. (2010)

Study 1	Study 2	Study 3
Context		
In this moment, right now...	While you have been working with your boss...	In the past 12 months, while you have been working with your boss...
Affective Component		
How much do you feel?	How many times did you feel:	How many times did you feel:
Feeling of openness towards others	Feeling of openness towards others	Feeling of openness towards others
Feeling of goodness/generosity	Feeling of goodness/generosity	Feeling of goodness/generosity
	Admiration for your boss	Admiration for your boss
Physical Component		
How much did you feel these sensations?		How many times did you feel these sensations?
Warmth in the chest		Warmth in the chest
Lump in the throat		Lump in the throat
Muscles relaxed		Muscles relaxed
Motivational Component		
How much would you like to:	How many times did you feel the desire to:	How many times did you feel the desire to:
Do something good for other people?	Do something good for other people?	Do something good for other people?
Behave as Massimo Castelli (the fictional leader in the story)	Be like your boss	Be like your boss
Become a better person	Become a better person	Become a better person

Studies 2 and 3 included an additional item for admiration of the participant’s ‘boss’. No theoretical reason was offered for the additional item other than to refine the scale. The inclusion of this item does undermine the conceptual clarity of the study as admiration is considered in the literature to be a distinctly different emotion from elevation (Algoe & Haidt, 2009). The physical component of the scale was removed for Study 2 as a result of Confirmatory Factor Analysis producing a poor fit for the three-factor model ($\chi^2(24) = 117.96, p < 0.001, SRMR = 0.08, CFI = 0.92$). The subsequent two factor model, eliminating the physical component, produced a good fit ($\chi^2(8) = 47.9, p < 0.01, SRMR = 0.052, CFI = 0.96$).

Deng et al. (2022) used the scale Vianello et al. (2010) used in study two reporting Cronbach’s alpha of .906. Huang (2022) used a five-item version of the scale adapted to refer to “physician” rather than boss or manager. The admiration item added by Vianello

et al. (2010) was removed which does improve the conceptual clarity of the concept of moral elevation. However, the instructions to those completing the survey was “*Among the physicians you have known personally, think about the one you most admire as a physician*”. It might be assumed that these instructions were part of the reasoning for removing the admiration item but by phrasing the items in this way conceptual confusion is created once more because admiration is a conceptually different construct from moral elevation (Algoe & Haidt, 2009). Huang et al. (2022) reported a Cronbach’s alpha of .87.

The studies of Janicke et al. (2018) and Janicke-Bowles et al. (2019) both used the findings of Oliver et al. (2012) pertaining to Elevation, and McCullough et al. (2004) pertaining to Gratitude in the creation of a scale analogous in its scope and application to the scale used by Vianello (2010). Janicke et al. (2018) included all 12 elevation and gratitude items measuring meaningful affect (e.g., touched, moved, inspired, thankful, fortunate; $\alpha = .959$). The resulting scale was named Meaningful Affect. The items were not provided.

The Janicke-Bowles et al. (2019) study refers to the creation of two scales of elevation and gratitude which were subsequently combined to form one scale (13 item, $\alpha = .957$) because the two scales significantly correlated with each other ($r = .836$, $p < .001$) resulting in multicollinearity in the path model. While example items are provided for each scale (Elevation scale – “The video made me feel touched; Gratitude scale – The video made me feel a warm sense of appreciation), neither the study itself nor the studies that the researchers referenced included the specific items that make up the scale.

To conclude, both the Janicke et al. (2018) study and the Janicke-Bowles et al. (2019) study create some conceptual confusion in that they are combining constructs – elevation and gratitude – that other researchers indicate are distinct (Algoe and Haidt, 2009). This also makes comparison with the other studies in this review difficult.

Chen and Treviño (2022) also purported to derive a measure for moral elevation from the work of Algoe and Haidt (2009). Respondents were asked to indicate the extent to which they were moved, inspired, respectful, and admiring of the co-worker in the example they described or of the fictitious agent of ethical voice in the two experimental conditions (4

items, $\alpha = .89$). The scale once again included a reference to admiration which is considered to be distinct from the construct of moral elevation (Algoe & Haidt, 2009).

In summary, the moral elevation scales used in the studies lacked theoretical clarity and conceptual coherence. While the researchers for the most part demonstrated that they were measuring something reliably, it is questionable whether this is moral elevation as originally set out in the research.

3.7 Other Measures

Across the six studies the relationship between moral elevation and 29 different variables were examined. The author has categorised these measures in Table 8. The measures fall broadly into the categories previously identified in this thesis as being of interest to researchers of moral elevation: prosocial intentions/behaviours, and wellbeing.

Table 8: *Categorization of measures*

Wellbeing	Prosocial		Miscellaneous
	Intentions	Behaviours	
Vitality X 2	Altruism	Altruism X 2	Intrinsic Motivation
Psychological Detachment	Courtesy Intentions	Courtesy X 2	Extrinsic Motivation
Mastery	Compliance Intention	Compliance X 2	Leader-follower congruence
Relaxation	Ethical Voicing x 2	Ethical Voicing	Spirituality
Work Satisfaction	Empathic Compassion		Affective Commitment X 3
Stress	Interpersonal Generosity		
Have Focus	Peer monitoring		
Meaning at Work			
Life Satisfaction			
High Life Meaning			
Maslach Burnout Inventory			
Relatedness at work			
Mindfulness			

3.8 How Has Moral Elevation Been Applied?

Having addressed the question of how moral elevation has been measured in work settings in the section above, this section will review in more detail how the construct has been applied, answering the second question of this SLR.

Conceptual issues have already been raised about the measurement of moral elevation. This inevitably calls into question any findings in the studies relating to these measurements. In this section these concerns will be momentarily placed to one side while the relationships that have been investigated are examined. The concerns will be revisited as the quality of the studies is summarised in a subsequent section. Table 9 presents a summary of the reported findings. The relationships found in the studies are consistent with the broader research into moral elevation which identifies associations with prosocial intentions/behaviours and wellbeing.

Table 9: Study findings

Study	Reported Findings
Vianello et al. (2010)	The evidence across the three studies was combined to report that that leaders influence followers by eliciting the positive emotion of moral elevation. Leaders who are committed to the common good and treat followers in an exceptionally fair manner can elicit elevation in their employees, and that this emotion fully mediates leaders’ influence on followers’ organisational citizenship behaviours and affective organisational commitment. In the first study a moderation effect of interpersonal fairness on self-sacrifice was also observed.
Janicke et al. (2018)	Evidence suggested a path model whereby meaningful and funny videos influence recovery and well-being. The study demonstrated that meaningful affect (a combination of elevation and gratitude) resulted from viewing a meaningful video that portrayed the altruistic nature of humanity. This contributed to recovery through experiences of mastery, whereas positive affect, as a result of watching a funny video, predicted psychological detachment and relaxation. The recovery experience of mastery consists of the feeling that one is encountering something new, taking on a challenge, perhaps intellectual, and broadening one’s horizons (Sonnentag and Fritz, 2007).
Janicke-Bowles et al. (2019)	A path model suggests unique effects for meaningful inspiring videos on indicators of subjective (vitality), psychological (meaning at work) and social (relatedness at work) wellbeing. In addition, appreciating the good things in life mediated the relationship between inspiring affect (a combination of elevation and gratitude) and meaning and relatedness at work. Participants tended to feel less stressed after watching any of the video conditions but felt the highest energy surge after watching an elevating video.
Chen & Treviño (2022)	Across three studies, it was found that moral elevation acts as a mediator between exemplars of ethical voicing and subsequent co-worker verbal support for the ethical voice. A distinction between promotive and prohibitive ethical voice demonstrated that while promotive ethical voicing will engender moral elevation (an approach-oriented emotion), prohibitive ethical voice promotes the mixed affect of threat (an avoidance-orientated emotion) and moral elevation such that prohibitive ethical voice may still have a positive effect via elevation on co-worker support.
Deng et al. (2022)	Perceived ethical leadership was significantly and indirectly related to followers’ peer monitoring through the partial mediator of moral elevation. The direct effect of ethical leadership on peer monitoring when controlling for moral elevation was still significant. Followers’ perceived leaders’ intrinsic moral motivation moderated the indirect effect of ethical leadership on peer monitoring. Ethical leadership had a stronger indirect influence on peer monitoring only when perceived leaders’ intrinsic moral motivation was at a high level.
Huang et al. (2022)	For physicians, moral elevation was associated positively with spirituality, life meaning, life satisfaction, higher empathetic compassion, and generosity.

3.8.1 Wellbeing

The studies by Janicke et al. (2018), Janicke-Bowles et al. (2019) and an element of the work by Huang et al. (2022) looked at the relationship of moral elevation and wellbeing measures.

While the papers did not seek to offer a philosophical stance regarding what they considered to be wellbeing, the researchers framed the outcome variables they examined as sitting within the domain of wellbeing. In following their lead and labelling a group of variables as wellbeing measures, this SLR has adopted the multifaceted PERMA framework of wellbeing proposed by Seligman (2011). The PERMA theory identifies five key elements necessary for achieving a fulfilling and meaningful life.

1. Positive Emotion (P) - Positive emotions encompass feelings of happiness, joy, contentment, and other pleasurable experiences.
2. Engagement (E) - involves being fully absorbed and involved in activities that challenge and utilize one's skills.
3. Relationships (R) - positive relationships are crucial for wellbeing and in a work context the relationships formed with colleagues are important.
4. Meaning (M) - having a sense of purpose and direction in life.
5. Accomplishment (A) - involved pursuing and achieving goals, having ambition, and a sense of mastery and success.

While the PERMA model of Seligman (2011) provides a framework for understanding and improving wellbeing beyond that of the workplace, it offers a lens by which to examine how a work environment contributes to wellbeing and how it might be enhanced. As such any studies that address any of these elements may be said to be examining aspects of wellbeing.

Janicke et al. (2018) addressed the Recovery Experiences of participants as they watched videos using three scales adapted from subscales from Sonnentag and Fritz (2007): (Psychological Detachment ($\alpha = .760$; four items, e.g. "I distanced myself from my work"), Relaxation ($\alpha = .835$; four items, e.g., "When I watched the video: I used the time to relax"), and Mastery ($\alpha = .859$; four items, e.g. "I did something to broaden my horizon"). A measure of Vitality, the extent to which participants felt sleepy, tired, drowsy, wide-awake, and wakeful, was included along with a measure of work satisfaction.

Only Mastery recovery experiences were predicted by meaningful affect ($\beta = .649, p < .001$) and Vitality was only predicted by mastery experiences ($\beta = .287, p = .003$). Mastery

experiences predicted work satisfaction only marginally significantly ($\beta = .166, p = .064$). Mastery experiences, they reported, fully mediated the relationship between meaningful affect and vitality ($\beta = .186, p = .010$), 95% CI [.038, .323]. In other words, the recovery one perceives - feeling more energised – from watching elevating videos is associated with the feeling of mastering a more challenging media exposure. These findings do support the proposals of Fredrickson (1998) that positive emotions undo negative emotions.

Janicke-Bowles et al. (2019) looked at levels of Stress, Have Focus (a measure of the appreciation of the good things in life), Meaning at Work and Relatedness at work (a measure of the extent to which people feel connected with their colleagues). Janicke-Bowles et al. (2019) labelled the combination of elevating and gratitude perceptions as Inspiring Affect. Their study found, as predicted, that the inspiring video condition predicted Inspiring Affect ($\beta = .464, p < .001$). Their explanation of its role as a moderator is that individuals who are primed on Inspiring Affect through a short inspiring video are activating cognitions of purpose and competence. This, they argue, makes employees aware of their fortune and privileges, thus contributing to an overall experience that one's work is meaningful. Given the evidence elsewhere that finding meaning in work has been associated with a range of measures such as less days absent from work and less psychological distress (Steger et al. 2012), they proposed and found that short eudaimonic entertainment experiences eliciting inspiring affect at work can impact short-term psychological wellbeing – meaning at work ($\beta = .172, p = .027$).

They also found that inspiring affect predicted have focus ($\beta = .627, p < .001$), which in turn predicted meaning at work ($\beta = .372, p < .001$) and relatedness at work ($\beta = .311, p < .001$) significantly. Have focus fully mediated the relationship between inspiring affect and meaning at work ($\beta = .233, p < .001$, 90% CI [.059 .407]) and relatedness at work ($\beta = .195, p < .001$, 90% CI [.057 .333]).

The study by Huang et al. (2022) is by its own admission a proof-of-concept study with less ambitious aims than the studies detailed above and an explicit recognition that the measures needed to be studied more rigorously to establish reliability and validity. Rather than reporting correlation or conducting SEM, the researchers created categories (e.g. Low, Moderate, High) for the measures and conducted Chi-square tests of the bivariate association between the measures and moral elevation to measure bivariate odds ratios (ORs). The study

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reported that physicians who were categorised as reporting higher moral elevation were more likely to report greater life meaning (OR 2.03, 95% CI 1.25–3.32).

In summary there is some evidence of the relationship between moral elevation and some specific measures of wellbeing, but the measures of moral elevation are inconsistent leading to difficulties drawing conclusions across the studies and the specific wellbeing measures used again make generalising the findings problematic.

3.8.2 Prosocial intentions and behaviours

A relationship of moral elevation with prosocial intentions and behaviours was reported as significant in four of the six papers in this review (Vianello et al., 2010; Deng et al., 2022; Chen & Treviño, 2022; Huang et al., 2022). These significant relationships were found in seven prosocial intentions, three self-reported behaviours and one example of an observed behaviour. Table 10 summarises these intentions and behaviours across the papers.

Table 10: *Summary of Intentions and Behaviours Found*

Study	Prosocial Measure	Outcome
Vianello et al. (2010)	Altruism	Intention
	Courtesy	Intention
	Compliance	Intention
	Altruism	Self-report Behaviour
	Courtesy	Self-report Behaviour
	Compliance	Self-report Behaviour
Deng et al. (2022)	Peer monitoring	Intention
Huang et al. (2022)	Empathic compassion	Intention
	Interpersonal Generosity	Intention
Chen & Treviño (2022)	Support of ethical voice	Intention
	Ethical voice	Observed Behaviour

Vianello et al. (2010) examined the relationship of the elevating experience with the prosocial behaviours associated with Organisational Citizenship Behaviours (OCB), in particular the components of Altruism, Courtesy and Compliance. In addition, the studies looked at Affective Commitment, which included items such as ‘I would be happy to spend the rest of my career in this organisation’ and ‘this organisation has a great deal of personal meaning to me’.

Viannello et al. (2010) seeks to explain the mediating mechanism. The study proposes that the emotion of elevation fully mediates the leader's influence on OCBs. Drawing together the evidence across the three studies in their paper, they argue that "the direction of causality has been proved by our manipulations".

SEM produced models that were a good fit with the hypotheses for study one ($\chi^2_{(12)} = 20.5$, $p = 0.06$, SRMR = 0.052, CFI = 0.97) and study two ($\chi^2_{(8)} = 47.9$, $p = 0.01$, SRMR = 0.052, CFI = 0.96). For study three, correlations indicated that elevation is a significant predictor of altruism ($r = .25$, $p < 0.01$), commitment ($r = .26$, $p < 0.01$), courtesy ($r = .30$, $p < 0.001$), and compliance ($r = .13$, $p < 0.05$).

The studies of Deng et al. (2022) and Huang et al. (2022) both used the Viannello et al. (2010) study as a reference point in the designs of their studies.

Deng et al. (2022) found that perceived ethical leadership was positively related to followers' moral elevation ($r = .320$, $p < 0.01$) and peer monitoring ($r = .526$, $p < 0.01$). Also, followers' moral elevation was positively related to peer monitoring ($r = 0.434$, $p < 0.01$). When controlling for all control variables, ethical leadership was positively related to followers' peer monitoring ($B = 0.317$, $SE = 0.033$, $p < 0.001$). Also, ethical leadership was positively associated with followers' moral elevation ($B = 0.106$, $SE = 0.037$, $p < 0.010$), and followers' moral elevation was positively related to peer monitoring ($B = 0.268$, $SE = 0.051$, $p < 0.001$).

To test the mediating effect of moral elevation, the researchers bootstrapped 5000 samples to construct a 95% bias-corrected confidence interval (CI). Results indicated that ethical leadership was significantly and indirectly related to followers' peer monitoring through moral elevation (indirect effect = 0.028, $SE = 0.011$, $p < 0.010$) with 95% CI excluding zero [0.009, 0.051].

The Huang et al. study (2022) included items looking at OCBs in addition to the items relating to wellbeing which were reported in the previous section. They found that physicians with high moral elevation reported higher empathetic compassion (OR 1.22, 95% CI 1.06–1.41) and generosity (OR 1.43, 95% CI 1.23–1.65), both measures of prosocial intentions.

The studies by Chen and Treviño (2022) shared the prosocial focus but derived the measure of moral elevation directly from the work of Algoe and Haidt (2009). All of the studies looking at promoting ethical voice reported significant results.

Study one looked at moral elevation and the promotion of ethical voice when participants were recalling a colleague demonstrating it in the past. A good fit was found in a SEM derived model that placed moral elevation as the mediator. ($\chi^2_{(125)} = 190.80$, $p < .001$, RMSEA = .05, SRMR = 0.052, CFI = 0.97, TLI = .96).

Study two measured ethical voice intentions and moral elevation in an experimental design in which participants were presented with manipulated ethical voice stimuli. A positive indirect effect of a promotive ethical voice via elevation on verbal support was reported. (effect = .59, SE = .14, bootstrapped 95% CI [.32, .87]).

The third study by Chen and Treviño (2022) was unique in this review in that it derived a measure of ethical voicing by independently coding responses in a chat forum. It should be noted that while this is an instance of actual observed behaviour, the exercise was a simulation rather than being real work. They reported that that promotive ethical voice was positively related to elevation ($B = .38$, $SE = .13$, $p = .005$, 95% CI [.11, .64]), which in turn was positively related to verbal support ($B = .36$, $SE = .15$, $p = .02$, 95% CI [.07, .64]). Bootstrapping results showed a significant and positive indirect effect of promotive ethical voice via elevation on verbal support (effect = .13, SE = .08, bootstrapped 95% CI [.02, .33]).

Each study uniquely looked at different aspects of prosocial behaviour. This makes drawing firm conclusions about a relationship of moral elevation with particular prosocial behaviours problematic. It also needs to be noted that none of the studies looked at actual behaviours in a work environment and several looked at intentions rather than behaviours. Nevertheless, the weight of evidence suggests that there is an association between moral elevation and prosocial intentions/behaviours and that there is evidence to indicate that moral elevation acts as a mediator between perceptions of leaders and OCBs.

3.8.3 Experimental design themes, strengths and limitations

The following section sets out themes of the experimental designs, reviews the strengths or limitations of these designs and details how the designs impact on our ability to reach conclusions from the studies. A level of granularity has been adopted to tease out the conceptual lack of clarity that is found in some of the studies. It is proposed that it is only by delving beneath the superficial declarations of the researchers that it is possible to reach conclusions that will facilitate the development of this area of research.

The studies seek to identify causal links. This review asks whether the designs allow interpretation of causal links.

3.8.3.1 The relationship between moral elevation and wellbeing

Both of the studies by Janicke et al. (2018) and Janicke-Bowles et al. (2019) hypothesised that stories of altruistic behaviours would increase a sense of moral elevation and that moral elevation would mediate wellbeing outcomes. Participants in the studies of Janicke et al. (2018) and Janicke-Bowles et al. (2019) were working while taking part in the experiments which enhanced the ecological validity of the studies. Participants were presented stories that were considered meaningful but were not specifically about work leading to an implicit hypothesis that the influence of moral elevation on a work setting is not limited to the stimuli being work related. The stories presented by these latter studies documented real stories. It is not clear from the write up of the study if the participants appreciated that the stories were real but the presentation of them was manifestly a documentary of real behaviour. The stories did adhere to the theoretical definition of morally elevating acts (Haidt, 2000; Algoe & Haidt, 2009). By choosing an experimental manipulation, the researchers in these studies may be more confident that they have established a causal relationship.

The survey by Huang et al. (2022) made no attempt to address causality. The research was simply a survey at one point where measures of moral elevation and wellbeing were gathered at the same time point. It is only possible to draw conclusions about associations between the variables from this research.

3.8.3.2 *The relationship between moral elevation and prosocial behaviours*

The first study by Vianello et al. (2010) hypothesised that stories of altruistic behaviours of leaders would increase a sense of moral elevation among followers. By manipulating the stimuli conditions, the researchers proposed that they were able to draw conclusions about causal links. The study presented a specific written story of a fair and self-sacrificing leader, but the experimental design made no attempt to establish whether any subsequent change in moral elevation was specifically because participants had been presented with a story about a *leader* or if any effect related to the degree of fairness and self-sacrifice present in the story, regardless of its leadership context. While the researchers sought to establish an association between the story stimulus being about a leader and the moral elevation of followers, such a design flaw makes it difficult to draw any such conclusions. Also, while the study explains that the leader in the story is fictional, the study does not explain whether participants were aware that the story was fictional or if they believed it was real. We are left with an experimental design that will tell us little about whether specifically learning about a real leader's ethical behaviour will have an effect on the moral elevation of followers. What we might be able to conclude is that reading a story about ethical and fair behaviour might lead to moral elevation.

A strength of the Vianello et al. (2010) paper and that of the Chen and Treviño (2022) paper, which will be reviewed in detail in the following paragraphs, is that they both sought to develop a weight of evidence by conducting and reporting three related studies.

In the second study by Vianello et al. (2010) the researchers sought to make the design more ecologically valid by asking participants to reflect on the behaviour of their manager before asking them to report measures of elevation. The challenge of this design is that it undermines efforts to establish causality as no attempt was made to experimentally manipulate a sense of moral elevation but rather they asked participant to recall the experience of the emotion while working with their managers. It is equally plausible that a relationship between elevation and perceived leader behaviour may be because individuals who are inclined to be or who are more morally elevated are more inclined to see the good in their managers. This design limitation is shared with the third study of Vianello et al. (2010) in which participants are once again asked to reflect on the behaviour of a manager.

A further limitation of the research by Vianello et al. (2010) is that although studies two and three ask participants to recall instances of ethical leader behaviour, no reference is made to whether participants are recalling whether their leaders are acting in a prosocial way towards them or to other colleagues. This is a conceptual concern because moral elevation is specifically defined in the literature as being the emotion elicited when we witness someone behaving in an altruistic way towards someone other than ourselves. (Haidt, 2000; Algoe & Haidt, 2009).

The Chen and Treviño (2022) studies looked at interactions between colleagues who were not necessarily in a leader-follower relationship. The studies sought to address both methodological issues detailed above. Firstly, they introduced controls, comparing different kinds of messaging in an attempt to identify the different impacts of these kinds of messages. The ecological validity of the first study was attended to by creating the elevating stimuli from the stories of ethical voice that participants had themselves witnessed and particular attention was given to ensuring that the stories that were created and recalled were instances of observing ethical behaviour towards others and not examples where the observer benefited. The issue of ensuring they were observing a direct relationship between the stimuli and the feelings of elevation was addressed by asking participants to reflect on these particular instances. The question of direction of causality of this study remains but was addressed in studies two and three by experimentally manipulating the stimuli.

The Deng et al. (2022) study also examines the leader-follower relationship. The design incorporates two measurement points, Time 1 and Time 2. The researchers suggest that this enhances their ability to establish causality. The study design follows closely that of Vianello et al. (2010) in that it asks individuals to assess ethical leadership and moral elevation at Time 1 while looking at peer monitoring dependent variables at Time 2. The study design does address common method bias but it is still not possible to be confident of the direction of causality. An inspection of the items included in the ethical leadership scale (Brown et al., 2005) reveals that it shares the conceptual ambiguity of Vianello et al (2010): none of the items in the scale relate to the definition of moral elevation that they purport to be eliciting.

3.8.3.3 Pre/post testing

It is of particular note that while a number of the studies utilised controls as detailed above Only Janicke-Bowles et al. (2019) employed a pre-post intervention measurement design strategy. This is somewhat surprising given that Chen and Treviño (2022), Deng et al. (2022), Janicke et al. (2018), and Vianello et al. (2010) were purporting to study changes in behaviour and wellbeing as a result of external stimuli, mediated by moral elevation.

3.8.3.4 Stimuli presentation

The stimuli in the first study by Vianello et al. (2010) was presented as a written story as were the stimuli in the first two studies of Chen and Treviño (2022) looking at Ethical Voice. The stimuli in the Janicke et al. (2018) and Janicke-Bowles et al. (2019) studies were presented as short videos of approximately four minutes. These studies follow the hypotheses of researchers (Haidt, 2000; Algoe & Haidt, 2009) who have hypothesised that stories of kind and altruistic behaviour will influence an individual's sense of moral elevation. Individuals, they hypothesised, do not need to be witnesses of the behaviours to experience the emotion. The third study of Chen (2022) employed a novel approach in this review in that an experimental simulation led participants to believe they were witnessing moral exemplars first hand and their responses were examples of actual prosocial behaviours.

Of these studies, only Chen (2022) sought to shed light on the characteristics of the stimuli that might elicit moral elevation. In this instance the study examined if both prohibitive and promotive examples of ethical voicing would elicit elevation. The approach and focus of the other studies were to check that the stories they had chosen for their studies worked in influencing the feeling of moral elevation.

3.8.3.5 Summary

In summary, there are design issues across all of the studies included in this SLR and significant design issues in several of the studies which make it difficult to draw firm conclusions about any causal relationships. What we are able to establish are some associations between measures. In the next two sections I will review in more detail what has been measured.

3.9 Quality Assessment Summary

For reasons detailed in the description of the methodology of this SLR, the quality of the studies has been addressed throughout this thesis. In this section I will attempt to summarise the issues pertaining to quality. Also, as previously explained and following recommendations of Hong and Playe (2018), I have not provided a numerical value for the quality assessment which I consider to be reductive and potentially misleading. Relevance, contribution, trustworthiness and generalisability will be addressed (Orme & Shemmings, 2010).

3.9.1 Relevance and contribution

All of the studies included in the review were relevant to the review question as they sought to shed light on the role of moral elevation in the workplace. They addressed the influence leaders who exhibit moral excellence have on their colleagues and also how moral elevation is associated with wellbeing measures. The former area of study addressed the relationship of the leader-follower interaction with prosocial behaviours such as ethical voice (Chen & Treviño, 2022), peer monitoring (Deng et al., 2022) and altruism (Vianello et al., 2010). These are all of relevance to organisational and individual performance. The study by Huang et al. (2022) was a proof-of-concept study however and as such both its design and analysis lacked rigour but also the impact of an intervention that elicits moral elevation. As an initial exploration of issues, however, it still has relevance to the review question.

3.9.2 Trustworthiness and generalisability

The question of trustworthiness relates directly to quality of the design and interpretation of the findings.

3.9.2.1 Structural equation modelling

The studies by Vianello et al. (2010), Janicke et al. (2018), Janicke-Bowles et al. (2019), Chen and Treviño (2022), and Deng et al. (2022) utilise Structural Equation Modelling (SEM) in their analysis. As evaluation of the quality of their findings must therefore take into account an evaluation of the quality of their SEM.

Bollen and Pearl (2013) offer a number of cautionary notes to researchers working with SEM. They warn against the “*post hoc ergo propter hoc*” fallacy, translated as “*after this, therefore because of this*”. They point out that SEM is not a tool that establishes causal relations from associations alone and that a good fit for the data does not prove causal assumptions. They argue that a good fit simply makes causal assumptions more plausible. An SEM will therefore contribute to our understanding in so far as it withstands attempts of replication, examination of the design and suggestions of other models.

By offering three studies set across the research, the works of Vianello et al. (2010) and Chen and Treviño (2022) seek to replicate the findings under different circumstances across different work sectors in order to add weight to any findings thus supporting the generalizability of the findings as well as adding weight to ascribing causality.

SEM best practice (Collier, 2020) is to assess the measurement model before evaluating the path model. Vianello et al. (2010), Chen and Treviño (2022), and Deng et al. (2022) all undertook such analysis. However, for the Vianello et al. (2010) study this analysis led to the exclusion of the Physical Component of moral elevation in the second study and the addition of an item in the Affective component for studies two and three. This undermines the generalizability of the findings in so much as the same concept is not being measured in each study.

In the final model in the study by Vianello et al. (2010), the authors used the aggregate scale figures rather than the individual items in their calculations. While this approach is not uncommon, there is debate within the SEM research community regarding its appropriateness and it is widely concluded that including the individual items as elements of latent variables is a more robust approach (Collier, 2020).

Janicke et al. (2018) and Janicke-Bowles et al. (2019) also presented path analyses that did not include latent variables consisting of individual items. There is no indication that CFA was conducted to establish the validity of a measurement model. However, both studies were undertaken by the same group of researchers with people at work in the same year using the

same design as each other. The replication of the research design in a real world setting again lends weight to the value of the research as stipulated by Hong and Playe (2018).

The studies by Chen and Treviño (2022) and Deng et al. (2022) did not provide sufficient information to be able to determine whether they included items in their SEM and the Chen and Treviño (2022) study was unclear about how they used the findings from the measurement model but CFA was conducted.

3.9.2.2 Measurement issues

Throughout this review issues of measurement have been raised with each study as it has been discussed. The conclusions of section 3.8 highlighted the lack of consistency of the measurement of moral elevation. The following paragraphs will focus on some of the measurement issues of other variables within the Vianello et al. (2010) studies. This is of relevance as this study is often cited and formed the blueprint for the studies by Deng et al. (2022) and Huang et al (2022).

The abstract of the Vianello et al. (2010) study speaks of the emotion fully mediating the leader's influence on Organisational Citizenship Behaviour. This statement requires some unpacking to gain a clearer picture of the possible value of the studies.

Firstly, the concept of Organisational Citizenship Behaviour (OCB) is measured in all three studies, but we should be cautious about drawing a link with actual behaviours. Indeed, the first study does not seek to present a link with actual behaviour: the OCB it refers to is *intention* to behave altruistically, compliantly and with courtesy. This presents a significant issue in ascribing value to this study as there is a strong argument that the relationship identified is merely a result of the same concept being measured twice but with different conceptual labels as will be detailed below.

The motivational component of the elevation scale used in these studies includes items such as, "How much would you like to do something good for other people?". The specific items included in the scales for OCB in the studies are not included in the write up but reference to the papers that the authors of the studies purport to have drawn from in creating their scales

(Konovsky and Organ, 1996) reveals items such as ‘Help others with heavy work loads’ and ‘help others who have been absent’. I argue that there is little conceptual daylight between an item looking at wanting to do something good for someone and an item looking at intending to help someone. The similarity of the items which on prima facie inspection of the constructs - Elevation and Organisational Citizenship Behaviour – suggest they are entirely unrelated constructs somewhat undermine the trustworthiness of the results.

The same concern is not present with studies two and three where participants are asked to recall instances of OCB. This design thus has the potential to reveal a relationship between intention and behaviour, but we need to be aware that the measure used is not an independent measure of actual behaviour but self-reported recollections of behaviour.

3.9.2.3 Pre and post testing

Another area of potential concern is the design of the study, as detailed above in section 3.8.3.3 is that only Janicke-Bowles et al. (2019) include pre and post testing. Studies without pre-post testing risk ascribing random variance between experimental groups to the effect of the experimental condition. Measuring change pre and post circumvents this issue and also lends weight to any conclusions about causality: a relationship between an experimental condition/intervention and a change is stronger evidence than a relationship measured at the same time as the intervention and only once. As this is a particular concern in the interpretation of complex SEM models, studies that take this into account may be considered to be of a stronger quality.

Janicke et al. (2018) and Janicke-Bowles et al. (2019) study the relationship between watching short videos and elevation effects in the workplace. Janicke-Bowles et al. (2019) did employ a pre and post measurement of the constructs Stress and Vitality although they do not make it clear how the measures were used in the construction of the measurement model. We cannot establish if they did indeed use a measure of change in the analysis.

3.9.2.4 Ethical considerations

All of the studies refer to seeking the relevant ethical approvals from the institutions, but no further information is provided upon which to draw any conclusions.

3.10 Evidence Statements

In this section a summary of the evidence provided by the studies has been presented in Table 11. The quality rating assigned was decided upon by the author using judgement rather than an algorithm or checklist by integrating the findings of the quality assessment detailed above and addressing the following: how any intervention works, why and for whom; an exploration of any relationships within and between studies; an assessment of the robustness of the synthesis which integrates the quality assessment rather than treat it as a standalone element of the review.

Given the acknowledged lack of studies in this area, it was not possible to state that there is strong evidence for most of the findings detailed in Table 11 but it is clear that the concept of moral elevation that emerged in psychological research 20 years ago has been given some limited attention in a work setting.

A theoretical theme that emerges from the studies is the assertion that moral elevation is a mediator between stimuli that evoke it and several organisationally important outcomes such as Recovery, Vitality, Organisational Commitment and Ethical Voice. It needs to be noted, however that the promising evidence is of a relationship *not* of causality.

Table 11: Summary of SLR evidence

Evidence Statement:	Quality Rating:	Reasoning:
Question 1: How has moral elevation been measured in the work setting?		
There is an agreed, commonly used scale examining moral elevation in the workplace.	Initial Evidence	Vianello et al. (2010), Janicke et al. (2018), Janicke-Bowles et al. (2019), Chen & Treviño (2022) use different measures in each of their studies. Deng et al. (2022) and Huang et al. (2022) use an adaptation of the scale used by Vianello et al. (2010). While the reliability and validity of each scale is acceptable and the antecedents of the scales are common amongst all the studies, an inspection of the scale at the component and item level leads to the conclusion that the moral elevation is still somewhat weakly defined within research in the work setting.
NOTE: in the following statements the term moral elevation has been used while accepting the caveat detailed above that there is no single accepted measure of the construct.		
Question 2: How has moral elevation been applied to work settings		
Relationships have been identified between moral elevation and organisationally valuable variables	Strong	Vianello et al. (2010), Janicke et al. (2018), Janicke-Bowles et al. (2019), Chen & Treviño (2022), Deng et al. (2022), and Huang et al. (2022) investigated and identified significant relationships between moral elevation and a range of measures of value to individuals at work and the organisations with which they work.
Specific Statements and applications:		
Moral elevation may be elicited in the workplace by presenting short videos of meaningful content	Promising Evidence	Janicke et al. (2018) and Janicke-Bowles (2018) demonstrated how participants can experience elevation following the viewing of short videos of meaningful content such as an individual caring for another person. Experimental design concerns do not impact on this finding.
Moral elevation may be elicited in the workplace by presenting written examples of meaningful content	Promising Evidence	Vianello et al. (2010), Chen (2022) demonstrated how written examples of ethical behaviour may elicit moral elevation.
Moral elevation may be elicited by the perceived behaviour of leaders and colleagues	Promising Evidence	Vianello et al. (2010), Chen & Treviño (2022), Deng et al. (2022) Huang et al., (2022) identified this relationship across seven studies. Design limitations identified.
The eliciting of an elevating experience in employees has a relationship with prosocial intentions and behaviour in the workplace	Promising Evidence	Vianello et al. (2010), Deng et al. (2022), Huang et al. (2022) conducted studies demonstrating a relationship between leaders in the studies and prosocial behaviours. Chen & Treviño (2022) demonstrated this relationship with colleagues. Vianello et al. (2010), Chen & Treviño (2022) and Deng et al. (2022) presented seven different studies each with different populations and experimental designs which demonstrated a relationship between employees' perception of the behaviour of a leader or colleague, moral elevation and various measures of prosocial intentions and behaviour in the workplace. Some design issues identified. There is therefore promising but not indisputable evidence of causality.
The eliciting of an elevating experience in employees has a relationship with specific measures of wellbeing	Promising Evidence	Janicke et al. (2018), Janicke-Bowles et al. (2018), Huang et al. (2022) identified this relationship with a range of wellbeing outcomes such as recovery and vitality. Some design limitations were identified

With only ten studies across six papers identified for this SLR, links across studies offer little in the way of a deeper understanding of the construct but all the studies support the assertion that moral elevation may be evoked.

3.11 Discussion

This systematic literature review set out to examine how the construct moral elevation has been measured in research in work settings and how the concept has been applied to these settings. These questions were framed as a precursor to identifying gaps in the research that would benefit from further investigation. In this discussion I will seek to draw conclusions and offer suggestions of where further work may be of value.

A cautious approach needs to be adopted when drawing conclusions from this review because while a rigorous systematic approach was adopted, only six papers consisting of ten studies were found that examined moral elevation in a workplace setting. These studies give some insights, but the lack of research is perhaps more instructive in highlighting where research should now head and the fact that there are so few studies of moral elevation in the workplace underlines that it is a little understood, studied, and applied concept among occupational psychology practitioners.

3.11.1 How has moral elevation been measured in the workplace

A key aim of the review was to establish how moral elevation is being measured in research in the workplace. The review highlighted that there is currently no agreed measure of moral elevation in the workplace and its operationalisation in different research designs led to several versions of scales being used in studies. We cannot have confidence that the studies are measuring the same construct and the studies by Janicke et al. (2018) and Janicke-Bowles et al. (2019) were clear that what they sought to measure included a separate construct which they indicated correlated highly with moral elevation: gratitude. The review highlighted that although the work of Haidt (2000) is the antecedent of all subsequent research, the little research there is has taken different paths in defining and measuring the construct. This is problematic if moral elevation is to be of value to practitioners as it will only be once there is

conceptual clarity about the construct and an agreed measure of moral elevation has been adopted that it will be possible to reach conclusions about individual studies and comparison across studies. It will be at this point that practitioners will be better placed to understand whether it has any value and how it might be used.

It is noteworthy that since the early research of Algoe and Haidt (2009) in which the construct of moral elevation was defined through discussions with study participants, there has been little qualitative research in the area and no qualitative research was found in this review pertaining to moral elevation and the workplace. This is a potential gap in the research which may further strengthen the definition and add to our understanding of the experience of moral elevation in a work setting.

3.11.2 How has the concept of moral elevation been applied to work settings.

Across the ten studies of the SLR, researchers examined moral elevation and sought to establish how its elicitation might lead to organisationally valuable outcomes, most notably wellbeing, and prosocial intentions and behaviours.

3.11.2.1 Wellbeing

The CIPD (2023) identified the significant impact of mental health on employees and organisations, and while research in the wider field of moral elevation points towards a role for moral elevation in promoting wellbeing (Neubaum et al., 2020), it is noteworthy that the review found only three studies examining this relationship in a work context. It is also clear that we need to be cautious in generalising any association between moral elevation and wellbeing from the studies reviewed. Firstly, as detailed above, the construct of moral elevation is not defined in any consistent way. Indeed Janicke et al. (2018) and Janicke-Bowles et al. (2019) explicitly included additional concepts in the measures they used in their studies. Secondly, the measures of wellbeing used in each study focus on specific facets of wellbeing as defined by Seligman (2011). Janicke et al. (2018) recognise this limitation in their study when they acknowledge that they assessed only two indicators of wellbeing, which, by their own admission, do not address the full range of wellbeing indicators that could potentially be relevant in a work context. The wellbeing measure of Huang et al. (2022) was

greater life meaning and the relationship found in the Janicke-Bowles et al. (2019) study was with meaning at work. While meaning at work has been associated with a range of important wellbeing measures at work (Steger et al. 2012) and forms one of the tenets of the PERMA framework of Seligman (2011), when employees and practitioners are considering wellbeing issues, do they have in mind such specific constructs or are they thinking of something much broader?

In summary there is some evidence of the relationship between moral elevation and some specific measures of wellbeing, but the measures of moral elevation are inconsistent leading to difficulties drawing conclusions across the studies and the specific wellbeing measures used make generalising the findings problematic.

3.11.2.2 Prosocial intentions and behaviour

The introduction highlighted the challenges that remote and hybrid working has on the prosocial behaviour of knowledge sharing (CIPD, 2020). None of the studies in the review looked specifically at this issue but several of the findings examined issues that one might consider to be related to knowledge sharing – altruism (Vianello et al., 2010), peer monitoring (Deng et al., 2022), and ethical voice (Chen & Treviño, 2022). Indeed, while one might posit that colleagues that demonstrate these behaviours may be likely to also demonstrate knowledge sharing, the review does not provide us with evidence of this and a study that looks specifically at knowledge sharing would be valuable.

There was, however, a particular interest with the role of the leader in eliciting moral elevation that leads to various prosocial behaviours. While the studies of Vianello et al. (2010), Deng et al. (2022) and Huang et al. (2022) variously invoked the influence of the leader by presenting stories of ethical leaders or asking for recollections of leader behaviour, none of these studies attempted to provide evidence that is specifically dependent on the leader-follower relationship. Indeed, the study by Chen and Treviño (2022) specifically did not involve a leader-follower relationship. Where the concept of a leader was included in the studies in the review, an equally plausible explanation for any moral elevation is simply that it is the behaviour that is important not that it is demonstrated by the leader. This is important as it means that a morally elevated response is not restricted to a reaction to the

actions of a leader. This does not diminish the importance and influence of leader behaviour, but it does suggest that moral elevation may also be associated with the actions of colleagues (Chen & Treviño, 2022) or indeed fictitious moral exemplars (Vianello et al., 2010).

Given the ambiguity about the role of the leader in eliciting moral elevation, further research could take two possible paths in examining this. One path would be to examine the extent to which the role of the leader is pivotal in eliciting moral elevation. A second path would be to examine if and how eliciting elevation evokes the prosocial behaviour of knowledge sharing irrespective of the status of or relationship with the stimuli. Janicke et al. (2018) and Janicke-Bowles et al. (2019) demonstrated that elevation may be elicited by showing short meaningful films, thus providing evidence that the stimuli neither needs to be real nor connected with the person's workplace for it to be effective.

If it is possible to demonstrate how elevation may be elicited using context-independent stimuli and how this leads to prosocial behaviour such as knowledge sharing, practitioners would potentially have access to tools which are not dependent on developing specific behaviours among leaders or colleagues to act as exemplars.

3.11.3 Design issues

While the SLR was able to shed limited light on how the concept of moral elevation may be employed to benefit individuals and organisations, one of the most pertinent findings of this review is that the design of several of the studies limits our ability to draw firm conclusions.

The issue of the inconsistent way that moral elevation has been measured has been detailed above but there are several other areas that warrant discussion including population samples, outcome measures, analytical techniques and the stimuli used to elicit moral elevation.

Looking at population samples, we find that only one of the studies (Deng et al., 2022) gathered data from participants outside of a Western Educated Industrialised Rich and Democratic (WEIRD) country. The body of evidence therefore fails to address the concerns that typical psychological research does not represent the global human experience.

Turning to outcome measures, we find that all the studies provide evidence for a hypothesis that organisationally relevant outcomes are mediated by moral elevation. However, only one of the studies (Chen & Treviño, 2022) gathered direct behavioural data and this was in an experimental condition rather than measuring behaviour in a real work context. All the others used self-report measures and eight of the 15 reported measures of prosociality measured intentions rather than actual behaviour. If we are to provide compelling evidence of any value in a work context of moral elevation it is incumbent on researchers to look beyond behavioural intentions and examine the extent to which moral elevation impacts on actual behaviours in relevant work contexts.

An association of moral elevation with an organisationally relevant outcome provides little practical value if we are not able to identify a causal relationship yet only the study by Janicke-Bowles et al. (2019) included any pre-post measure of change from the intervention. Reaching conclusions about causality are therefore problematic. Several of the studies somewhat obfuscate this limitation of their research by employing SEM as their analysis tools but we must remind ourselves that SEM does not prove causality and that we must still steadfastly pursue appropriately designed studies (Bollen and Pearl, 2013).

The issues with the use of SEM also extend to the inclusion of CFA to create a measurement model and the subsequent inclusion of the individual items in the latent variables of the path analysis (Collier, 2020). None of the studies reported observing both of these requirements. Future studies would clearly benefit from attending to rigour in experimental design and best practice in the analysis.

The last issue I will address is the stimuli used to elicit moral elevation. While the studies offered promising evidence that individuals may become morally elevated in a work context, they employed a variety of approaches. The most frequently employed technique was to ask participants to recall the characteristics of events or individuals (Chen & Treviño, 2022; Deng et al., 2022; Huang et al., 2022; Vianello et al., 2010) and establish an association with moral elevation. The challenge of this approach is that while associations may be identified, establishing causal links through manipulation is difficult. It also creates challenges if practitioners were to subsequently seek to create interventions that utilise moral elevation

as we are not provided with sufficient information to replicate the stimuli and there is a significant risk that recollections create conceptual ambiguity: we cannot be sure what participants are recalling.

The other technique employed to elicit moral elevation was to present stimuli as written stories or videos to elicit moral elevation (Vianello et al., 2010; Janicke et al., 2018; Janicke-Bowles et al., 2018). The advantage of this technique is that they can be manipulated to establish causal links with conceptual clarity, are replicable, and lend themselves to the creation of practitioner interventions. Pursuing this approach also enables researchers to focus in on what are the specific characteristics of morally elevating stimuli and if it is concluded that morally elevating content is beneficial to people at work, it would be valuable to identify the characteristics of stimuli that elicit it.

None of the studies reviewed attempted to define the specific characteristics of morally elevating stimuli. Janicke et al. (2018) and Janicke-Bowles et al. (2019) used controls or comparisons with labels for the stimuli such as ‘humorous’, and Chen and Treviño (2022) examined the differential impact on moral elevation of promotive and prohibitive messaging, but significant research is still required if we were to attempt to develop a blueprint of morally elevating stimuli or to at least define the stimuli in the studies more coherently.

3.11.4 Strengths and limitations

It must be acknowledged that as with any SLR, a degree of subjectivity and judgment was involved in its creation. While attempts were made to mitigate against this by adopting a systematic process and by working with two reviewers, arguably the most valuable element of the review – the discussion and conclusions drawn about the studies – is inherently subjective.

To our knowledge this is the only SLR that has conducted a review of the role of moral elevation in the workplace. It therefore offers a valuable summary and useful insights for practitioners looking to include moral elevation in interventions addressing wellbeing and prosocial behaviour development for people in organisations. These insights, however, are

relatively limited as the SLR demonstrated that there has been little research in this area. There is an argument that this SLR perhaps came too early in the development of research and understanding of moral elevation. It is of note that half of the studies in the review were published in the 18 months prior to this review being written. The other half span the 20 years before that. We may, perhaps, be witnessing a renewed interest in this topic and perhaps the greatest value of this SLR will be in highlighting areas of research that need attention.

3.12 Conclusion

This study has further added to the literature addressing moral elevation generally and specifically the role of moral elevation in the workplace. While the role of moral elevation has been explored in various contexts, research into its role in a work setting appears to be in its infancy, even with it being over 20 years since the construct was first described. The review found that there is some initial and promising evidence that moral elevation may be elicited in a work context and there is an association with organisationally important wellbeing and prosocial behaviour measures.

The current state of understanding is hampered, however, by conceptual and methodological issues and further focussed research in the area would benefit from addressing these as it seeks to identify causal links between moral elevation, wellbeing, and prosocial behaviour.

Chapter 4: Empirical Study

4.1 Abstract

The proposition that observing exceptional acts of kindness elicits one of the other praising emotions, moral elevation, which leads to influences an individual's wellbeing, prosocial intentions and prosocial behaviour has attracted attention from researchers and there is a growing body of research that has examined which stimuli lead to which outcomes. Relatively little attention, however, has been given to its role in the workplace and where researchers have looked at this area, they have not looked at cumulative exposure to morally elevating stimuli. This study examined whether viewing videos of acts of kindness over a sustained period influences wellbeing, prosocial intentions and the prosocial behaviour of knowledge sharing at work. In an experiment (N 227), subjects were repeatedly exposed to either (a) acts of exceptional kindness, or (b) neutral control video stimuli over a period of ten days. Results showed that prolonged exposure to videos of acts of kindness does not have a direct effect on participants' prosocial intentions, prosocial behaviour or general wellbeing. However, videos of acts of human kindness can indirectly increase prosocial intentions - mediated through a feeling of moral elevation. Findings are discussed in relation to implications for practice and research.

4.2 Introduction

Chapter 3, the SLR, examined how moral elevation has been measured and applied in workplace studies. The review demonstrated how moral elevation has been applied to the organisationally relevant areas of wellbeing (Janicke et al., 2018; Janicke-Bowles et al., 2019; Huang et al., 2022) and prosocial intentions and behaviour (Vianello et al., 2010; Chen & Treviño, 2022; Deng et al., 2022). The SLR also highlighted significant conceptual and experimental design issues associated with study of this area: ambiguity of measures used; the propensity of WEIRD studies; the challenge of establishing causality without employing a pre-post measurement design; and not following best practice in employing SEM.

This section details how these findings have informed the focus and design of the empirical study.

4.2.1 Films as morally elevating stimuli

Chapter 3 indicates that occupational psychology researchers have examined moral elevation's relationship with wellbeing and how moral elevation is associated with prosocial intentions and behaviours.

The SLR concluded that meaningful video content unrelated to work may be associated with positive wellbeing mediated by being morally elevated (Janicke et al., 2018; Janicke-Bowles et al.) and that moral elevation induced by leader behaviour may in turn lead to prosocial intentions and behaviours (Vianello et al., 2010; Chen & Treviño, 2022; Deng et al., 2022).

A gap in the research to date is that it appears that no researchers have looked at how meaningful video content unrelated to work, mediated by being morally elevated, may be associated with prosocial intentions and prosocial behaviour at work. Examining how video content unrelated to work may elicit moral elevation, prosocial intentions and prosocial behaviour at work is an important lens through which to look at the mechanism of the moral elevation construct for two reasons. Firstly, it elucidates whether a leader acting as a moral exemplar is a key component in the promotion of prosocial behaviour through moral elevation. If the leader behaviour is not a key component, it means that it may be possible to promote prosocial behaviour through replicable, sharable content – such as video - rather than through leader selection or development. Using such stimuli also addresses the concerns raised in the SLR regarding using a design that is replicable and controllable

4.2.2 Promoting the prosocial behaviour of knowledge sharing

The SLR indicated that previous studies have focussed on moral elevation's relationship with the prosocial intentions rather than behaviours. The intentions of altruism, courtesy, compliance, (Vianello et al., 2010), peer monitoring (Deng et al., 2022), supporting ethical voice (Chen & Treviño, 2022) and empathic compassions (Huang et al., 2022) were detailed.

Moral elevation's link with actual prosocial behaviour was limited to its relationship with altruism, courtesy, compliance (Vianello et al., 2010) and ethical voice (Chen & Treviño, 2022).

The paucity of evidence of a link with prosocial behaviour is a gap in the research that merits exploration given that the study of behavioural change rather than simply intentions is of significantly great value to the field of occupational psychology.

Addressing the growing concern regarding the erosion of knowledge sharing in a homeworking environment (CIPD, 2020) as detailed in Chapter 1, this study chose the specific prosocial behaviour of knowledge sharing.

Seen as critical for organisational success, knowledge sharing at work refers to the process by which employees exchange skills, insights, and information to enhance their collective understanding and improve organizational outcomes. Effective knowledge sharing promotes collaboration, innovation, and problem-solving within organisations (Ipe, 2003).

The Covid-19 pandemic has transformed the landscape of knowledge sharing. Organizations are increasingly using digital learning tools and platforms within a hybrid work setting while seeking to enhance knowledge sharing (CIPD, 2023).

Leadership plays a crucial role in promoting knowledge sharing. Studies indicate that leaders who foster a supportive environment encourage employees to share their insights and collaborate more effectively. This supportive culture is linked to higher employee engagement and innovation outcomes (Dayanti & Yulianti, 2023).

The quality of knowledge being shared has also been found to significantly impact organisational performance and adaptability. High-quality knowledge sharing contributes to better decision-making and enhances the firm's competitive advantage (Haas & Hansen, 2007; Dayanti & Yulianti, 2023).

Developing a culture that values continuous learning and knowledge exchange (Chua et al., 2023) is vital if knowledge sharing is to be successful. The CIPD (2023) emphasises that creating systems that support both formal and informal knowledge sharing practices is critical

in today's work environment. This is being the case, any research that encourages or facilitates knowledge sharing is organisationally important.

This research proposes that the organisationally valuable behaviour of knowledge sharing is an example of prosocial behaviour in the same way that volunteering for extra tasks (Schnall and Roper, 2012), verbal support (Chen & Treviño, 2022) and peer monitoring (Deng et al., 2022) are specific examples of such behaviour. Details of the tool chosen to measure this behavioural change are presented in section 4.3.3, Measures.

4.2.3 Measuring wellbeing change

While the SLR indicates that previous research has looked at the relationship between moral elevation and wellbeing in work (Janicke et al., 2018; Janicke-Bowles et al., 2019; Huang et al., 2022), an issue raised in the SLR was that although they purported to be measures of wellbeing and were able to show that that they were reliable tools, the domains they were covering were often very narrow and specific such as Vitality (Janicke et al., 2018) and Have Focus (Janicke-Bowles et al., 2019). While these studies offered insights into the links between moral elevation and these specific constructs, this empirical study seeks to shed light on the relationship with a broader, longer-term concept of wellbeing. Details of the tool chosen to achieve this are presented in section 4.3.3, Measures.

4.2.4 Addressing additional issues in the study design

This study also seeks to address several additional methodological and conceptual issues in the study of moral elevation in the workplace that were identified in the SLR: the propensity of WEIRD studies; the challenge of establishing causality without employing a pre-post measurement design; and not following best practice in employing SEM. How these issues were specifically tackled is addressed in subsequent sections in this chapter.

In addition to offering a unique contribution to research in this area, by addressing these highlighted methodological and conceptual issues and building upon previous studies this research aims to draw together the strengths of previous studies so that it offers findings that are robust, replicable and conceptually coherent. We therefore expect the following:

Hypothesis 1a: Meaningful videos portraying acts of human kindness will elicit a greater sense of moral elevation than neutral nature videos.

Hypothesis 1b: Meaningful videos portraying acts of human kindness will increase a viewer's prosocial intentions to a greater extent than nature videos.

Hypothesis 1c: Meaningful videos portraying acts of human kindness will increase a viewer's prosocial work behaviour of knowledge sharing to a greater extent than nature videos.

Hypothesis 1d: meaningful videos portraying acts of human kindness will increase a viewer's wellbeing to a greater extent than nature videos.

The theory of planned behaviour (TPB) proposes an individual's intention to behave in a prosocial way should be preceded by a concomitant increase in prosocial intentions (Ajzen, 1985; Webb and Sheeran; 2006). This being the case, we should find the following.

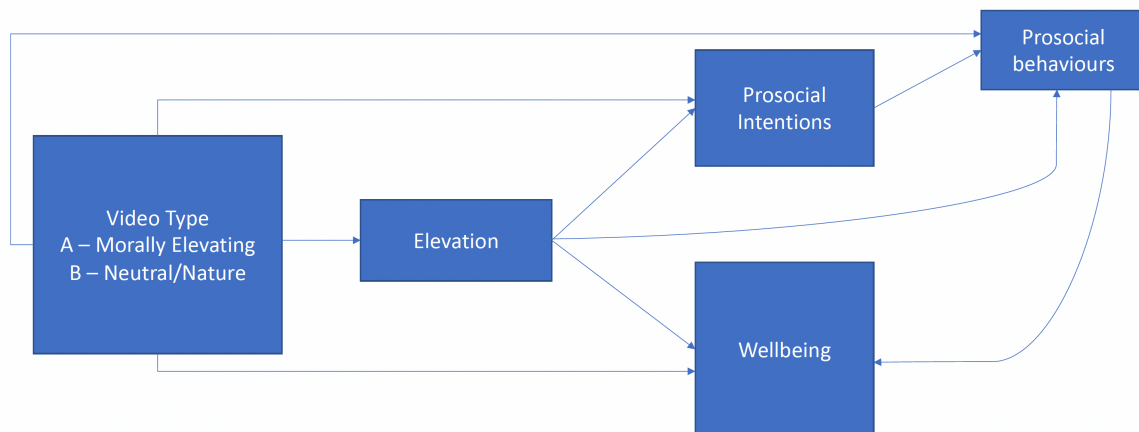
Hypothesis 2a: The effect of exposure to meaningful videos portraying acts of human kindness on viewer's prosocial work behaviour of knowledge sharing is mediated by prosocial intentions which is in turn mediated by the experienced feeling of moral elevation.

While the research indicates that these effects are associated with the sustained experience of being morally elevated, it has also been shown that helping other people positively affects the helper's wellbeing. This increase in wellbeing results from a greater perceived sense of autonomy and competence by helping others (Martela & Ryan, 2016a, 2016b). We would therefore also expect the following.

Hypothesis 2b: The effect of exposure to meaningful videos portraying acts of human kindness on viewer's wellbeing is mediated by the experienced feeling of moral elevation.

Hypothesis 2c: The effect of exposure to meaningful videos portraying acts of human kindness on viewer's wellbeing is mediated by the prosocial behaviour of knowledge sharing. Figure 3 illustrates the hypothesised pathways.

Figure 3: *The hypothesised pathways*



4.3 Method

4.3.1 Sample

Participants needed to be 18+ and currently engaged in paid or unpaid activity that they considered to be work. Individuals who worked exclusively on their own (such as a sole trader craftsman) were excluded so that participants had an opportunity in their work to demonstrate prosocial behaviour towards a colleague: if they were not able to identify someone they considered a colleague, this would not be possible. Participants who were participating in a formal psychological intervention such as counselling or therapy were also excluded as required by the ethics committee of Birkbeck College to avoid any risk of the video content causing harm or impacting on current treatment. Excluding this group also eliminated one possible confounding element of the study in that we did not need to consider whether any observed change was confounded by a separate psychological intervention.

808 participants responded to the initial invitation. There was an attrition rate of 68% (559 participants did not complete the final questionnaire 11 days later). 22 of the remaining participants who did complete the questionnaires reported that they watched less than 7 out of ten of the stimuli videos so were excluded from the analysis. 227 participants remained to

be included in the analysis. As participants were not able to progress through the questionnaires without responding to each item, there was no missing dependent variable data for those that completed the last questionnaire. The response capturing software did not allow data entry errors to create outliers. Consequently, although calculation of Mahalanobis distances suggested six cases could be considered for deletion as outliers, these were retained in the analysis.

The final sample comprised a total of 227 subjects (63 male, 160 female, 2 described themselves in another way and 2 preferred not to answer) ranging in age from 23 to 75 years ($n = 225$, $M = 47.32$, $SD = 11.59$). The mean number of hours worked each week was 37.01 ($n = 226$, $SD = 11.41$). 170 of the 221 that provided information were residing in the UK. The remaining 51 were residing in 21 different countries.

The appropriateness of the sample size was assessed using the online tool developed by Soper (2024) that operationalized the sample size recommendations of Westland (2010). By inputting the conventional anticipated medium effect size of 0.3, the desired statistical power level of 0.8, the number of latent variables of four and the 25 indicators incorporated into the model with a probability level of 0.05, the tool calculated that the minimum sample size to detect an effect is 137 while a sample size for the model structure is suggested as being at least 241. The sample size in the analysis was 227 exceeds the “critical sample size” recommendations for the N recommended by Soper (2024) for the detection of an effect and comes very close to the suggestion for the model structure.

4.3.2 Experimental Design

An experimental research design was developed to examine potential differences in continuous dependent variables between an experimental and control group, and over time (pre-test and post-test).

Participants were asked to watch ten films over ten days in one of two conditions. In condition A participants were asked to watch films portraying exceptional act of kindness while

participants assigned to condition B watched films of the natural world such as views of a mountain and animal behaviour.

Self-report measures of prosocial intentions, the prosocial behaviour of knowledge sharing at work, and wellbeing were obtained before and after exposure to the films (pre-test and post-test). Moral elevation was measured the day after participants had watched the films.

Participants were randomly assigned to either an experimental condition or a control condition by the Qualtrics survey tool as they signed up for the study. They were asked to watch ten films over ten days, one film per day. On the 11th day participants were asked to complete a questionnaire. The independent variable was the content of the films to contrast the effects of elevating material with other material.

Film stimuli were drawn from pre-existing open access films on the internet. Films were included in the experimental group which presented one or more persons conferring a benefit on one or more other persons, at some immediate cost to the actor(s), e.g., cooperation. The examples were exceptional in the sense that the witnessed prosocial behaviour or kindness is rare, extreme, spectacular, or in some other way violates the expectations of the witness. Films were included in the control group only if there were no humans present.

A check was put in place to ensure that the video stimuli elicited the emotional response that was expected and that no inappropriate content was shared with participants. Two psychologists reviewed the shortlisted films to evaluate if they met the selection criteria, to evaluate the emotional response to the films to identify if any might cause distress. It was decided that any film would be removed if either of the psychologists believed they might cause distress or if the films did not elicit the expected emotional response. No films were discarded by the panel.

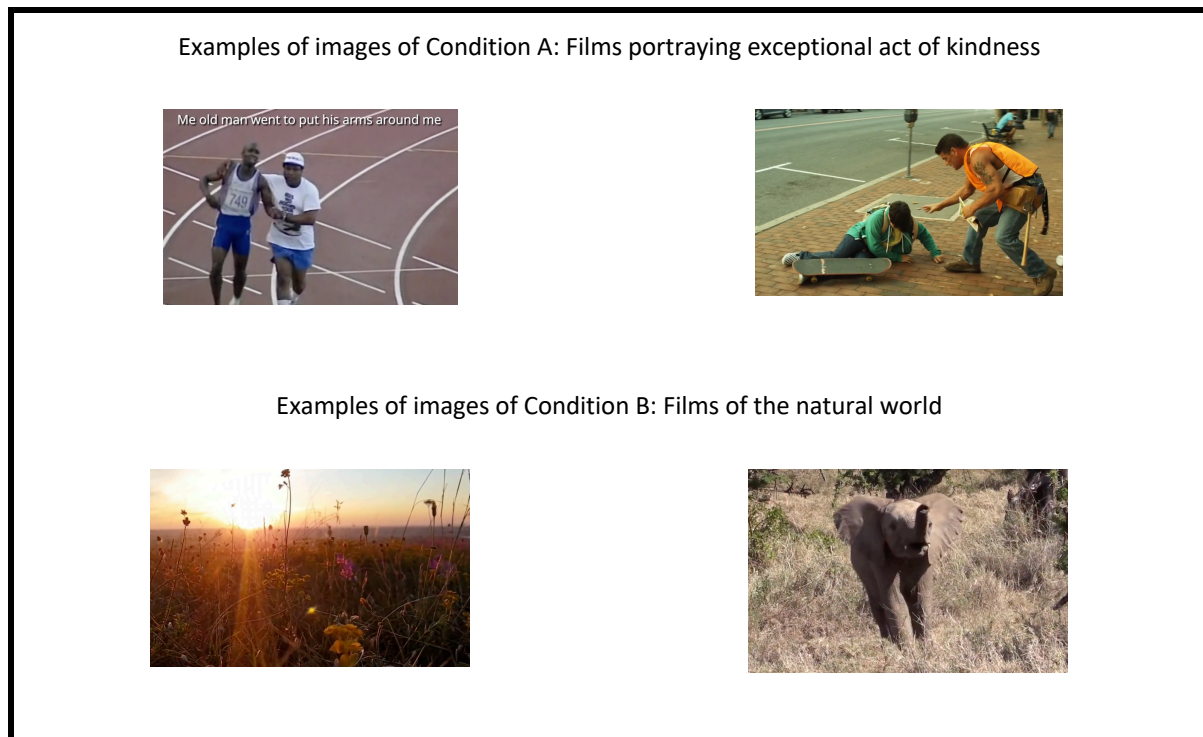
The two film conditions were therefore:

- Condition A: Films portraying exceptional act of kindness
- Condition B: Films of the natural world such as views of a mountain and animal behaviour.

Films ranged from 90 seconds to four minutes 53 seconds. Three of the ten films in Condition A were from Western Educated Industrialised Rich and Democratic (WEIRD) countries. It was not possible to identify if the films in Condition B, were from WEIRD countries. The content of the videos in Condition B may therefore be considered as being WEIRD-neutral stimuli.

Videos were uploaded to an online film content sharing platform, Vimeo, from where videos could be watched via a personalised link that was sent out to participants each day at the same time at which they signed up to the research. Illustrative images from the films are presented in Figure 4. Details of the films presented along with links to watch them may be found in Appendix 2.

Figure 4: *Illustrative images from the films presented to participants*



4.3.3 Measures

The measures were chosen to address issues relating to the lack conceptual clarity of the variables examined in the SLR. The dependent measures were four self-report questionnaires. See Appendix 3 for details of the questionnaires.

4.3.3.1 Wellbeing

The WHO-5 wellbeing index was completed immediately before participants were sent a link to watch the first film. Participants were sent a link to complete the same questionnaire 24 hours after the link to the last film had been sent out. The questionnaire consists of five items. Participants were asked to consider their feelings over the preceding two weeks when responding.

The wellbeing items were:

1. I have felt cheerful and in good spirits
2. I have felt calm and relaxed
3. I have felt active and vigorous
4. I woke up feeling fresh and rested
5. My daily life has been filled with things that interest me

The items were measured using a five-point scale with respondents choosing from 1 = all the time to 6 = at no time. Accordingly, higher scores indicated a lower sense of wellbeing (see Table 12 for descriptive values and reliabilities).

4.3.3.2 Prosocial intentions

Self-reported prosocial intentions were measured using the General Prosocial Intentions Scale (Baumsteiger & Siegel, 2018). (Cronbach Alpha = .83).

Participants completed the questionnaire immediately before they were sent a link to watch the first film and 24 hours after the link to the last had been sent out. Respondents were asked to imagine that they encountered the opportunities to help others detailed in the items.

The opportunities were:

1. Comfort someone I know after they experience a hardship
2. Help a stranger find something they lost, like their key or a pet
3. Help care for a sick friend or relative

4. Assist a stranger with a small task (e.g., help carry groceries, watch their things while they use the restroom)

The items were measured using a seven-point scale with respondents indicating how willing they would be to perform each behavior from 1 (Definitely would not do this) to 7 (Definitely would do this). See Table 12 for descriptive values and reliabilities.

4.3.3.3 Prosocial behaviours

The tool chosen to measure the prosocial behaviour dimension in the empirical study was The Knowledge Based Work Proactive Helping Scale, (Mittal et al., 2018) (Cronbach Alphas of the 5 sub scales = .73 - .86). In addition to covering the topic identified by the CIPD (CIPD, 2023) as warranting attention, there was also a pragmatic reason for its inclusion: the choice of this tool was influenced by the fact that this research took place during the Covid-19 pandemic when many people were working remotely from their team members and so this measure of prosocial work behaviours was chosen as its items addressed such behaviour in a knowledge sharing environment that does not necessitate respondents being physically present with their colleagues. Participants completed this questionnaire before they were sent a link to the first video and 24 hours after the link to the last had been sent out.

The questionnaire consists of 21 Items rated using a Likert scale from 1 = 'strongly disagree', to 5= 'strongly agree'. Items covered issues such as "I help team members further develop their skills" and "I help the team learn from past events or experiences". The complete questionnaire may be found in Appendix 3. (see Table 12 for descriptive values and reliabilities).

4.3.3.4 Moral elevation

The measure chosen to be included in the empirical study was the ten item Elevation Experience scale developed by Krämer, Eimler, Neubaum, Winter, Rösner, and Oliver (2017) (Cronbach's Alpha = .97; M = 4.12, SD = 1.75). Kramer et al. (2017) conducted a principal component analysis of a 36-item questionnaire to ensure that elevation experience is distinct from accompanying affective and bodily responses. The resulting six factor structure differentiates elevation experience from negative affect, hedonic response, eudaimonic

affect, bodily reaction- warmth, bodily reaction – tension. The tool offers conceptual clarity and was used in the study that provided a conceptual template for this empirical study (Neubaum et al., 2020). Participants were asked to complete this questionnaire 24 hours after they had been sent a link to watch the last film.

The questionnaire was adapted so that statements asked individuals to reflect on their feelings while watching the films over the previous ten days rather than at one particular moment or at the particular time they were completing the questionnaire. They used a 5-point Likert scale from 1 = never to 5 = very frequently. See Table 12 for descriptive values and reliabilities. The items are presented below:

While watching the research study films, I felt...

... inspired to see how much goodness human beings can have.

... illuminated by observing what human spirit can achieve for others.

... joy when understanding how good human nature can be.

... warmth by looking at how profound the connection between human beings can be.

... affected by recognizing what humans' solidarity can do.

... emotional to see human greatness.

... moved when getting an insight into human nature.

... moved to see the good sides of humankind.

... touched when looking at human nature.

... moved to see a better world.

4.3.4 Procedure

Participants were recruited for the study as a convenience sample by posting invitations to join the study in groups on social media sites, LinkedIn and Facebook. To deliver video stimuli over an extended period to an international sample, the online platform, Qualtrics was chosen in combination with the video sharing platform, Vimeo. This enabled content and

questionnaires to be sent to participants via emails and links over the course of the study at predetermined times that were customised to when the participant signed up to the study.

Interested participants were directed to the Qualtrics based platform where they were informed about the purpose, length and stages of the experiment and were asked to respond to questions seeking informed consent. Upon agreeing to participate and after completing eligibility questions, participants were asked to complete the following questionnaires:

- wellbeing
- prosocial intentions
- prosocial behaviours.

Upon completion of the questionnaires, participants were immediately sent an email link to watch a film from one of the two conditions:

- Condition A: Films portraying exceptional act of kindness.
- Condition B: Films of the natural world such as views of a mountain and animal behaviour.

For the next nine days, 24 hours after the last, participants were sent a link to another film in the same condition. Films were shown in the same sequence to all participants. 24 hours after the link to the tenth film was sent, participants were invited to complete a further set of questionnaires and provide demographic information.

The questionnaires presented at this point were:

- wellbeing
- prosocial intentions
- prosocial behaviours.

- moral elevation

4.4 Results

Following attrition there were 117 (51.5 %) in Condition A (films of kindness) and 110 (49.5 %) in Condition B (films of nature) who indicated they had watched at least 7 of the videos assigned to them and had completed the questionnaires.

A T-Test was computed to compare the number of videos watched by the 117 participants in the acts of kindness video condition (M = 9.74, SD = .70) with the 110 participants in the nature video condition (M = 9.65, SD = .72). The difference was not significant ($t(226) = .948, p = .344$).

Descriptive values and zero-order correlation coefficients (using Spearman's rho) among the measures used in the study are presented in Tables 12 and 13.

Table 12: *Descriptive values of measures*

Measures	N	M	SD	α
1. wellbeing (pre)	227	16.17	4.33	.846
2. prosocial intentions (pre)	227	23.58	3.05	.764
3. prosocial behaviours (pre)	227	66.35	13.51	.935
4. wellbeing (post)	227	15.02	4.19	.838
5. prosocial intentions (post)	227	23.93	3.91	.863
6. prosocial behaviours (post)	227	66.59	15.19	.949
7. moral elevation (post)	227	34.85	11.67	.976

Table 13: *Correlation coefficients of measures*

			Correlations						
			Wellbeing (pre)	Pro-social Intentions (pre)	Pro-social behaviours (pre)	Wellbeing (post)	Pro-social Intentions (post)	Pro-social Behaviours (post)	Moral Elevation (post)
Spearman's rho	Wellbeing (pre)	Correlation Coefficient	1.000	-.088	-.122	.661**	-.013	-.116	-.020
		Sig. (2-tailed)	.	.186	.067	<.001	.843	.080	.764
		N	227	227	227	227	227	227	227
Pro-social Intentions (pre)	Correlation Coefficient	-.088	1.000	.135*	-.088	.530**	.136*	.004	
	Sig. (2-tailed)	.186	.	.042	.185	<.001	.040	.955	
	N	227	227	227	227	227	227	227	
Pro-social behaviours (pre)	Correlation Coefficient	-.122	.135*	1.000	-.105	.111	.773**	.235**	
	Sig. (2-tailed)	.067	.042	.	.113	.095	<.001	<.001	
	N	227	227	227	227	227	227	227	
Wellbeing (post)	Correlation Coefficient	.661**	-.088	-.105	1.000	-.124	-.101	-.100	
	Sig. (2-tailed)	<.001	.185	.113	.	.063	.131	.132	
	N	227	227	227	227	227	227	227	
Pro-social Intentions (post)	Correlation Coefficient	-.013	.530**	.111	-.124	1.000	.128	.165*	
	Sig. (2-tailed)	.843	<.001	.095	.063	.	.054	.013	
	N	227	227	227	227	227	227	227	
Pro-social Behaviours (post)	Correlation Coefficient	-.116	.136*	.773**	-.101	.128	1.000	.227**	
	Sig. (2-tailed)	.080	.040	<.001	.131	.054	.	<.001	
	N	227	227	227	227	227	227	227	
Moral Elevation (post)	Correlation Coefficient	-.020	.004	.235**	-.100	.165*	.227**	1.000	
	Sig. (2-tailed)	.764	.955	<.001	.132	.013	<.001	.	
	N	227	227	227	227	227	227	227	

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

4.4.1 Hypothesis testing

To test Hypothesis 1a, which predicted that meaningful videos portraying acts of human kindness will elicit a greater sense of moral elevation than nature videos, a T-Test was computed. The 117 participants who watched the videos portraying acts of human kindness (M = 40.96, SD = 7.79) compared to the 100 participants who watched the nature videos (M = 28.34, SD = 11.62) reported significantly higher elevation scores, $t(226) = 9.66, p = <.001$. Given this finding, Hypothesis 1a is supported.

Hypotheses 1b predicted that meaningful videos portraying acts of human kindness will increase a viewer's prosocial intentions to a greater extent than nature videos. The presence of an interaction effect between experimental condition and time of measurement was tested by a factorial ANOVA with repeated measures. The analysis found no main effect of pre and post testing, $F(1, 225) = 1.641, p = .202$, partial $\eta^2 = .007$, and no significant interaction effect was found, $F(1, 225) = 1.60, p = .690$, partial $\eta^2 = .001$ (see Table 14 for descriptive values). Given this, Hypothesis 1b is not supported.

Table 14: *Descriptive statistics for prosocial intentions*

	Video Condition	Mean	Std. Deviation
prosocial intentions (pre)	Acts of kindness	23.60	2.67
	Nature	23.55	3.43
prosocial intentions (post)	Acts of kindness	23.85	4.32
	Nature	24.03	3.43

Hypothesis 1c predicted that meaningful videos portraying acts of human kindness will increase a viewer's prosocial work behaviour of knowledge sharing to a greater extent than nature videos. The presence of an interaction effect between experimental condition and time of measurement was tested by a factorial ANOVA with repeated measures. The analysis found no main effect of pre and post testing, $F(1, 225) = .104$, $p = .748$, partial $\eta^2 = .000$, a small but insignificant main effect of type of video watched, $F(1, 225) = 3.77$, $p = .053$, partial $\eta^2 = .016$, and no significant interaction effect was found, $F(1, 225) = 2.83$, $p = .132$, partial $\eta^2 = .010$ (see Table 15 for descriptive values). Given this, Hypothesis 1c is not supported.

Table 15: *Descriptive statistics for prosocial work behaviour of knowledge sharing*

	Video Condition	Mean	Std. Deviation
prosocial behaviours (pre)	Acts of kindness	67.55	12.80
	Nature	65.08	14.18
prosocial behaviours (post)	Acts of kindness	68.75	15.68
	Nature	64.30	14.37

Hypothesis 1d predicted that meaningful videos portraying acts of human kindness will increase a viewer's wellbeing to a greater extent than nature videos. The presence of an interaction effect between experimental condition and time of measurement was tested by a factorial ANOVA with repeated measures. The analysis found a significant main effect of pre and post testing, $F(1, 225) = 22.86$, $p < .001$, partial $\eta^2 = .092$, but no significant main effect of type of video watched, $F(1, 225) = .882$, $p = .349$, partial $\eta^2 = .004$, and no significant

interaction effect was found, $F(1, 225) = .75$, $p = .784$, partial $\eta^2 = .000$ (see Table 16 for descriptive values). During the course of the study, the wellbeing of participants decreased but there was no effect of the type of video watched. Given this, Hypothesis 1d is not supported.

Table 16: *Descriptive statistics for wellbeing*

	Video Condition	Mean	Std. Deviation
wellbeing (pre)	Acts of kindness	15.97	4.25
	Nature	16.38	4.48
wellbeing (post)	Acts of kindness	14.75	4.29
	Nature	15.30	4.08

To test Hypotheses 2a, 2b and 2c, which predicted indirect effects of video content through the experienced feeling of moral elevation on prosocial intentions, prosocial work behaviour and wellbeing, structural equation modelling was conducted using AMOS 26.

An issue that became apparent from the SLR was a tendency for researchers to use aggregate scale figures in their SEM modelling or not be clear which figures they used (Chen & Treviño, 2022; Deng et al., 2022; Janicke et al., 2018; Janicke-Bowles et al., 2018; Vianello et al., 2010) rather than adopt the best practice of using individual items in their analyses (Collier, 2020). Additionally, the reporting of some of the studies left it unclear how they had used the items in the scales. The empirical study therefore sought to employ best practice as detailed below so that any findings could be considered robust and generalisable.

To minimise error variance from differences between participant groups, and to enable analysis to be conducted using structural equation modelling, measures were calculated of the changes in wellbeing, prosocial intentions and prosocial behaviours by subtracting the pre-test scores from the post-test scores. It is these difference scores that are included in the examination of the hypotheses below. Moral elevation was only measured post-test, so no difference scores were calculated.

Prior to examination of the hypotheses, Confirmatory Factor Analysis (CFA) was computed using AMOS 26 to test the measurement model.

In identifying if a model demonstrates an acceptable fit, AMOS compares the model with a 'null' model in which the correlations among observed models are constrained to 0, suggesting that the latent variables are uncorrelated. AMOS was used to generate several fit indices. There is debate among researchers about how to use the indices. While Hu and Bentler (1999) recommend setting high bars to individual figures, Marsh et al. (2004) have argued against such rigour in favour of drawing conclusions from multiple indices. This is the approach that has been adopted in this research and several indices are reported in order to reach a judgement about the fit of the measurement model.

Model Chi-Square test is very sensitive to sample size and thus a relative chi-square test is also reported which is the chi-square value divided by the degrees of freedom. This index is less dependent on sample size. Kline (2011) states that a relative chi square test with a value of less than 3 is considered an acceptable fit.

Comparative Fit Index (CFI) varies from 0 to 1 with values close to 1 indicating a good fit. A value of greater than .90 is considered an acceptable fit. (Bentler and Bonett, 1980). This indicates that 90% of the covariation in the data can be reproduced by the model. CFI is not affected by sample size. Incremental Fit Index (IFI) should be .90 or greater (Bentler and Bonett, 1980). Normed Fit Index (NFI) should be .90 or greater. NFI may underestimate fit for small samples and does not reflect parsimony. This means that a larger NFI might be reported for models with a large number of parameters (Bentler and Bonett, 1980). The Tucker Lewis Index (TLI), also called the Non-Normed Fit Index, requires a fit of above .90 (Bentler and Bonett, 1980). Root Mean Square Error of Approximation (RMSEA) is a badness of fit test thus a good model fit is present if RMSEA is below .05. An adequate fit is .08 and below (MacCallum et al. 1996). Standardized Root Mean Square Residual (SRMR) is also a badness of fit test with a value of .05 and below representing a good fit. An adequate fit is .09 and below.

In developing a Measurement Model, AMOS suggested model alterations be considered, by adding additional covariances within a construct's indicators. Where Modification Indices were above 3.84, a threshold for making a significant difference by their inclusions, adding covariances between error terms were considered.

As part of confirmatory factor analysis, factor loadings were assessed for each item. A standardized factor loading that is greater than .702 explains over half of the variance in the indicator and is said to be providing value in explaining the unobserved construct. If an indicator is not explaining at least half of the variance, it is contributing little to our understanding of the unobservable construct and we should consider deleting it (Collier, 2020).

It was necessary to remove 15 of the 21 items from the prosocial behaviours change scale with low factor loading ($<.50$) to ensure a reasonable goodness of fit. Two items with loadings of .44 were however retained in order to ensure coverage of the construct.

Items 4 and 5 of the wellbeing change scale were identified as having factor loading less than .50 but were retained to ensure coverage of the factor and to retain fidelity with the scale as used in WHO research.

4.4.2 Normality of items

Skewness and kurtosis statistics were calculated for the items (Appendix 4). None of the items exceeded a skewness value of ± 2 , considered to be acceptable for sample sizes in excess of 200 (Collier, 2020). Only one item (prosocial intentions, item 1, kurtosis = 10.76) exceeded the recommended maximum kurtosis value of 10.00 (Collier, 2020). Given its proximity to the acceptable level, its acceptable skew measure and its importance in the validity of the scale, it was kept in the subsequent analysis.

All of the items of the moral elevation were retained. Items 1 and 2 of the moral elevation scale were, however, found to have significant covariance (.32) and so this relationship was included in the final measurement model.

Model fit measures were used to assess the model's overall goodness of fit (CMIN/df, GFI, AGFI, CFI, TLI, NFI, SRMR and RMSEA) (Table 17). Six of the eight values were within their respective common acceptance levels (Ullman, 2001; Hu and Bentler, 1998, Bentler, 1990). The four-factor model (wellbeing change, prosocial intentions change, prosocial behaviours change, moral elevation) yielded a reasonable fit for the data: CMIN/df = 1.46, GFI = 0.880, CFI = 0.969, AGFI = 0.854, TLI = 0.966, NFI = 0.901, SRMR = 0.0472, RMSEA = 0.045.

Table 17: Model fit indices

Name of Index		Recommended Value	Source	Value
P		insignificant	Bagozzi and Yi (1988)	.000
CMIN/df		<2 - 5	<3 Kline (2011) <2 (Ullman, 2001) to 5 (Schumacker & Lomax, 2004)	1.460
GFI	Goodness of Fit	> 0.90	Hair et al. (2010)	0.880
CFI	Comparative Fit Index	> 0.90	Bentler (1990)	0.969
AGFI	Adjusted Goodness of Fit	> 0.90	Bentler (1990)	0.854
TLI	Tucker Lewis Index	> 0.90	Bentler (1990)	0.966
NFI	Normed Fit Index	> 0.90	Bentler (1990)	0.901
Standardized RMR	Standardized Root Mean Square Residual	SRMR < 0.08	Hu and Bentler (1998)	0.047
RMSEA	Root Mean Square Error of Approximation	RMSEA < 0.08	Hu and Bentler (1998)	0.045

Construct Reliability was assessed for the measurement model using Cronbach's Alpha and Composite Reliability. Cronbach's Alpha for the constructs in the study, moral elevation, prosocial intentions change, and prosocial work behaviours change, were over the over the required limit of .70 (Nunnally and Bernstein, 1994) and the value for the wellbeing change construct was very close to the required measure (.69). Composite Reliabilities ranged from 0.70 to 0.97, above the 0.70 benchmark (Hair et al., 2010). Hence construct reliability was established for each construct in the study. (Table 18).

Table 18: Loadings, reliabilities and convergent validity

Items	Loadings	Cronbach's Alpha	Composite Reliability	AVE
wellbeing change		.69	.70	.33
Item 1	.694			
Item 2	.705			
Item 3	.601			
Item 4	.388			
Item 5	.410			
moral elevation		.97	.97	.52
Item 1	.882			
Item 2	.930			
Item 3	.911			
Item 4	.934			
Item 5	.881			
Item 6	.939			
Item 7	.940			
Item 8	.954			
Item 9	.939			
Item 10	.529			
prosocial intentions change		.85	.85	.59
Item 1	.750			
Item 2	.825			
Item 3	.773			
Item 4	.715			
prosocial behaviours change		.72	.72	.31
Item 2	.437			
Item 5	.615			
Item 6	.718			
Item 8	.562			
Item 10	.442			
Item 13	.498			

Convergent validity of scale items was estimated using average variance extracted (AVE) (Fornell and Larcker, 1981) (Table 19), a measure of the amount of variance that is captured by the constructs in relation to the amount of variance due to measurement error. The AVE values were above the threshold value of 0.50 (Fornell & Larcker, 1981) for the moral elevation construct and the prosocial intentions change construct but below this threshold

for the other two constructs, wellbeing change and prosocial behaviours change. However, according to Hair et al. (2010) since the Composite Reliability was over the required limit for all of the constructs, we can proceed in including the full range of constructs in the subsequent analysis.

Discriminant validity indicates the extent to which a given construct differs from other constructs (Anderson and Gerbing, 1988). Discriminant validity in the study was assessed using the Fornell and Larcker Criterion and the Heterotrait-Monotrait (HTMT) Ratio.

According to Fornell and Larcker criterion, discriminant validity is established when the square root of AVE for a construct is greater than its correlation with the other constructs in the study. These figures are presented in Table 19 which indicates that discriminant validity was established using the Fornell and Larcker criterion.

Table 19: *Fornell and Larcker Criterion analysis*

	wellbeing Change	Prosocial Work Behaviours Change	prosocial intentions Change	moral elevation Change
wellbeing Change	0.574	0.039	-0.151	-0.056
prosocial behaviours Change	0.039	0.557	-0.077	-0.015
prosocial intentions Change	-0.151	-0.077	0.768	0.109
moral elevation	-0.056	-0.015	0.109	0.721

Henseler et al. 2015 recommend that discriminant validity is assessed using the Heterotrait-Monotrait Ratio (HTMT) which measures the ratio of between-trait correlations to within-trait correlations of constructs. (Hensseler, Ringle and Sarstedt (2015)). Discriminant validity is increasingly measured in studies using the HTMT. When assessed using HTMT ratio, all ratios were within the acceptable range of being below .85 (Henseler et al. 2015) (Table 20). Hence discriminant validity can be said to have been established.

Table 20: HTMT ratios

	wellbeing Change	Prosocial Work Behaviours Change	prosocial intentions Change	moral elevation Change
wellbeing change				
prosocial behaviours change	0.04			
prosocial intentions change	-0.15	-0.08		
moral elevation	-0.06	-0.02	0.11	

4.4.3 Common methods bias

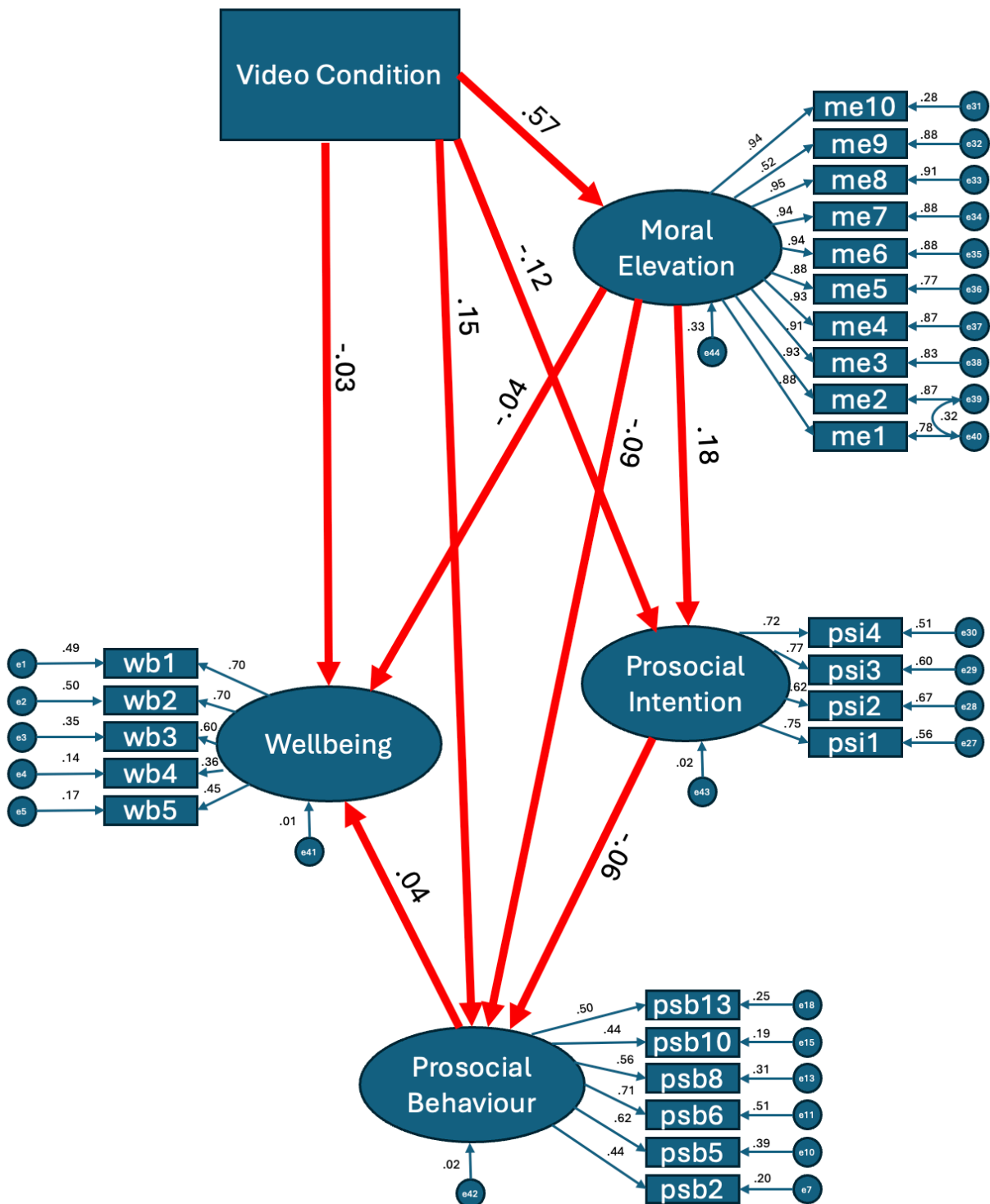
The inflation, or rarely deflation of the true correlation among the variables in the study because respondents are replying to survey questions about independent and dependent variables at the same time, was examined using Harman’s Single Factor test. Fixing one factor for the measurement model yielded a bad fit for the data (CMIN/df = 4.184 GFI = 0.673, CFI = 0.784, AGFI = 0.612, TLI = 0.763, NFI = 0.736, RMSEA = 0.119) indicating that we do not have evidence to cause substantial concern for common method bias.

Having established the appropriateness of the measurement model, analysis proceeded to create a full structural model. The independent categorical variable of type of video were recoded and included in the model.

- Condition A: Films portraying exceptional act of kindness – recoded as 1
- Condition B: Films of the natural world such as views of a mountain and animal behaviour = recoded as 0.

Model fit measures were used to assess the model’s overall goodness of fit (CMIN/df, GFI, AGFI, CFI, TLI, NFI, SRMR and RMSEA). Five of the eight values were within their respective common acceptance levels (Ullman, 2001; Hu and Bentler, 1998, Bentler, 1990). The fit indices for the model set out in Figure 5 therefore indicate a reasonable but not good fit: CMIN/df = 1.658, GFI = 0.862, CFI = 0.954, AGFI = 0.833, TLI = 0.949, NFI = 0.893, SRMR = 0.054, RMSEA = 0.052.

Figure 5: Full structural model



The model fit further supports hypothesis 1a, which predicted that meaningful videos portraying acts of human kindness will elicit a greater sense of moral elevation than nature videos. The squared correlation was 0.32 for moral elevation. This indicates that 32% of variance in the experienced sense of moral elevation is accounted for by the video experimental condition. The relationship was positive and significant ($b = .571$, $t = 6.870$, $p < .001$)

To test hypotheses 2a, 2b and 2c, AMOS was used to conduct mediation analysis involving a total of 5,000 bootstrap resamples with 95% bias-corrected confidence intervals. To test Hypothesis 2a, that the effect of exposure to meaningful videos portraying acts of human kindness on viewer's prosocial work behaviour of knowledge sharing is mediated by prosocial intentions which is in turn mediated by the experienced feeling of moral elevation, the serial mediating effect of exposure to different video conditions (VC) on viewers' prosocial behaviour through the mediators of the experienced feeling of moral elevation and prosocial intentions was assessed. The results revealed a non-significant indirect effect of (VC) on prosocial behaviour (PSB) through moral elevation (ME) and prosocial intentions (PSI) ($b = 0.005$, $t = -.714$, $p = .192$). The intermediary step along the path was also assessed independently. The results revealed a significant indirect effect of video condition on prosocial intentions (PSI) through moral elevation (ME) ($b = .177$, $t = 1.806$, $p = .022$). The direct effects of video condition (VC) on prosocial intentions (PSI) ($b = -.121$, $p = .170$) and prosocial behaviours (PSB) ($b = .146$, $p = .179$) were also found to be insignificant while the direct effect of moral elevation (ME) on prosocial intentions (PSI) was found to be significant ($b = .178$, $p = .040$). Hypothesis 2a is therefore found to be partially supported as the relationship between the video condition and prosocial intentions is fully mediated by moral elevation. A mediation analysis summary is presented in Table 21.

Table 21: Mediation analysis summary hypothesis 2a

Relationship	Direct Effect	Indirect Effect	Confidence Interval		P-Value	Conclusion
			Lower Bound	Upper Bound		
VC -> ME ->PSI ->PSB		-.005	-.023	.004	.192	No Mediation
	.146				.131	
VC->ME->PSI		.177	.023	.417	.022	Fully Mediated
	.121				.170	

To test Hypothesis 2b, that the effect of exposure to meaningful videos portraying acts of human kindness on viewer’s wellbeing is mediated by the experienced feeling of moral elevation, the mediating effect of exposure to different video conditions (VC) on viewer’s wellbeing (WB) through the mediator of the experienced feeling of moral elevation (ME) was assessed. The results revealed a non-significant indirect effect of video condition (VC) on wellbeing (WB) through moral elevation (ME) ($b = -.130$, $t = -1.192$, $p = .127$).

To test Hypothesis 2c, that the effect of exposure to meaningful videos portraying acts of human kindness on viewer’s wellbeing is mediated by the prosocial behaviour of knowledge sharing. Figure 3 illustrates the hypothesised pathways, the mediating effect of exposure to different video conditions (VC) on viewer’s wellbeing (WB) through the mediator of prosocial behaviours (PSB) was assessed. The results revealed a non-significant indirect effect of video condition (VC) on wellbeing (WB) through prosocial behaviours (PSB) ($b = 0.005$, $t = .357$, $p = .386$). The direct effects of video condition (VC) on wellbeing (WB) ($b = -.032$, $p = .736$) was also found to be non-significant.

Hypotheses 2b and 2c are therefore not supported. A mediation analysis summary is presented in Table 22.

Table 22: Mediation analysis summary hypothesis 2b and 2c

Relationship	Direct Effect	Indirect Effect	Confidence Interval		P-Value	Conclusion
			Lower Bound	Upper Bound		
VC -> ME ->WB		-.130	-.409	.038	.127	No Mediation
	-.032				.736	
VC->PSWB->WB		.005	-.012	.049	.386	No Mediation

4.5 Discussion

4.5.1 Reinforcement of and contradiction with previous findings

This study sought to examine for the first time how exposure to videos of acts of kindness unrelated to work might stimulate moral elevation in the viewer and engender prosocial work behaviour over a sustained period of ten days. Specifically, the prosocial behaviour of knowledge sharing was explored. In addition, the study sought to examine the relationship between morally elevating stimuli and wellbeing. As well as looking at how videos of acts of kindness might promote wellbeing, the role that undertaking prosocial behaviours has in developing the individual's own wellbeing was looked at.

The results provided very limited evidence to support the hypotheses presented as while it was found that watching videos portraying acts of human kindness did elicit a greater sense of moral elevation than neutral nature videos, this was not accompanied by a corresponding increase in knowledge sharing behaviour nor increased wellbeing.

Potential limitations with the design and implementation of the study that may offer explanation for these findings will be presented in the next section. However, leaving to one side the limitations, the findings do support previous research in numerous studies that moral elevation may be elicited and specifically that it may be elicited through watching videos of acts of exceptional kindness (Haidt et al., 2009; Janicke et al., 2018, Janicke-Bowles et al. 2019; Neubaum et al., 2020; Schnall, 2010; Silvers et al., 2008).

That no direct relationship was found between moral elevation, wellbeing, prosocial intentions, and prosocial behaviour is at odds with findings elsewhere. While the study did not find a direct relationship between viewing morally elevating videos and prosocial intentions, the findings do support previous research which has found that the elevation experience is associated with an increase in prosocial intentions (Landis et al., 2009). However, the lack of a direct relationship between the eliciting stimuli and the prosocial intentions - the relationship between the video condition and prosocial intentions being fully mediated by moral elevation – demands that we explore what this relationship means.

A similar finding was reported by Neubaum et al. (2020) where they found that the relationship between prosocial motivation and exposure to elevating videos was mediated by the feeling of being elevated. What Neubaum et al. (2020) proposed and what the current study supports is that certain individuals are more inclined than others to feel morally elevated which is not a direct function of a particular eliciting stimuli. This study supports the work of Neubaum et al. (2020) in that it also finds that those individuals morally elevated to a greater extent are more likely to have prosocial intentions but that there is no clear mechanism to promote these intentions through sharing videos of acts of kindness.

Neubaum et al. (2020) additionally suggest that morally elevating effects of videos of kindness are short term and ephemeral, questioning the *strength* of the psychological momentum of the stimuli. The empirical study asked participants to reflect on whether they had felt morally elevated by the films during the study, thus eliciting a response to the short-term effects of each video but not measuring any sustained feelings during that period. As such the empirical study does not contradict the suggestion of the ephemeral nature of being morally elevated that is proposed by Neubaum et al. (2020).

There are other possible explanations for the lack of a relationship between moral elevation wellbeing, prosocial intentions and prosocial behaviour that take us beyond study limitations. A hypothesis of this study was that moral elevation would have an impact on intention and that intention would have an impact on behaviour. More specifically the research design examined if being morally elevated by stimuli unrelated to work would lead to a generalised

prosocial intention which would lead to the very specific prosocial behaviour of knowledge sharing

One explanation for being unable to demonstrate this relationship takes us back to Fredrickson's initial assertion (Fredrickson, 1998) which suggests that there is no particular urge experienced as a result of positive emotions but that we experience a more nebulous tendency to explore and experiment. Our inability to find specific associations may simply be evidence of this. However, if we look at other studies that have found a relationship between being morally elevated and behaviour, an alternative explanation emerges which might explain our findings.

4.5.1.1 Prosocial intentions and behaviours

It was reported in Chapter 1 that Schnall and Roper (2012), found people more willing to volunteer in an experiment when morally elevated during that experiment. Cox (2010) found that individuals elevated by a particular task were more likely to volunteer for that particular task. In other words, they did not propose nor find that individuals who are morally elevated undertake a wide gamut of prosocial behaviour but that there is a relationship with behaviour that is closely related by time and context with the elevating experience. Put another way, we may hypothesise that the target of the psychological momentum elicited by being morally elevated is close in time and context to the stimuli.

Returning to the SLR studies, the context of the prosocial behaviour measured always closely matched the context of the morally elevating stimuli (Table 23). So, for example, Vianello et al. (2010) sought questionnaire responses from participants addressing their intention to be fair and courteous when they had presented a story of a fair manager or had been asked to recall instances of their manager being fair. Similarly, Deng et al. (2022) asked participants about the extent to which their managers challenged inappropriate behaviour before asking about their recollections of when they might do the same.

Table 23: *Details of themes emerging from studies addressing prosocial behaviour*

Study	Prosocial Measure	Outcome	Contextual Proximity	Temporal Proximity
Vianello et al. (2010) study 1	Altruism	Intentions	Yes	Yes
	Courtesy	Intentions	Yes	Yes
	Compliance	Intentions	Yes	Yes
Vianello et al. (2010) study 2	Altruism	Behaviours	Yes	No
	Courtesy	Behaviours	Yes	No
	Compliance	Behaviours	Yes	No
Vianello et al. (2010) study 3	Altruism	Behaviours	Yes	No
	Courtesy	Behaviours	Yes	No
	Compliance	Behaviours	Yes	No
Deng et al. (2022)	Peer monitoring	Intention	Yes	No
Chen & Treviño (2022)	Support of ethical voice	Intentions	Yes	Yes
	Support of ethical voice	Intentions	Yes	Yes
	Ethical voice	Behaviours	Yes	Yes
Huang et al. (2022)	Empathic compassion	Intentions	Yes	Yes
Empirical Study	Prosocial Intentions	Intentions	Yes	No
	Prosocial Behaviour	Behaviour	No	No

Seven of the 17 measures demonstrate a temporal proximity between elevating experience and the reporting of the measure. But in all instances where there was not a temporal proximity, there was a clear contextual relationship between the morally elevating stimuli and the measure.

As with all the SLR studies, the stimuli of the empirical study did elicit moral elevation, but no association nor causal link between the stimuli and the outcomes was observed. Table 23 identifies that there is neither temporal nor contextual proximity between the prosocial behaviours and the stimuli in the empirical study: the stimuli were videos of acts of kindness unrelated to work and the potential outcomes measure was a specific set of questions about knowledge sharing. This is the only instance across all the studies where neither criterion was observed.

So, what might we conclude? We cannot conclude that the behaviour of a leader is key to eliciting moral elevation as there was no leader present in the empirical study videos, but it may be key to an elevating experience leading to a change in behaviour as it was an element

of all the other studies. A more parsimonious explanation is that it is not the specific presence of the leader in the morally elevating stimuli that is important but that it is that the leader also reflects contextual proximity in that they are part of the work context.

Han et al. (2022) offer further insight into the issue in a study examining why some stories of moral exemplars motivate us more than others to behave like them. They found that it was primarily the relatability of the exemplar (sharing the same cultural and social background) that was important. Perhaps we need to extend the notion of the contextual proximity to include the individual eliciting the stimuli and the person for whom moral elevation is being elicited: we may be more likely to respond to morally elevating leader behaviour if they are similar to us.

4.5.1.2 Wellbeing

Turning to the issue of wellbeing, this study also did not find any relationship between moral elevation and wellbeing – direct or indirect. The study also did not find a relationship between the prosocial behaviour of knowledge sharing and wellbeing. The study was not therefore able to find support for the proposals of Erickson and Abelson (2012) that the direction of attention towards others reduces symptoms of depression and anxiety.

While these findings are at odds with a number of studies (Janicke et al., 2018; Janicke-Bowles et al., 2019; Huang et al., 2022) that suggested a relationship between moral elevation and wellbeing, this study contrasted with these studies in that whereas they found a relationship between moral elevation and narrowly focused wellbeing measures, this study employed the 5-item World Health wellbeing (WHO-5). This study argues that the WHO-5 measure is a more generalisable measure as it is extensively validated and internationally applicable (Topp et al., 2015). The measures chosen by the other researchers adopt more ephemeral and granular manifestations of wellbeing such as feelings of Relaxation (Janicke et al., 2018) or State of Stress (Janicke-Bowles et al., 2019). We may adopt the same level of granular examination to wellbeing as we have afforded to the examination of prosocial intentions and behaviour (Table 24). This reveals the breadth of the concept that has been attended to in the studies. Table 24 also reminds us that not all of these measures produced a significant relationship with moral elevation. Indeed, six of 16 measures were not found to be significantly related.

Thus, it is clear that it is not particularly useful to merely cite a relationship of moral elevation with wellbeing without being specific about what aspect of wellbeing we are referring to. The importance of attending to the detail in the definition is underlined and supported by the lack of a relationship found with the global measure of wellbeing adopted in this empirical study, the WHO-5.

Table 24: *Details of wellbeing measures and significance of findings*

Study	Wellbeing Measure	Significant relationship Found	Causal link claimed	Ephemeral
Huang et al. (2022)	Mindfulness	Yes	No	Yes
	Burnout	No	No	No
	Life Satisfaction	Yes	No	No
	High Life Meaning	Yes	No	No
	Spirituality	No	No	No
Janicke et al. (2018)	Psychological Detachment	No	Yes	Yes
	Relaxation	No	Yes	Yes
	Mastery	Yes	Yes	Yes
	Vitality	Yes	Yes	Yes
	Work Satisfaction	No	Yes	No
Janicke-Bowles et al. (2019)	State of stress	No	No	No
	Positive Affect	Yes	Yes	Yes
	Have Focus	Yes	Yes	Yes
	Vitality	Yes	Yes	Yes
	Meaning at Work	Yes	Yes	No
	Relatedness	Yes	Yes	No
Empirical Study	WHO-5	No	No	No

Table 24 also tells us something of the significance of the potential ephemeral impact of moral elevation. The WHO-5 measure, where no significant relationship with moral elevation was found, is unequivocally not a measure of an ephemeral aspect of wellbeing as it calls for a reflection of a state over an extended period of time. This contrasts with a number of the measures used in the other studies such as Vitality (Janicke et al., 2018) and Have Focus (Janicke-Bowles et al., 2019) which look at a feeling in that moment and were found to have a significant relationship with moral elevation. This gives some weight to the hypothesis that moral elevation has an ephemeral effect but the findings here are not conclusive as other measures do not fall neatly into this categorisation. For example, Meaning at Work (Janicke-

Bowles et al., 2019) may be categorised as a long-term measure but was found to have a significant association with moral elevation while Relaxation (Janicke et al., 2018), arguably an ephemeral outcome, was not found to have a significant association.

What we can conclude is that moral elevation has been shown to have an association with a number of specific measures of wellbeing but by no means universally impacts on wellbeing and there is no evidence of it impacting on general measures of wellbeing.

In summary, and akin to the possible explanation of the lack of relationship between moral elevation and prosocial behaviour being because the psychological momentum of moral elevation is short-lived and context specific, our findings related to wellbeing may be explained by the possibility that moral elevation also affects wellbeing in a narrow, momentary way and does not accumulate to improve general wellbeing.

It should be noted that wellbeing of the participants in both conditions deteriorated during the course of the study. While we cannot rule out that it was participation in the study itself that led to this deterioration, a probable explanation is that the majority of respondents participated as one of the Covid-19 lockdowns was imposed. This is supported by a review of the psychological impact of the Covid-19 lockdowns conducted by Prati and Mancini (2021). Their meta-analysis of 25 studies involving 72 004 participants revealed that prolonged lockdowns, restrictions, and fear of infection contributed to an increase in anxiety and depressive symptoms in the general population.

4.5.2 Strengths and limitations

This study set out to build on previous research by adopting particular rigour in the choice of experimental design, conceptual clarity of variables and best practice in the application of SEM statistical analysis.

Conceptual clarity of the measurement of moral elevation was achieved by using a tool that was not confounded by its inclusion of other constructs such as gratitude (Janicke et al.

(2018); Janicke-Bowles et al. (2019) or admiration (Vianello et al. (2010); Deng et al. (2022); Huang et al., 2022). Robust measurement of wellbeing was achieved by incorporating the WHO-5. The value of attending closely to variable definitions was born out by the findings offering new insights into the relationships between moral elevation, prosocial intentions, prosocial behaviours and wellbeing.

Attending to best practice in the application of SEM and the incorporation of pre-post testing of the outcome measures are also strengths of this study. These were both addressed as there was a concern that the studies in the SLR may have been presenting spurious results by not including individual items but rather item aggregates in the SEM and by only including post-test measures.

A pre-post testing experimental design was adopted to minimise the risk of ascribing random variance between experimental groups to the effect of the experimental condition and to lend weight to any conclusions regarding causality. The importance of this was highlighted in the empirical study by the finding that a spurious significant result for the relationship between video condition and prosocial behaviour would have been reported if a pre-post protocol had not been adopted.

It was the intention of the study to be non-WEIRD (Western Educated Industrialised Rich and Democratic participants). The study did not succeed in recruiting a non-WEIRD population. While 22 countries were represented in the study, 77% of the participants were based in the UK making the participants very much WEIRD. Despite extensive efforts to recruit more widely, the participant population was predominantly middle-aged women in the UK and any conclusions drawn about the research should recognise that this is the population we are referring to. The study is therefore able to offer little to debate over the application of findings to non-WEIRD populations. Future research would benefit from focussing exclusively on recruiting a non-WEIRD population. In this study it was erroneously believed that it would be possible to recruit an internationally representative sample. A more realistic and insightful approach would be to conduct the research with particular non-WEIRD populations (Hendricks et al., 2019). Only one of the previous studies examined in the SLR (Deng et al., 2022) had been conducted in a non-WEIRD setting. Given that previous studies where

significant associations were found used a WEIRD population, but this study found little of significance but also used a WEIRD population, there is no reason to believe that the population chosen for this study contributed to the lack of significant findings.

While there are a number of strengths of the study which compare favourably with previous studies, we cannot discount entirely the possibility that we have a Type II error and that the design or execution of the empirical study simply failed to identify relationships that are in reality apparent.

While the number of participants in this study compare favourably with the raw numbers of participants in the studies identified in the SLR (see Table 1: Participant details, method and design) where six of the ten studies had fewer participants than this study, this only partly tells the story as the number of required participants is inextricably linked to the complexity of the study and the choice of statistical analysis. Given that the sample size was considered to be only just acceptable, as detailed in the method section, we may not entirely discount the possibility of Type II error as a result of sample size.

A related limitation of the study is the dropout rate of participants which challenges the generalisability of the results to the wider population as Snape et al. (2016) recommends that we should be cautious with results in which attrition rates are higher than 65%. Attrition for this study was 69%. It is perhaps unsurprising that such a high proportion of individuals that made an initial response to the invitation did not complete the research: very little investment was made by participants to respond to the study and express an interest in participating. Those that did respond were subsequently included in the participant numbers. Participants were offered no reward and were required to engage with the research over several days. Nevertheless, the dropout rate does indicate that a high proportion of people do not choose to repeatedly watch films when requested to do so. Neubaum (2020) suggests that the lack of control of participants over films they are requested to watch may have a significant effect on their motivation and consequently impact on the variance of responses observed. Future research that incorporates choice would be worth exploring.

It should be noted that this study is not able to offer any demographic insights into those that dropped out. A decision was made to gather demographic data after participants completed the study in an attempt to limit dropouts by participants put off by an early request for such data. A decision was also made during the design of the study to randomly assign participants to condition groups. While part of the reason for this approach was that it is simpler and more feasible to adopt, it is generally considered to be a robust way to avoid systematic bias creeping into a study through participant assignment (Moore & McCabe, 2021). In this instance one of the demographic questions that would have been valuable to answer is whether any systematic drop out of participants led to the demographic make-up of the population we are left with and thus undermines the generalizability of the findings. Choosing matched groups as a design approach, for example, might have circumvented such a concern.

4.5.3 Theoretical contributions

The study set out to make a contribution to the research by drawing together the strengths of previous studies and in so doing offer findings that are robust, replicable and conceptually coherent. By doing so this, the research was able to contribute findings that confirm that moral elevation may be elicited by viewing films of exceptional acts of kindness.

Weighing up the strengths and limitations of the study, if we leave aside the possibility of a Type II error as a result of sample size and unknown factors within the study population, the quality and design of the empirical study is either comparable or superior to that of those in the SLR where significant relationships were found. If we accept this to be the case, we must attempt to draw theoretical conclusions to explain the differences between the finding of this study and previous studies where significant relationships were widely reported between moral elevation, wellbeing, prosocial intentions and prosocial behaviour.

This study adds to the body of research addressing moral elevation generally and its application at work specifically the hypothesis that the temporal and contextual proximity of the eliciting stimuli with the outcomes measures being examined are important factors. Studies examining this element of the mechanism of moral elevation would be valuable additions to the body of evidence.

Furthermore, the message that this research offers is that there is a need to be very careful about the definitions of the variables that are being considered with an abundance of caution recommended if we are to avoid either over ascribing a relationship between moral elevation and prosocial behaviour, and wellbeing or adopting a false negative and dismissing its influence in specific circumstances or on particular, narrowly defined and time limited aspects of wellbeing.

The empirical study also contributes a set of video stimuli that have been found to elicit moral elevation that may be used in future research. This set of videos is publicly available and would allow comparisons between studies if employed by other researchers but it should be noted that this research does not provide insights into which of the video stimuli elicit the most or least moral elevation. Neither does the research offer insights into the elements of the video that are important for such stimuli to be elevating beyond suggesting that contextual proximity might be important in eliciting behavioural change. Indeed, if we are to pursue the question of specificity and the link between stimuli and outcome, research that looked in detail at the content of such videos and developed our understanding of the characteristics of elevating stimuli would be valuable. For example, would morally elevating videos set in a work context exert more influence on moral elevation and subsequent changes in wellbeing and prosocial behaviour at work?

4.5.4 Implications for Practice

Prior to this research, studies had indicated that leader-induced moral elevation is associated with prosocial intentions and behaviour (Vianello et al., 2010; Chen & Treviño, 2022; Deng et al., 2022) and that meaningful video content unrelated to work may be associated with narrow, specific elements of wellbeing (Janicke et al., 2018; Janicke-Bowles et al., 2018; Neubaum et al., 2020). This study sought to add to our understanding of the concept of moral elevation firstly by removing the leader as the inducer of moral elevation and also by looking at a wider definition of wellbeing.

The former approach is important as it sheds some light on whether a leader acting as a moral exemplar is a key component in the promotion of prosocial behaviour through moral

elevation. If the leader behaviour is not a key component, it was proposed, prosocial behaviour could be promoted through replicable, sharable content in addition to or rather than through leader selection or development.

The study did not find that sharing morally elevating videos of acts of kindness unrelated to work with colleagues will lead them to increase their prosocial behaviour of knowledge sharing. The study was also unable to demonstrate that the sharing of morally elevating videos would improve the general wellbeing of people at work.

The implications of this are that we are not able to rule out the importance of the leader as an exemplar of morally elevating behaviour in promoting prosocial behaviour, but the findings do not indicate that this is the only mechanism by which elevating experiences impact on behaviour and wellbeing. Indeed, the findings add some weight to the idea that the influence of being morally elevated is both temporally limited and context specific. While this research does not directly confirm this, the implications for practice are that where morally elevating exemplars are deployed in a work setting there is a better chance that they may have an impact on prosocial behaviour or wellbeing if they are targeted and time bound. For example, while sharing morally elevating films unrelated to work elicited moral elevation but no change in knowledge sharing behaviour, presenting a video showing someone supporting a colleague through knowledge sharing may have an impact if presented shortly before colleagues are introduced to a new entrant or before a meeting where knowledge sharing is on the agenda. Equally, if a leader's aim is to increase knowledge sharing, presenting themselves as an exemplar of this specific behaviour is likely to have a greater impact than presenting themselves as prosocial in other more generalised ways.

It should be underlined that this research is not proposing that such interventions will have the desired impact but rather that any interventions that are not targeted and not timebound are likely to be unsuccessful.

This study also offers some insight into the implications of increasing the dosage of morally elevating stimuli. While this study does not offer evidence that more videos would have had a greater impact, we do know that the current intervention took place over 11 days and even

when requiring participants to watch videos of only two or three minutes, there was a 69% dropout rate. Can we reasonably expect a better take-up of such an intervention in a work context even if it is of value?

4.5.5 Conclusion

In conclusion, the study set out to explore the relationship between moral elevation, prosocial intentions, prosocial behaviour and wellbeing in the workplace. Conceptual and methodological issues found in previous research were addressed in order to offer findings that demonstrated methodological and statistical rigour. No direct relationships were found which challenges previous finding, but the study did support previous research that proposed that moral elevation may be elicited from viewing videos of acts of kindness that are unrelated to work. The study also supports previous research that found a relationship between moral elevation and prosocial intentions, suggesting that some individuals may be more susceptible to being morally elevated.

The findings offer a potentially new route for researchers by suggesting that temporal and contextual proximity between the eliciting stimuli and the outcome may be important in the study of moral elevation but at this point we are not able to propose a particular intervention at work that will lead to moral elevation, prosocial intentions, prosocial behaviour and wellbeing.

Chapter 5: Conclusion - implications for theory, research and practice

This final chapter aims to bring together key findings from Chapter 3, the SLR, and Chapter 4, the empirical study. The contribution this thesis offers to the study of the relationship of moral elevation with work is discussed, along with its overall strengths and limitations. The implications for research and practice are also discussed.

5.1 Overall Findings

This thesis sought to examine the construct of moral elevation and its value to a work setting. In particular, it aimed to develop further our understanding of the potential role of moral elevation in promoting wellbeing, prosocial intentions and prosocial behaviour in a work context.

The proposition at the outset of this thesis was that the study of moral elevation in non-work settings had led to several promising findings regarding its value in promoting prosocial behaviour and wellbeing. This thesis therefore set out to investigate how researchers had applied this construct in the workplace, hypothesising that there may potentially be novel ways in which it might be utilised to improve organisational and individual wellbeing and effectiveness. Table 25 summarises the findings of the thesis, combining the findings of the SLR and the empirical study.

Table 25: Summary of research methodology and findings

	Systematic Literature Review	Empirical Study	Contribution of SLR and Empirical Study
Initial Research Questions	<p>How has the concept of moral elevation been applied to work settings?</p> <p>How has moral elevation been measured in a work setting?</p>	<p>Do meaningful videos portraying acts of human kindness: elicit a greater sense of moral elevation than neutral nature videos when viewed over a sustained period? increase a viewer’s prosocial intentions to a greater extent than neutral nature videos when viewed over a sustained period? increase a viewer’s prosocial work behaviour of knowledge sharing to a greater extent than neutral nature videos when viewed over a sustained period? increase a viewer’s wellbeing to a greater extent than neutral nature videos when viewed over a sustained period?</p> <p>Is the effect of exposure to meaningful videos portraying acts of human kindness on viewer’s prosocial work behaviour of knowledge sharing mediated by prosocial intentions which are in turn mediated by the experienced feeling of moral elevation?</p> <p>Is the effect of exposure to meaningful videos portraying acts of human kindness on viewer’s wellbeing mediated by the experienced feeling of moral elevation?</p> <p>Is the effect of exposure to meaningful videos portraying acts of human kindness on viewer’s wellbeing mediated by the prosocial behaviour of knowledge sharing?</p>	<p>Previously little research undertaken to understand role of moral elevation in work setting.</p> <p>SLR is first of its kind to examine moral elevation in the work setting.</p> <p>The empirical study research questions and approach directly addressed the gaps and issues identified in the SLR, most notably:</p> <ul style="list-style-type: none"> • The impact of being morally elevated over a sustained period in a work setting. • How moral elevation influences the prosocial behaviour of knowledge sharing. • Whether moral elevation, wellbeing and prosocial behaviours may be engendered in the absence of particular leader behaviour.

Table 25 contd.: *Summary of research methodology and findings*

	Systematic Literature Review	Empirical Study	Contribution of SLR and Empirical Study
Study Design	<p>Systematic literature review.</p> <p>Initial search yielded 2272 papers, using PsycINFO, Scopus and Business Source Premier (EBSCO) six final papers consisting of ten studies met criteria.</p> <p>Textual narrative synthesis of findings</p>	<p>The study examined whether viewing videos of acts of kindness over a sustained period influences prosocial intentions, the prosocial behaviour of knowledge sharing at work and wellbeing.</p> <p>An experimental design was employed, examining for potential differences in the continuous dependent variables between the experimental (videos of acts of kindness) and control group (neutral videos of nature), and over time (pre-test and post-test).</p> <p>Participants watched ten films over ten days and responded to questionnaires on the first and eleventh day.</p>	<p>Addressing limitations of the studies identified in the SLR, particular rigour was adopted to ensure findings in both the SLR and empirical study were based on sound methodological and conceptual underpinnings:</p> <ul style="list-style-type: none"> • The textual narrative synthesis coupled with the granularity of analysis of the findings highlighted the value of these approaches in identifying methodological and conceptual weaknesses of previous research. • The empirical study addressed the weakness identified in the SLR of not adopting pre-post research designs/work. The study highlighted that such a design approach is feasible in this area of study. • The analytical approach of the empirical study addressed issues identified by the SLR of the flaws in the approach to SEM. • Empirical study addressed SLR findings that measures of moral elevation and wellbeing had previously been conceptually ambiguous. • Causality as well as association was addressed. <p>Empirical study was the first to adopt the globally recognised WHO-5 measure of wellbeing.</p> <p>Empirical study was first to adopt a design approach of eliciting moral elevation over a sustained period and adopted an ecologically valid approach thus offering insights into how a moral elevation intervention might be conducted at work.</p>

Table 25 contd.: Summary of research methodology and findings

	Systematic Literature Review	Empirical Study	Contribution of SLR and Empirical Study
Sample	Sample from all six papers: Ten studies (six in USA, three in Italy, one in China) <i>n</i> = 2892, working adults	Participant details: <i>n</i> = 227 engaged in paid or unpaid activity they considered to be work. Mean hours/week = 37.01 63 male, 160 female, 2 described in another way, 2 preferred not to answer Age range: 23-75 170 residing in UK, 51 residing in 21 different countries.	The SLR highlighted the importance of conducting Non-WEIRD studies. The empirical study sought to address this and while it was unsuccessful pointed to strategies that should be adopted if future studies are to successfully conduct Non-Weird studies.
Findings	Moral elevation may be elicited in contexts of relevance to work. There is an association of moral elevation with organisationally important wellbeing and prosocial behaviour measures. Highlighted conceptual and methodological issues to be addressed regarding measurement of moral elevation and study design.	Moral elevation may be elicited by watching videos of exceptional acts of human kindness. No direct relationships found between moral elevation, prosocial intentions, prosocial behaviours and wellbeing as a result of sustained exposure to morally elevating video stimuli. Specifically, the study did not find a relationship of moral elevation and wellbeing with knowledge sharing. The relationship between the video condition and prosocial intentions was found to be fully mediated by moral elevation.	The value of adopting a conceptually clear measure of moral elevation was demonstrated through the clarity of the findings of the empirical study and the ambiguity of some of the SLR studies. The empirical study adds weight to the evidence that moral elevation may be elicited, and it may be elicited by stimuli that do not involve a leader or manager. Specifically, it may be elicited by exposure to videos of acts of kindness. The two studies combined are not able to add to the initial evidence suggesting that eliciting moral elevation in a work setting over a sustained period may influence prosocial intentions, prosocial behaviour and wellbeing. Attending to methodological and conceptual issues did not lead to more significant findings. Indeed, the negative findings suggest that some of the findings in the SLR may have been as a result of weaker design. The empirical study supports the SLR findings or the mediating effect of moral elevation.

5.1.1 Systematic literature review

A search of three databases yielded six papers comprising of ten studies that met the inclusion criteria. The first research question posed by the SLR asked how the concept of moral elevation has been applied to work settings.

The SLR revealed that very little research has been conducted in moral elevation in the workplace and where it existed, researchers had pursued the same two domains of interest that researchers in non-work context had pursued. The first was that an elevating experience may be related to wellbeing measures (Huang et al., 2022; Janicke et al., 2018; Janicke-Bowles et al., 2019). The second was that an elevating experience may be related to various forms of prosocial behaviour (Vianello et al. 2010; Chen & Treviño, 2022; Huang et al., 2022; Deng et al., 2022).

The approach to their research also followed much of the related studies: all previous research in moral elevation in a work setting was quantitative and all sought to examine the relationships between moral elevation and various dependent variables.

The examination of how moral elevation might be elicited in a work setting identified that there was something of a departure from the approaches adopted in much of the general research into moral elevation. While six of the ten studies adopted a similar approach to that which had been adopted in previous research - namely presenting stimuli in written or video format to elicit moral elevation (Vianello et al., 2018; Janicke et al., 2018; Janicke-Bowles et al., 2018; Chen & Treviño, 2022) - the remaining studies adopted an alternative approach that reflected their focus on morally elevating relationships at work.

In these remaining four studies, researchers gathered self-report questionnaire data as both independent and dependent variables (Vianello et al. 2018; 2018; Deng et al., 2022; Huang et al., 2022). Participants were asked to reflect on the behaviour of leaders in terms of how morally elevating they were. It is noteworthy that only one study by Chen and Treviño (2022) involved an independent assessment of the prosocial behaviour. The focus of these four studies was on the importance of colleagues – particularly leaders – in setting the emotional

tone and culture of an organisation while the former studies sought to shed light on how stimuli might be introduced in a work setting to promote the benefits of moral elevation.

The SLR highlighted that across all of the studies, self-report questionnaires were used to measure moral elevation, wellbeing and prosocial behaviour constructs. The SLR found that there was significant conceptual ambiguity among the measures, that the statistical analyses conducted often lacked rigour, and that the extant research is predominantly WEIRD.

5.1.2 Empirical study

Building on the findings of the SLR, this study sought to move the existing research forwards by adopting a rigour absent in much of the previous research and examining the relationship of moral elevation elicited through viewing videos of acts of kindness with wellbeing, prosocial intentions, and the prosocial behaviour of knowledge sharing at work. In an experiment (N 227), subjects were exposed to either acts of exceptional kindness, or neutral control video stimuli over a period of ten days. Results of this study were that prolonged exposure to videos of acts of kindness did not have a direct effect on participants' prosocial intentions, prosocial behaviour or general wellbeing. However, videos of acts of human kindness can indirectly increase prosocial intentions - mediated through a feeling of moral elevation.

5.2 Overall Strengths and Limitations

A strength of this thesis is the rigour with which the studies of the SLR were interrogated and the subsequent application of the findings. Issues of conceptual clarity, experimental design and statistical analysis were identified and addressed in the empirical study. The result of this applied rigour is that both the significant and insignificant findings demonstrated in the empirical study may be given some weight.

Perhaps the biggest shortcoming of the research is what was not addressed. The thesis set out to explore the relationship between the construct of moral elevation, wellbeing, prosocial intentions, and prosocial behaviour, thus pursuing the same narrow perspective of so many

of the researchers that came before this research. As with all but one study presented in the SLR, the empirical study adopted self-report questionnaires as the means of measuring all the constructs. It is posited that such an approach lacks imagination and precludes identification of other mechanisms by which moral elevation may impact beneficially on organisations and their employees. The Hamby and Dahl study (2022) which identified how morally elevated individuals are less gullible is a rare example in the field of researchers looking beyond wellbeing and prosocial behaviours. This is an example that the current thesis may have benefitted from pursuing.

The narrowness of approach was further compounded by the Covid-19 pandemic that necessitated focusing on variables that could be measured during enforced remote working and which did not require direct observation. Additionally, the lockdown reduced the opportunity for individuals to demonstrate prosocial behaviour as interactions with colleagues were limited.

The SLR identified that WEIRD studies dominate this area of research making the generalisability of the findings problematic. The limitation this imposes is also found in the empirical study despite best efforts to recruit a diverse sample.

5.3 Unique Contributions

It should be noted that prior to this research, no SLR had been undertaken to look at moral elevation in the workplace or indeed the construct of moral elevation itself. The thesis therefore makes a unique contribution in bringing together the extant research in one place for the first time.

Equally the empirical study was the first to explore the relationship between moral elevation and the prosocial behaviour of knowledge sharing. The study was also the first to examine the relationship between moral elevation and prosocial behaviour at work without using leader or colleague behaviour to elicit moral elevation. It therefore addresses for the first time if individuals may be influenced to be prosocial through the elicitation of moral elevation in a circumstance that does not involve the influence of a leader or a colleague

5.4 Implications for Research

A key component of this thesis is that the SLR revealed that methodological and conceptual issues found within a number of the studies included in the SLR made it difficult to draw firm conclusions about the role moral elevation plays in influencing intentions, behaviour and wellbeing. Issues identified included using measures with conceptual ambiguity, failure to use pre/post testing design, and questionable statistical techniques. The empirical study sought to address these issues so that weight could be given to its findings.

The empirical study used validated and reliable measures; an appropriate research design involving pre/post testing; and adopted best practice in its SEM statistical analysis. The latter two issues contribute significantly to being able to draw conclusions about causality rather than just associations. This being the case, this study makes a significant contribution towards establishing a research protocol that enables the exploration of causal relationships which future researchers may follow.

The study subsequently produced results that were at odds with previous research and this thesis contends that a significant contribution to these observed differences is likely to be the increased rigour adopted in this study. This has implications for future research as at the very least it challenges future researchers to reflect on the experimental designs they adopt and to seek designs that attend to the rigour adopted here. A potentially useful direction of future research would be for researchers to revisit the areas of the previously published research and re-run it using the techniques advocated here.

The empirical study used the measure of moral elevation created by Kramer et al. (2017) which was developed through a confirmatory factor analysis approach. The reliability, validity and conceptual clarity of this tool does make it a candidate for future research but since the empirical study was undertaken, a new contender has been developed that offers promise for researchers. McGuire, Hayden, Tomoum and Kurz (2022) similarly identified the inconsistency in how elevation experiences have been measured at the state level. After reviewing 50 moral elevation measures, they developed a new nine item reliable and valid scale, the State Moral Elevation Scale (SMES), through exploratory and confirmatory factor

analysis. Aimed at both clinical and non-clinical populations, it offers the conceptual clarity that this thesis identified as important and which this thesis has contributed toward the case for. It is anticipated that if the SMES is adopted by researchers it will support future robust research on elevation and further our understanding of its role in the workplace.

The use of the WHO-5 measure of wellbeing is a useful contribution which prompts a debate and potential direction for future researchers. Although significant relationships were not found using the WHO-5, the thesis brings a widely used and respected tool into this area of study. A criticism of its use, however, may be that if we focus on such a general measure, we miss specific, particular associations of wellbeing with moral elevation. Indeed, in chapter three, the importance of the critical realist approach (Bhaskar, 1989) was recognised. The potential value of attending to specific measures of wellbeing, it may be argued, are further examples of this approach.

In the discussion of limitations, it was acknowledged that the thesis pursued the same outcome measures of many other studies in this area: wellbeing and prosocial behaviour. It is proposed that a broader exploration of the moral elevation construct may point to further areas of study. All the previous research and this thesis pursued quantitative approaches to the subject. It is proposed that qualitative research enquiring about what the morally elevating experience means to individuals may offer some insights that help untangle its mechanisms and present new avenues of research.

5.5 Implications for Theory

The conceptual ambiguities identified in the SLR which this thesis sought to address in the empirical study, highlight a theoretical shortcoming in this area of research: the focus of research has often been on the outcomes and how they might be promoted rather than the psychological mechanisms leading to the outcomes. In other words, there has been less concern about the fidelity of the constructs being measured and more concern with what would happen if individuals were exposed to specific stimuli. In this respect it did not matter to researchers if their measure of moral elevation was the same as that used by other researchers or if the measure of wellbeing was one that could be applied to other contexts.

The emphasis was not findings that could be generalised to other contexts but on uncovering specific practical relationships. While such an approach might yield short-term gains in the creation of specific interventions for practitioners, it significantly limits theoretical advancement which might lead to a coherent set of principles or connect isolated findings into broader contexts, or the creation of broadly applicable interventions based on theories that effectively predict outcomes (Bordens & Abbot, 2018). The absence of underlying theory also makes it difficult to make sense of diverse and confusing observations. This has very much been the case in this thesis.

This thesis therefore contributes to the theoretical understanding of moral elevation in the workplace by bringing together the current literature and trying to make sense of it alongside the contradictory findings of the empirical study.

In the first place this thesis lends weight to the finding that moral elevation may be elicited by external stimuli. It also supports the finding that the relationship between prosocial intentions and the eliciting medium is fully mediated by moral elevation.

Prior to this research, investigating the relationship between prosocial behaviour and moral elevation had been confined to research involving the observation or recollection of leader behaviour, colleague behaviour. The empirical study was the first to look at this relationship in the absence of leader behaviour and was able to find that elevation could also be elicited by watching videos of exceptional acts of kindness thus dispelling the idea that leader behaviour is of paramount importance in eliciting moral elevation at work.

More problematic from a theoretical perspective was the lack of a significant direct relationship between moral elevation, wellbeing, prosocial intentions and prosocial behaviour. In the first instance we can conclude that there is no evidence for the potency of the extended period of ten days of video observation in influencing behaviour but what are we to make of the contradiction with other studies that identified relationships between these constructs? Is there a development of theory that enhances the predictivity of the influence of moral elevation?

This thesis supports the idea that the probability of identifying a relationship of morally elevating stimuli with prosocial intention and behaviour is going to be greater when the opportunity to demonstrate the outcome behaviour is temporally close to the stimuli and when the context of the outcome behaviour is specific and similar to the context of the stimuli. In other words, there is not evidence for morally elevating stimuli leading to prosocial behaviour days or weeks later but that we may find immediate changes if the opportunity arises soon after the stimuli is presented and if the individual perceives a contextual link between the stimuli and the opportunity to behave in a different way. Similarly in relation to wellbeing, the significance of the ephemeral nature is emphasised along with the importance of attending to the specificity of the measures of wellbeing being studied. These hypotheses are worthy of investigation by future researchers.

In summary what we can conclude and support is that moral elevation is associated with a number of specific measures of wellbeing but by no means universally impacts on wellbeing and there is no evidence of it impacting on general measures of wellbeing. Furthermore, it has a relationship with prosocial intentions and may influence prosocial behaviour. In all cases there is little evidence for a long-term influence of moral elevation and the findings of this thesis suggest that any influences are limited by time and how closely the outcomes measures relate to the specific context of the morally elevating stimuli.

5.6 Implications for Practice

At the heart of research into the construct of moral elevation is a belief or hope that it may unlock some individual, societal or organisational benefits and as such organisational researchers have sought to establish causal links between it and valuable outcome measures. This thesis pursued the same aims. By developing the findings of the SLR and addressing methodological shortcomings in those studies, the empirical study and thesis as a whole sought to nudge forward the domain of moral elevation towards finding possible applications in a work context, in particular the area of knowledge sharing.

What was found, however, were insignificant associations and a lack of supporting evidence which does not bring us closer to identifying specific work-based interventions but does

challenge directions which other researchers have proposed. For example, the thesis does not offer support for the proposal of Erickson et al. (2017) that individuals who regularly expose themselves to moral exemplars may experience chronic elevation and prosocial tendencies.

The tentative findings of the SLR and the lack of significant findings in the empirical study do suggest that morally elevating stimuli are more likely to have an impact on short-term emotional states and specific temporary measures of wellbeing. Such content to energise and refresh individuals may therefore be of benefit in a work setting.

What we have found strong evidence for is that it is possible to morally elevate individuals either through the behaviour of colleagues or through presenting context-independent morally elevating videos. This being the case, while we were not able to find an association with knowledge sharing nor able to make any general proposals about promoting prosocial behaviour or wellbeing in the workplace, should other researchers more clearly identify the organisationally valuable outcomes of being morally elevated, practitioners are already equipped with tools to deliver an elevating experience.

The thesis does support findings elsewhere (Neubaum et al., 2020) that proposed that certain individuals are more susceptible to being morally elevated and that this is associated with prosocial intentions. If organisationally such intentions are desirable, this suggests that practitioners should seek to select such individuals rather than focus solely in seeking to influence the behavioural intentions.

The implications for practice are disappointingly modest but one important conclusion from this research is that practitioners should shy away from overly ascribing value to morally elevating experiences in the workplace as there is simply insufficient evidence to draw such a conclusion at present.

5.7 Concluding Remarks

Van de Vyver and Abrams (2015) posed the question, “How can we overcome apathy and instigate a desire to help others?”. The hubris and optimism of this researcher led to a belief that an answer might be found in the relationship between moral elevation and the prosocial behaviour of knowledge sharing.

Drawing together the evidence from the SLR and empirical study, we are not able to conclude that there is such a relationship but what the evidence does strongly point towards is the importance of attending to the detail, the specifics of a context and clear definitions of concepts if we are to identify meaningful relationships. While the prospect of producing generalizable and widely applicable results is always beguiling, this thesis teaches us once more that the study of psychology rarely delivers such moments.

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Appendix 1: Quality Assessment

	Vianello et al. (2010) Study 1	Vianello et al. (2010) Study 2	Vianello et al. (2010) Study 3	Janicke et al. (2018)	Janicke-Bowles et al. (2019)	Chen & Trevino (2022) Study 1	Chen & Trevino (2022) Study 2	Chen & Trevino (2022) Study 3	Deng et al. (2022)	Huang et al. (2022)
From Hong & Pluye (2018)										
Screening questions										
Are there clear research questions?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Do the collected data allow researchers to address the research questions?	Partially	Partially	Partially	Partially	Partially	Partially	Partially	Partially	Partially	Partially
Adapted from Snape et al. (2016)										
Was the evaluation well designed?										
<ul style="list-style-type: none"> Fidelity: The extent to which the study was delivered with fidelity is clear - i.e. if there is a specific study which is being evaluated, this has been well reproduced. 	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<ul style="list-style-type: none"> Measurement: The measures are appropriate for the study's anticipated outcomes and population/to address study's hypotheses 	Partially	Yes	Yes	Partially	Partially	Yes	Yes	Yes	Yes	Yes
<ul style="list-style-type: none"> Participants completed the same set of measures once shortly before participating in the study and once again immediately afterwards 	No	N/A	N/A	No	Partially	N/A	No	No	No	No
<ul style="list-style-type: none"> Counterfactual: Assignment to the treatment and comparison group was at the appropriate level (e.g., individual, family, school, community) 	N/A	N/A	N/A	Yes	Yes	N/A	Yes	Yes	N/A	N/A
<ul style="list-style-type: none"> Counterfactual: The comparison condition provides an appropriate counterfactual to the treatment group. 	Yes	No	No	Yes	Yes	N/A	Yes	Yes	N/A	N/A
<ul style="list-style-type: none"> Participants were randomly assigned to the treatment and control group through the use of methods appropriate for the circumstances and target population OR sufficiently rigorous quasi-experimental methods 	Can't tell	Can't tell	Can't tell	Yes	Yes	N/A	Yes	Yes	N/A	N/A

	Vianello et al. (2010) Study 1	Vianello et al. (2010) Study 2	Vianello et al. (2010) Study 3	Janicke et al. (2018)	Janicke-Bowles et al. (2019)	Chen & Trevino (2022) Study 1	Chen & Trevino (2022) Study 2	Chen & Trevino (2022) Study 3	Deng et al. (2022)	Huang et al. (2022)
Was the study carried out appropriately? Including appropriate sample										
<ul style="list-style-type: none"> Representative: The sample is representative of the study's target population in terms of age, demographics and level of need. The sample characteristics are clearly stated. 	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<ul style="list-style-type: none"> There is baseline equivalence between the treatment and comparison group participants on key demographic variables of interest to the study and baseline measures of outcomes (when feasible) 	Can't tell	N/A	N/A	Can't tell	Can't tell	N/A	Can't tell	Can't tell	N/A	N/A
<ul style="list-style-type: none"> Sample size: The sample is sufficiently large to test for the desired impact. This depends most importantly on the effect size; however, a suggestion could be e.g. a minimum of 20 participants have completed the measures at both time points within each study group. 	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<ul style="list-style-type: none"> Attrition: A minimum of 35% of the participants completed pre/ post measures. Overall study attrition is not higher than 65%. 	Can't tell	Can't tell	Can't tell	Can't tell	Yes	Yes	Yes	Yes	Yes	N/A
<ul style="list-style-type: none"> The study had clear processes for determining and reporting drop-out and dose. Differences between study drop-outs and completers were reported if attrition was greater than 10%. 	No	No	No	No	No	No	No	No	No	N/A
<ul style="list-style-type: none"> The study assessed and reported on overall and differential attrition 	No	No	No	No	No	No	No	No	No	N/A
<ul style="list-style-type: none"> Equivalence: Risks for contamination of the comparison group and other confounding factors have been taken into account and controlled for in the analysis if possible: 	No	No	No	Yes	Yes	N/A	No	No	Yes	N/A
<ul style="list-style-type: none"> Participants were blind to their assignment to the treatment and comparison group 	No	N/A	N/A	No	No	N/A	Yes	Yes	N/A	N/A
<ul style="list-style-type: none"> There was consistent and equivalent measurement of the treatment and control groups at all points when measurement took place. 	Yes	N/A	N/A	Yes	Yes	N/A	Yes	Yes	N/A	N/A
<ul style="list-style-type: none"> Measures: The measures used were valid and reliable. This means that the measure was standardised and validated independently of the study and the methods for standardization were published. Administrative data and observational measures may also have been used to measure programme impact, but sufficient information was given to determine their validity for doing this. 	Partially	Partially	Partially	Partially	Partially	Yes	Yes	Yes	Partially	Partially

	Vianello et al. (2010) Study 1	Vianello et al. (2010) Study 2	Vianello et al. (2010) Study 3	Janicke et al. (2018)	Janicke-Bowles et al. (2019)	Chen & Trevino (2022) Study 1	Chen & Trevino (2022) Study 2	Chen & Trevino (2022) Study 3	Deng et al. (2022)	Huang et al. (2022)
<ul style="list-style-type: none"> Measurement was independent of any measures used as part of the treatment. 	Partially	Partially	Partially	Partially	Partially	Partially	Yes	Yes	Yes	N/A
<ul style="list-style-type: none"> In addition to any self-reported data (collected through the use of validated instruments), the study also included assessment information independent of the study participants (e.g., an independent observer, administrative data, etc.). 	No	No	No	No	No	No	No	Yes	No	No
Was the analysis appropriate?										
<ul style="list-style-type: none"> The methods used to analyse results are appropriate given the data being analysed (categorical, ordinal, ratio/parametric or non-parametric, etc.) and the purpose of the analysis. 	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<ul style="list-style-type: none"> Appropriate methods have been used and reported for the treatment of missing data. 	No	No	No	No	No	No	No	No	Yes	N/A
Is the evidence consistent?										
<ul style="list-style-type: none"> Are the findings made explicit? 	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<ul style="list-style-type: none"> Is there adequate discussion of the evidence both for and against the researcher's arguments? 	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<ul style="list-style-type: none"> Has the researcher discussed the credibility of their findings (e.g. triangulation, respondent validation, more than one analyst)? 	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<ul style="list-style-type: none"> Are the findings discussed in relation to the original research question? 	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Appendix 2: Empirical Study Films

Condition A: Films portraying exceptional acts of kindness

1. Father helps injured son complete race
<https://vimeo.com/604323970/5038a89846?share=copy>
2. Strangers help boy buy flowers for mother
<https://vimeo.com/604324436/569c677113?share=copy>
3. Chain of events of people helping each other in a street
<https://vimeo.com/604324436/569c677113?share=copy>
4. Man helps homeless people
<https://vimeo.com/604326031/7f2b589877?share=copy>
5. Woman surprised by gift of accommodation
<https://vimeo.com/604326508/afa31430cd?share=copy>
6. Man repays favour given to him by paying medical bills
<https://vimeo.com/604326776/055741a994?share=copy>
7. Shopkeeper donates money to woman trying to sell her jewellery.
<https://vimeo.com/604327432/c023a34f3a?share=copy>
8. Brother creates mural for sick sister
<https://vimeo.com/604328024/aca86460c0?share=copy>
9. Girl given a sewing machine so she can support her family
<https://vimeo.com/604328324/620002f47d?share=copy>
10. A young man helps people in his neighbourhood
<https://vimeo.com/604328861/c727fc3667?share=copy>

Condition B: Films of the natural world such as views of a mountain and animal behaviour.

1. Fish
<https://vimeo.com/606001361/5681e6ff2?share=copy>
2. Nature in South Africa
<https://vimeo.com/606001971/4255ee00b0?share=copy>
3. Flowers
<https://vimeo.com/606001971/4255ee00b0?share=copy>
4. Rocky Mountains
<https://vimeo.com/606004506/9b018d4e9c?share=copy>
5. Elephants
<https://vimeo.com/606005295/1223bea868?share=copy>
6. Shoreline
<https://vimeo.com/606005815/3bd926f029?share=copy>
7. Shoreline
<https://vimeo.com/606006826/94f6d89457?share=copy>
8. Fields of flowers
<https://vimeo.com/606007551/3ce2a7457b?share=copy>
9. Snowy mountains
<https://vimeo.com/606007935/d8eaa384d2?share=copy>
10. Drone shots
<https://vimeo.com/606008565/921b7d3d97?share=copy>

Appendix 3: Empirical Study Questionnaires

Self-reported pro-social intentions

Baumsteiger, R., & Siegel, J. T. (2018). Measuring Prosociality: The Development of a Prosocial Behavioral Intentions Scale. *Journal of Personality Assessment*, 1–10. doi:10.1080/00223891.2017.1411918

Instructions: Imagine that you encounter the following opportunities to help others. Please indicate how willing you would be to perform each behavior from 1 (Definitely would not do this) to 7 (Definitely would do this). If you are more likely to complete one task (e.g., help a stranger find a key) than another (e.g., help a stranger find a missing pet), please respond to the task that you would be more likely to perform.*

1. Comfort someone I know after they experience a hardship
2. Help a stranger find something they lost, like their key or a pet
3. Help care for a sick friend or relative
4. Assist a stranger with a small task (e.g., help carry groceries, watch their things while they use the restroom)

Scoring: Calculate the mean of scores on all items.

Self-reported moral elevation

Krämer, N., Eimler, S. C., Neubaum, G., Winter, S., Rösner, L., & Oliver, M. B. (2017). Sense of Elevation Measure Retrieved from PsycTESTS. doi: <https://dx.doi.org/10.1037/t67284-000>

After watching the films, I felt ...

- ... inspired to see how much goodness human beings can have.
- ... illuminated by observing what human spirit can achieve for others.
- ... joy when understanding how good human nature can be.
- ... warmth by looking at how profound the connection between human beings can be.
- ... affected by recognizing what humans' solidarity can do.
- ... emotional to see human greatness.
- ... moved when getting an insight into human nature.
- ... moved to see the good sides of humankind.
- ... touched when looking at human nature.
- ... moved to see a better world.

Elevation experience items are rated on a 7-point Likert scale ranging from 1 = strongly disagree to 7 =strongly agree.

Self-reported pro-social work behaviours

Mittal, S., Sengupta, A., Agrawal, N. M., & Gupta, S. (2018). How prosocial is proactive: Developing and validating a scale and process model of knowledge-based proactive helping. *Journal of Management & Organization*, 1–26. doi:10.1017/jmo.2017.80

Items are rated using a Likert scale from 1 = 'strongly disagree', to 5= 'strongly agree'.

Items adapted from present tense to past tense to reflect study design

Over the last two weeks I have...

I. Training and development/deficiency

1. helped team members further develop their skills
2. helped the team learn from past events or experiences
3. helped team members who are lacking in requisite skills
4. trained team members to develop their skills

II. Difficult/ambiguous situation

5. advised team members when the situation is new for them
6. offered inputs to team members in understanding unfamiliar situations
7. guided team members when they are not sure what to do in the situation
8. guided team members when they face difficult situation in the work

III. Problem solving

9. talked through problems at work, helping to come up with solution
10. helped team members develop solutions to constraining problems
11. assisted team members in devising the solution to the problems at hand
12. not helped team members when they are faced with difficult problems

IV. Task coaching/mentoring

13. helped team members learn how to do the work
14. guided team members on more efficient way to complete the tasks
15. taught team members how to prioritize responsibilities
16. given tips to team members on easier ways of accomplishing tasks
17. educated team members on the best way to complete the work

V. Constructive suggestions and correction

18. helped team members to identify and correct mistakes by calling attention to errors and omissions
19. given suggestions to team members on improving their work and skills
20. given constructive feedback to team members on the issues with their work
21. refrained myself in making team members aware of their mistakes

Self-reported wellbeing measured using the WHO-5 Wellbeing

WHO. (1998). wellbeing Measures in Primary Health Care/The Depcare Project. WHO Regional Office for Europe: Copenhagen.

Over the last two weeks:

1. I have felt cheerful and in good spirits
2. I have felt calm and relaxed
3. I have felt active and vigorous
4. I woke up feeling fresh and rested
5. My daily life has been filled with things that interest me

Response options:

- All the time
- Most of the time
- More than half of the time
- Less than half of the time
- Some of the time
- At no time

Appendix 4: Skew and Kurtosis of Items in Measurement Model

Items	Min	Max	Skew	Kurtosis
wellbeing Change				
Item 1	-3	3	0.113	1.062
Item 2	-4	3	-0.124	0.945
Item 3	-3	4	-0.023	0.972
Item 4	-4	3	-0.044	0.386
Item 5	-3	3	0.19	0.858
moral elevation				
Item 1	1	5	-0.449	-0.815
Item 2	1	5	-0.372	-0.921
Item 3	1	5	-0.505	-0.876
Item 4	1	5	-0.556	-0.855
Item 5	1	5	-0.336	-0.93
Item 6	1	5	-0.34	-1.136
Item 7	1	5	-0.376	-1.051
Item 8	1	5	-0.529	-0.95
Item 9	1	5	-0.463	-0.891
Item 10	1	5	-0.833	0.257
prosocial intentions Change				
Item 1	-6	6	-1.194	10.767
Item 2	-6	6	-1.074	7.651
Item 3	-6	6	-1.48	7.923
Item 4	-6	6	-0.853	7.964
Prosocial Work Behaviours Change				
Item 2	-2	3	-0.008	0.506
Item 5	-3	2	-0.394	0.439
Item 6	-3	3	-0.107	0.611
Item 8	-4	4	-0.084	0.659
Item 10	-3	2	-0.461	0.093
Item 13	-2	3	0.198	1.055

Appendix 5: Reflective Assessment

Stage	Questions	Reflections
In the Beginning		<p>When I completed a reflective journal for a Masters I completed in Filmmaking, I was given invaluable advice by my tutor: write it as you go on and it's a powerful and useful record of your learning journey. It's also quite easy. Write it just before you need to hand it in and it's a traumatic work of fiction.</p> <p>The former is how I have approached this document and in doing so it has struck me not only how much I have learnt but how much I have learnt when I thought I had already reached a point of understanding. The subsequent journey demonstrated to me how much more I still had – and no doubt have – to learn about mastering a doctorate.</p>
Scoping out your research idea	What challenges did you face and how did you overcome them?	<p>As I sat down for my first proper exploration, I was excited about where this would take me. I started off very broad. Psychology, business, film. I hoped to drill down to something that would fascinate, energise and motivate me.</p> <p>The group sessions we attended filled me with enthusiasm and on reflection I realise how Rachel and Jo let our flights of fancy run away with us. I initially proposed an idea involving MRI scanning, films and empathy – more than enough for a couple of PhDs, far too much for a professional doctorate.</p>

		<p>It was pointed out to me early on how I needed to make sure I stayed within the confines of occupational psychology and not general psychology.</p> <p>As I read and read around the ideas of organisational change, story-telling and film I appreciated that my interests lie in areas of psychology that stretch beyond simply applying to the world of business.</p> <p>A useful learning for me early on was what I wanted to get out of the professional doctorate. I recognised that part of my motivation is that I feel occupational psychology research I have read or applied – particularly around assessment - has little application outside the world of work as well as in work. I was reminded that I was originally drawn to psychology out of a curiosity about people and a sense of getting a clearer understanding of my place in the world.</p> <p>As my career has progressed, the psychology I have been applying has had less and less to do with a general understanding of people and more to do with specific workplace tasks such as selection or redundancies.</p> <p>As I read research, it became clearer to me that the studies that presented narrow application and little transferable insight were of little interest to me whereas those that looked at concepts with far reaching application outside the world of work, those that touched on other areas such as social psychology or individual growth were of far greater interest to me.</p> <p>So, my challenge – if I am to sustain interest in the subject – was to find an area relevant to occupational psychology that I believed had a wider application and if possible,</p>
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		<p>could be applied to my work as a filmmaker as well as a psychologist.</p> <p>Much of my early reading around organisational storytelling and narrative pointed me toward the subject of empathy. The research was broadly indicating that storytelling and films were used to engender empathy for the viewed by the observer.</p> <p>I abandoned the film focused approach and explored empathy. This I thought, would be my area of research but reading around the subject soon highlighted to me that with it being such a huge and well-studied area, my focus would need to be severely restricted. Undaunted I ploughed on searching for specific elements of empathy to focus on, getting ever more specific.</p> <p>As I will address in more detail below, I ultimately abandoned the areas I had initially scoped out. On reflection I don't think I had scoped out areas incorrectly, but I had not identified early enough red flags such as a lack of meaningful research or few weighty papers tackling complex conceptual areas that suggested an area worth exploring.</p>
	<p>Did your initial idea change during this stage? If so, how and why?</p>	<p>As detailed above, my ideas changed quite dramatically from film and storytelling towards empathy, to perspective taking and then to moral elevation. I have addressed this more fully in other sections but it is worth adding here that I think now that this is probably a natural process as you explore the literature. By being curious and open to the possibilities of where the research will take you, I think it is likely that ideas will shift. On</p>

		<p>reflection I am glad that I didn't quickly land on a specific area and rigidly stick to it.</p> <p>The group of fellow students has proved to be a helpful support during the studies – particularly during the lockdown we have experienced. It has occurred to me that where some individuals were wedded to an idea at the beginning, some have struggled once they realised that their reading did not support their initial aims. I feel I have avoided this particular pain.</p>
	<p>How did this process differ from your expectations?</p>	<p>I have adopted an open approach to the learning as it has unfolded. What has become clearer to me is that the doctorate is as much about the process of learning as it is about a particular body of research or an output. Each time I return to the study, things are a little clearer and I'm a little more confident about my skills. I have traditionally crammed in work, often just meeting deadlines. What has become evident for me is that when it comes to undertaking research, I need to undertake a different approach if I am to be successful. I need to let ideas sit and percolate, problems to evaporate as I reflect on them during a morning run. This process is a slow, long jog for me and not a sprint.</p>
	<p>What were your key learnings from this stage?</p>	<p>There have been a number of practical but very helpful learnings around how to engage with research papers. Using the library, search functions and Endnotes while painful at times has broken down a barrier that had built up for me over decades with regard to research. I recognise that almost all of my theoretical understanding in the last decade or so has either been based on old research or on an author's interpretation in a non-fiction</p>

		<p>business guide. The last time I fully immersed myself in academic papers was during my MSc over 25 years ago. An MA in more recent years cemented the idea that it was easier to stay away from scientific academic papers.</p> <p>The introduction and subsequent exploration of the library's resources has taught me not to fear or avoid raw research. Indeed, the relative simplicity with which information can be gathered has meant I have turned to it frequently. Proposals and advice are now accompanied with references to a research article rather than simply years of experience.</p>
	<p>What would you do differently if you were to go through this process again?</p>	<p>Very simply I would have got stuck in earlier. I spent too many days at the beginning of the research thinking that unless I could devote a significant chunk of time on the work in one go, it would not be worth doing any. At this stage I now believe that the work is going to be best undertaken by slowly and methodically tackling the stages bit by bit. I am mindful that my changes in understanding and perspective on the task shift as the days pass. This is only possible for me by looking at the research over extended periods of time – cramming in will not work. In fact, I realise that if I do simply cram in the research, I may obtain a doctorate, but I won't have transformed my way of thinking.</p>
<p>The systematic review: Developing a protocol</p>	<p>What challenges did you face and how did you overcome them and how did this process differ</p>	<p>I started off this stage thinking I had cracked it. I thought I knew what I was going to study and developing a protocol would be straightforward. Having read systematic reviews and listened to the discussions about</p>

	<p>from your expectations/pl an?</p>	<p>the process, I believed it would be a linear, simple process. What happened was far from this.</p> <p>I developed what I thought were sensible questions and started to identify papers. 100s or thousands emerged. It quickly became evident that I needed to narrow my focus to make the work manageable, but how?</p> <p>I was very fortunate – or so I thought at the time - that I had a eureka moment while attending the Occ Psych conference in January 2020. (Attending the event was only prompted by my being part of the doctorate programme. That I got so much from the event was another bonus of embarking on the doctorate.) While attending a presentation about Empathy, the speaker pointed out how comparatively little research has been undertaken on the related are of perspective taking. This area is often considered to be a subcomponent of empathy or a different focus on the issue. It dawned on me that this might be the breakthrough I needed in terms of focusing my study. It still ticked the boxes of being work related but also relevant to wider application. In particular it is of interest to me as it forms a key plank of mediation, another area of professional interest for me.</p> <p>Armed with this, I set about refining my protocol and returning to the databases. The numbers became manageable and a study in sight.</p> <p>What became apparent at this stage, however, was that this is not a linear process. Particular questions still yielded too few or too many papers leading me to further revision and I discovered that additional papers that appear during this process can also be included – growing</p>
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		<p>pearls. As I delve deeper, it becomes clearer and clearer that the structured approach that appears to underline a SLR is not quite as structured as the papers suggest.</p> <p>For me, however, this was not the end of the story of developing a protocol as I will detail below as I discuss the extraction process.</p>
	<p>What were your key learnings from this stage and what would you do differently if you were to go about developing a protocol again?</p>	<p>Much of the learning in this stage was about the nature of the topic I focused in on. I felt that there was steep learning curve in terms of knowledge. As a reflection on practice, I take from this that much of the knowledge learning for me can only take place when I am working within the constraint of trying to reach a particular outcome: the protocol in this instance.</p> <p>I effectively developed two protocols before developing a research proposal and the second iteration was a far less painful process. I think what I took from the first iteration to the second was the importance of specificity of the questions you are asking. I also was much more rigorous about asking myself 'so what?'. This approach helped me focus on questions that would be of value to organisations and society more broadly.</p>
<p>The systematic review: Data extraction</p>	<p>What challenges did you face and how did you overcome them and how did this process differ from your</p>	<p>I was filled with unjustified joy as I undertook my first extraction, tackling the concept of perspective taking. The process felt achievable if somewhat mechanical but then my research derailed.</p> <p>Initially I had found it satisfying that I had found a little studied cul-de-sac of the Empathy research that I could sink my teeth into. The research studies were varied and instantly understandable but as I delved into them in</p>

	<p>expectations/pl an?</p>	<p>more detail, I realised that they were understandable because they were trivial with scant evidence of a deep theoretical basis.</p> <p>At this point I paused and reviewed why I had decided to undertake this doctoral research. As well as desiring to immerse myself in an area of psychology with practical application to my current work, I also wanted to develop my expertise as what I often call a 'proper psychologist'. What I mean by this is that, as noted above, I have found throughout my career as an occupational psychologist that much of my work - particularly in the realm of selection and assessment - has offered pragmatic and prosaic solutions that frequently shed very little light on the broader human condition or even the broader condition of work. When I decided to study psychology as a teenager, that was my driving interest, not the validity of a selection interview.</p> <p>I reminded myself that this doctorate is an opportunity to return to the genesis of my career. This is an opportunity not to be squandered and I see that as I pulled apart the perspective taking research there was a danger that I would be left with very little to sustain my interest over the coming years.</p> <p>It had become evident to me, however, that an SLR does not need to include a glut of fascinating papers to do its job. So, I found myself with a difficult decision: continue with perspective taking as an area of study, keep on top of the timeline that has been set out and risk spending the next year and a half pursuing research that is uninspiring and unsatisfying or jump into the murky,</p>
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		<p>uncharted territory of beginning my research again. I decided on the latter, and I am pleased I did as my subsequent research has proved to be significantly more satisfying for me.</p>
	<p>What were your key learnings from this stage and what would you do differently if you were to go about it again</p>	<p>The process of returning to the beginning was a fascinating and in itself rewarding one as I appreciated how much I had already learned over the preceding 9 months.</p> <p>Firstly, I found I was able to get to grips with research papers more quickly than a year ago. The fog that often descended as I tried to penetrate academic writing had lifted. This was in part due to familiarity with the language but was also down to the recognition that most papers in an area simply build on and refer to each other. This now feels like an obvious truth but as an undergraduate, master's student and practitioner, I had never given myself the chance to become familiar with an entire body of research. It was much more typical to be given one or two key papers about a subject and expect to glean all the key issues pertaining to that area.</p> <p>What I found from reading multiple papers about a subject is that repetition of areas of discussion makes those issues much simpler to grasp. I believe this is because of two reasons. One reason is simply because I am revisiting a complex issue that takes time to understand but more importantly it is because the opaque language of one paper is often illuminated by the lens of another writer. The upshot of this now blindingly obvious revelation is that I no longer become bewildered or dispirited if I struggle with a paper. Now I just</p>

		<p>understand what I can knowing that it will become clear as I study more papers in the area and then return to the paper that is troubling me.</p>
<p>The systematic review: Assimilation and write up</p>	<p>How did you come to a decision on the way to cluster the data and tell the story?</p>	<p>In some senses the clustering and storytelling emerged as self-evident from the research. I was in some ways fortunate in that as there were relatively few papers, covering relatively few areas. It was therefore difficult to avoid the key themes that had emerged. I also referenced back to the thesis introduction to ensure that the thematic discussion reflected the beginnings of the story set out earlier in the thesis.</p>
	<p>What challenges did you face and how did you overcome them?</p>	<p>A key challenge was an entirely self-inflicted one. As I spent such long time between embarking on the research and writing up the final chapters, I believed that a better representation of the research could be achieved by returning to the literature to ensure that my review was still up to date and relevant. This revealed several relevant and interesting papers that significantly improved the value of the review.</p> <p>A second challenge was becoming confident to comment on the methodology and statistics presented in the research. Overcoming this was simply a hard slog – seeking papers and commentary on the statistical techniques referred to and reaching considered conclusions. My hunch is that many psychologists read papers and simply accept the studies as being of value. I hope that I am now a little better equipped to understand research.</p>

	<p>How did this process differ from your expectations/plan?</p>	<p>My reading of SLRs at the beginning of this research led me to believe they were more objective and ‘scientific’ than proved to be the case. I think I felt that following the process would lead to some unequivocal truth about the topic. Now I am at the other end of writing an SLR and having reflected on the content of others, as well as having read papers critiquing them, I realise that they are step forward in the search for evidence, but we should not shy away from the fact that SLRs still involve judgement and subjectivity. Indeed, I argue that it is the judgement of the reviewer that still makes an SLR valuable. The tables and numbers offer some clarity of the scope of the evidence, but it is the evidenced conclusions of the reviewer that really add value.</p>
	<p>What were your key learnings from this stage?</p>	<p>Apart from the significant amount of information about my topic that I learnt, a fundamental learning for me is that the quality of much of what is written is poor. This I have found quite shocking and dispiriting. On numerous occasions I found papers that incorrectly reference another paper. It is not just that researchers play fast and loose with the evidence of other researchers but sometimes they simply get it wrong. This is not in the realms of making a nuanced judgment about a paper but simply drawing a conclusion that can’t be drawn such as writing that a paper looked at behavior when it looked at intentions.</p>
	<p>What would you do differently if you were to go</p>	<p>My learning here is not so much a particular process change I would make to the way I would write up my findings but rather a sense that I am now better equipped to extract information and understand the complexities</p>

	<p>about writing up again?</p>	<p>of the data. I think I have gained confidence in my judgements about the quality of evidence.</p> <p>I also recognise the importance of getting the question right. I don't think my SLR has contributed as much as I would like it to have to the body of psychological research. This is possibly because the area I am looking at is still reasonably new. Perhaps it is too new to benefit from an SLR. On reflection, I think that I maybe should have focused on a different question. Nevertheless, as detailed above, I recognise that the doctorate is as much about learning about conducting research as it is creating a particular output. As such the endeavour served me well and I believe it has made me a better psychologist.</p>
<p>Research Study: Design and Proposal</p>	<p>How did you come to a decision on the study/studies you were going to undertake?</p>	<p>I have found this a very interesting question, and my answer surprises me. After much struggle finding an area to focus on and then extracting data to understand the current thinking, the decision over what the study should look like it just naturally arose. This feels like a poor answer, but I think it's because there was an inevitability about what needed to come next in the research once I had narrowed down an area of thinking and read what other researchers had found. The research essentially begged the questions that I set about to answer in my design. This in turn dictated the approach to the research. I could not extend the current understanding by abandoning current approaches and taking an entirely different route.</p>
	<p>Why did you decide to use the particular</p>	<p>The research so far has really taught me the meaning of the oft cited phrase, 'standing on the shoulders of giants'. While my natural inclination is to start with a blank sheet</p>

	methodology/analytical process?	and invent my own approach, the doctorate has taught me the value of building on others' research if we are to make a useful and meaningful contribution to a body of knowledge. And so my approach has reflected this as detailed in the previous question. This feels a little uncomfortable at the moment and will therefore merit further reflection as I undertake the research study.
	What challenges did you face in the design process and how did you overcome them?	This has been the intellectually most challenging element of the research so far. My brain has ached as I've scribbled down mind maps and tried to work out how A might predict B, mediated by X and moderated by Y. As I've enthusiastically embraced previous research, my ideas for a study have grown to a point where I could no longer see where they started from.
	How did this process differ from your expectations/pl an?	I love innovating. I love tackling something that nobody has tackled before. I learnt, however, that when it comes to research, this approach would lead me to bewilderment and paralysis as I became aware that I lacked the skills and expertise to start from scratch. I have learnt now that this doctorate is more about learning about research than it is about developing a novel area of research that might stun the world with our genius. As such, taking small steps forward at this point is absolutely fine, indeed will lead to higher quality than attempting to re-write the way research is undertaken
	What were your key learnings from this stage?	There are a number of technical aspects that I am pleased to be getting to grips with. This learning has been fueled by the helpful insistence to justify every aspect of my research proposal. Why this approach? Why work with

		<p>such a population? Why incorporate particular stimuli?</p> <p>My initial vague ideas have been honed as I've studied statistical techniques, sampling, experimental design and measurements. While I recognise that my expertise needs to develop significantly over the coming year, I feel that I am much better equipped to incorporate many of these concepts into my practice.</p> <p>What has been particularly informative has been the learning of areas that I won't be incorporating into my own study such as the basics of qualitative analysis. During my BSc and MSc, qualitative analysis was largely dismissed. It has been stimulating to become acquainted with several methods I was completely unfamiliar with.</p>
<p>Research Study: Gathering data</p>	<p>How did you go about gathering data and accessing participants? Why did you choose this route</p>	<p>Having decided to adopt a quantitative approach and SEM, I was aware that I needed to gather a large number of participants. I had also decided to attempt a non-WEIRD study so I set myself the additional task of gathering responses from a wide range of individuals from around the world. The latter decision was a response to criticism of much of positive psychology and my growing interest in global development work. On top of this, I needed people who were working in teams. I looked at the costs of recruiting participants through online portals but this proved to be very expensive so I created adverts and placed them in social media channels. I then sat back and waited</p>
	<p>What challenges did you face when gathering data/accessing</p>	<p>Unsurprisingly in hindsight, it was much more difficult getting people to sign up than I had anticipated. People simply did not respond. In the end I had to just beg and cajole all my contacts to ask their contacts until I got the</p>

	participants and how did you overcome them?	numbers I needed to. I then had to write individual emails to lots and lots of people. Nothing clever or spectacular, just hard slog.
	How did this process differ from your expectations/pl an?	I had naively thought people would respond to my adverts and I had not anticipated the amount of work that it would take to gather a sample.
	What were your key learnings from this stage?	Don't try to conduct a study requiring large amounts of data from a specific group unless you are confident that you have a clear plan about how to find the participants.
	What would you do differently if you were going to begin this stage again, and why?	I don't think I would try to conduct such a study unless I had clear access to the appropriate target population. In the end I was not able to gather non-WEIRD data and the sample is disproportionately older women. This undermines the generalizability of the findings and challenges what I was trying to achieve from the outset.
Research Study: Analysing data	How did you go about analysing your data? Why did you choose this route?	I chose SEM. I have set out in my methodology the reasons for this choice. From a personal point of view, I was also interested in exploring a technique I had not attempted before. It is seen as a rigorous and valuable approach and I felt that beyond its value to my study, it would give me useful insights into a range of research. I also felt it would give me a sense of achievement if I was able to tackle it.

	<p>What challenges did you face when analysing your data and how did you overcome them?</p>	<p>SEM is really really difficult – at least I found it to be so. I found it conceptually very challenging and a significant step up from other analysis I have conducted in the past. I had to learn it from scratch on my own from books and youtube videos. The online courses I found were incredibly useful and I would not have been able to tackle it without them.</p> <p>There were also practical challenges to overcome in that I needed to conduct the analysis on a PC rather than a Mac which involved creating an emulated Windows environment on my Mac and conducting the analysis within it. Even working out how to do this was a challenge that took several days.</p>
	<p>How did this process differ from your expectations/plan?</p>	<p>I have handled data analysis challenges well in the past – indeed I pursued SEM as I wanted the challenge – but I was surprised with how difficult it was to master</p>
	<p>What were your key learnings from this stage?</p>	<p>My key learning was how to undertake SEM and what it contributes to my understanding of research. My hunch is that many people reading published research do not really understand what they are trying to interpret when reading SEM output. I feel that I will have a much better grasp of research that I read in the future.</p>
	<p>What would you do differently if you were going to begin this</p>	<p>Once I had chosen an analytical path, I should have sought more advice early on to establish if I had the skills to undertake it. In an ideal world I would have worked out how to undertake it before I had research data to deal</p>

	<p>stage again, and why?</p>	<p>with. I may have taken a different route with the research.</p> <p>To be candid, I think taking on SEM was probably a learning stretch too far. At times I felt like I was drowning and at other times I felt like I was clinging on to a cliff with my finger tips. While I am pleased that I managed to learn this approach, I think my energies could have been better deployed in other aspects of the research.</p>
<p>Research Study: Writing up</p>	<p>What challenges did you face when writing up your study and how did you overcome them?</p>	<p>The challenge here was the complexity of what I was trying to make sense of and convey. What did the findings mean? What contribution have I made? This was made more difficult by my not producing results that supported all my hypotheses. What did a negative or inconclusive result mean? How could I write this up to be of use to others?</p>
	<p>How did this process differ from your expectations/pl an?</p>	<p>I guess I had not properly considered how to deal with research that shows very little. I had probably thought I would show something fascinating and the write up process would therefore be an easy process of conveying how my hypotheses were well founded.</p> <p>As well as being conceptually difficult, this was also motivationally difficult as write up became more about the doctoral process than about getting my findings out there for the world.</p> <p>Someone suggested to me that the write up is the hardest and most tedious part of the process as by this point you already know everything you want to and if your findings aren't groundbreaking, there are probably all sorts of reasons for moving on.</p>

	What were your key learnings from this stage?	Chipping away was key to the write up. It was like I was carving away at a big slab of stone. For a long time it did not reveal anything and would not be rushed. Patience was required – with my own shortcomings and inability to blast through it.
	What would you do differently if you were going to begin this stage again, and why?	Writing up while undertaking several other projects was challenging for me as when I returned to the write up after days or weeks, I really struggled to re-acquaint myself with the material. Towards the end I ensured I was carving out chunks of weeks to focus on the doctorate. I think for this kind of work that kind of dedicated time is important for me.
Overall Doctoral Process	Reflecting on your doctorate, how do you feel you have developed (e.g. technical expertise, theoretical knowledge)?	<p>As stated above, my improved understanding of specific statistical techniques has been significant. This is a particular technical skill I now feel I have but the I feel it is the less concrete aspects of the learning that have had the most profound impact on me. For many years, reading research papers was a challenge as they felt impenetrable. The SLR process forces you to read papers properly and makes sure you understand them in granular detail. This is something that I hope I will carry forward in my career.</p> <p>My theoretical understanding of a wide range of areas – basic psychological issues such as emotion, motivation, basic neuropsychology – had increased beyond recognition.</p> <p>For years I felt that my application of psychology as an occupational psychologist was a little fraudulent and that any day I would be caught out as not knowing anything.</p>

		<p>For the first time in a number of years, the doctoral research has left me feeling like I am a proper psychologist.</p>
	<p>Can you see any changes in your practices and/or professional plan as a result of undertaking this doctorate and associated learnings?</p>	<p>As I embarked on the programme, I was pursuing communication projects more and more and leaving some of the old projects I was involved in such as assessment and selection behind.</p> <p>The programme has doubled my resolve to continue down this avenue as I find it immensely rewarding and incredibly fascinating. I don't think I would have had the confidence to commit so wholeheartedly if I had not had this opportunity and my knowledge of psychological theories of value to organisations around communication matters has been improved beyond recognition by the programme. Indeed, I needed this kind of programme to be able to operate in the way I want to in the next chapter of my career.</p>
	<p>What has been the most useful element of the process for you?</p>	<p>This has proved to be probably the most interesting question for me as I surprise myself by finding that the SLR was the most useful to me as it forced me to explore an area in great detail and re-learn how to really understand published research. I feel that before this I had probably given research papers a more cursory examination and it is definitely the case for me that if an element of a paper was too difficult for me to grasp after a couple of reads, I would not pursue it. Of course, this was not possible when undertaking an SLR, so it trained me to understand findings and to spot methodological flaws. It was this area of study combined with discussions with other doctoral students who also found many</p>

		<p>papers flawed that I grew in confidence in my understanding of the research. Prior to engaging in the programme, I would most likely have assumed that all papers are good papers and if I thought otherwise, I must have misunderstood them. I am now much warier of findings and a better practitioner for it.</p>
	<p>What has been the most rewarding element of the process for you?</p>	<p>Learning about many aspects of psychology that I was previously unfamiliar with was the most rewarding experience. One of the motivations for undertaking the programme was to allow myself to dive deeply into psychological research for the first time in many years. This I did to a greater extent than I could have imagined. In my case this was a particularly fruitful endeavour as I pursued one area and after finding it did not offer the depth I hoped for, I started another area. Simply the process of exploring areas of research offered my insights.</p>
	<p>What has been the most challenging/frustrating element of the process for you?</p>	<p>As detailed above, writing up when your research has not produced the results you hoped for is frustrating and oftentimes tedious. This was all on me though – not about the support or the demands of the programme. It was just very hard motivationally to carry on with work that did not have the value that you hoped it would.</p>

	<p>What would you tell someone beginning this process? What are the key things they should know/avoid/prepare for?</p>	<p>Ask yourself a number of times why you are doing this research. The challenges, demands and pressures it puts on other aspects of your life can be considerable. If I had realized this at the outset, I am not sure that I would have put my family and friends through it.</p>
<p>Ethical considerations and management of boundaries</p>	<p>What ethical considerations did you make and why?</p> <p>Has this impacted your practice outside the doctorate?</p> <p>Was there anything that you would do differently next time?</p> <p>Looking forward to conducting your research, is there anything that you need to keep front of</p>	<p>What I have found most striking and perhaps shocking is how little attention is given to ethical considerations when working as a practitioner. Of course, we follow best practice guidelines, but these steps don't nearly go as far as they do within the doctoral research programme. I certainly do not give as much consideration to ethical issues as I believe I should do.</p> <p>This, I believe will continue to have a profound effect on all of my work as a practitioner. Curiously as I have recently developed a parallel career as a filmmaker, the issues of consent, appropriateness and wellbeing have been addressed as part of studies and development to a greater extent in that sphere than they have been in an occupational psychology setting over many years.</p> <p>I was aware as I undertook my empirical research, that I need to be much more mindful of ethical issues than I probably am on a day-to-day basis. This is particularly important given the type of study that I am undertaking. I am looking to see how particular stimuli might prompt or encourage behaviours. Essentially my research will look at the mechanisms for changing behaviour and as</p>

	mind or need support on?	such I must take great care to ensure that any changes are not to the detriment of participants nor society. This concern extends to how my research may be used by others wishing to manipulate behaviour. What will be important going forward will not only being careful to ensure that proper consents, duty of care etc. has been attended to but also that the findings are carefully reported and disseminated so that I minimise the chance of them being used inappropriately or misrepresented.
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