A systematic narrative review on the effectiveness of psychological interventions on workplace stress



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**Declaration**

I declare that this submission is my own work. Where I have read, consulted, and used the work of others, I have acknowledged this in the text.

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**Abstract**

Workplace stress is a crucial, increasing issue that requires attention and focus. The effects of stress in the workplace can be detrimental to both employees and the work organisation itself. Stress management interventions can be implemented into workplaces in order to help relieve the effects of workplace stress. These interventions can vary in duration, intensity, and design. This systematic narrative review analysed existing literature to investigate which interventions are most effective in the workplace. Google scholar and Pub Med were searched for peer reviewed published papers that fit the inclusion and exclusion criteria of this review. 2,380 papers were initially identified. This was narrowed down to ten which were included in this study. This study’s findings suggests that mindfulness-based interventions are the most researched and implemented in workplaces. Each intervention researched in this study was found to be effective in reducing stress. There were other benefits of these interventions as well as stress reduction, such as improvement in sleep, and reduced rates of burnout. This review emphasises that any intervention that is implemented correctly has positive benefits. There were various identifiable limitations of this study, such as the small number of papers included and potential lack of accuracy. Some suggestions for future research include using a wider search criterion, including more papers in the study, and adding intervention weighting to the papers.

**Introduction**

* 1. *introduction to the review*

Stress is defined as the adverse psychological and physical responses that an individual experiences as a result from their inability to manage demands placed on them (Moorhead et al. 1998) (Daniel, 2019) (Robbins & Sanghi, 2006). Work-related stress is a type of stress that refers to when an individual believes that they do not have the capacity to react to the pressure, difficulties, and responsibilities of their job (Curbow et al., 2000). The present study aims to systematically review and produce a narrative description of the literature looking at the effectiveness of psychological interventions used in the workplace to reduce work related stress, and to provide directions for future research and implementing of such interventions.

*1.2 the prominence of stress in the workplace*

Stress management has become a pressing topic as problems relating to workplace stress have been increasing (Petković & Nikolić, 2020). In 1998, Swanepoel et al., believed that the world of work was subject to rapid change, and the demands being placed on employees were dramatically increasing. This in turn resulted in employees experiencing increased stress levels (Swanepoel et al., 1998) (Daniel, 2019). According to the American Psychological Association, 64% of adult employees reported feeling work-related stress in 2019 and 2020 (American Psychological Association (APA) 2020). It’s important to note that this statistic reflects the American population rather than the Irish population. When investigating stress in the workplace in Ireland, it is clear that it is also a relevant issue that requires focus and attention. According to a poll conducted in 2023 by the recruiting company Robert Walters, 60% of professionals in Ireland said they had experienced work-related stress that year. 55% of the respondents stated that they believe employers are not doing enough to counteract work-related stress (Robert Walters, 2023). Between 2010 and 2015, Ireland was among the nations where occupational stress increased at the fastest rate (Russell et al., 2018).

*1.3 Reasons for stress in the workplace*

There are many reasons as to why stress in the workplace is increasing. Several psychosocial problems related to the workplace have been established (Oakman et al., 2023) such as bullying (American Nurses Association, 2015), long work hours (National institute for Occupational Safety and Health, 2015) and role conflict (Cox et al., 2000). These hazards emphasise the intricacy of the environment of work organisations, and the wide range of possible contributing factors that affect the physical and mental well-being of employees (Oakman et al., 2023). Globalization has resulted in characteristics of work evolving. The changes in characteristics can lead to higher job demands and lower job security, which contribute to increased work-related stress (Forastieri, 2016). Poor working conditions can be detrimental to employee’s wellbeing and mental health (World Health Organization (WHO) 2022). These conditions include an unreasonably heavy workload, job insecurity, lack of job control, inequality, and discrimination (World Health Organization (WHO) 2022).

Research has demonstrated that when the appropriate physical work environment characteristics are not met, work performance suffers. Inappropriate working conditions include improper lighting, noise, and incorrect temperatures (Nekoranec & KmoŠena, 2015). Workers worldwide are experiencing great pressure to fulfil the requirements of modern working life (Forastieri, 2016). The digitalization of work and communication methods is developing and will continue to grow further in the modern workplace (Bregenzer & Jimenez, 2021). Rapid communication and intense global rivalry drive the fast pace of work today. These driving factors are resulting in the separation of an employee’s work and personal life becoming more difficult to draw (Forastieri, 2016). This continually blurring line may result in family conflict (Taşdelen-Karçkay & Bakalım, 2017). There may be hazards involved with modifications of the workplace that may harm employees’ well-being (Bregenzer & Jimenez, 2021). A hierarchical regression analysis carried out by Bregenzer and Jimenez (2021) on a total of 1412 employees across Europe demonstrated a correlation between each of the four risk factors associated with digital work and increased workplace stress.

The four risk factors are ‘dispersed teamwork, mobile work, constant availability and inefficient technical support’ (Bregenzer & Jimenez, 2021). A clear example of this is in the banking sector. This particular sector has been subject to rapid developments in digitalization. The daily lives of employees and their working conditions have been affected by new technologies and organisational structuring. The majority of research carried out regarding employee’s mental health in the banking sector, demonstrated that there had been an increase in mental health problems in the workplace. Such problems included anxiety, depression, and job burnout (Giorgi et al., 2017).

*1.4 The Covid-19 Pandemic and Stress*

The recent covid 19 pandemic has had a profound effect on employees and workplaces globally (Kniffin et al., 2021). It resulted in millions of employees being required to Work from Home (WFH) abruptly, from March 2020 onwards (Oakman et al., 2023). An increasing amount of research conducted is examining how WFH during the covid 19 pandemic may have impacted employees’ health (Niebuhr et al., 2022).

Due to the pandemic, employees were required to social distance. Social connections in the workplace were lost due to employees being forced to WFH or being laid off. Previous research demonstrates the value of high-quality social interactions, such as casual conversations amongst employees (Mogilner et al., 2018) and handshakes, which were prohibited. Gestures such as handshakes are highly valuable and necessary for good physical and mental health of employees, and for social connections (e.g., Schroeder et al., 2019). (Kniffin et al., 2021). The effects of the pandemic on the workplace remain to this day. According to a study carried out by Bonin et al., (2020), up to 93% of employees have a desire for WFH to be option for them, even post pandemic. Most employees desire a hybrid work arrangement that combines office-based and home-based workdays (Bonin et al., 2020).

According to Demerouti et al. (2010), covid 19 has increased the likelihood of employees experiencing job burnout. This is a chronic stress syndrome, that can be identified by consistent fatigue and a detached attitude towards work (Demerouti et al., 2010). Employees’ constant exposure to the pandemic through the media may also be responsible for symptoms of distress. Previous research has suggested that those exposed to substantial incidents for e.g., hurricane Katrina, experience above-baseline stress and depressive symptoms that lasted over a year following the incident. This indicates that the psychological effects associated with exposure of an incident, like the COVID 19 pandemic, may remain for a long duration (Kniffin et al., 2021).

Stress-related symptoms are affected by the percentage of the working week that an individual spent working from home. For example, higher weekly WFH hours corresponded to high stress-related symptoms. The research also suggested that WFH has a detrimental effect on an individual’s job satisfaction. The findings suggest that WFH requires legal regulation (Niebuhr et al., 2022).

*1.5 The effects of stress*

According to Sormaz & Tulgan (2003), stress is neither a negative nor positive thing/phenomenon. Stress is inevitable and plays an important role in life. The effect it has on an individual depends on the interpretation of the stress and the individual’s ability to deal adequately with it (Sormaz & Tulgan, 2003). Stress frequently has negative effects on work organisations and employees (Daniel, 2019). Such negative effects include high rates of illness and absenteeism in employees, increased employee turnover, decreased task performance, conflict in relationships among colleagues, memory decline, and cognitive and decision-making functioning diminishing.

Work-related stress may also effect have physiological effects on an employee, such as high blood pressure or gastrointestinal disorders. Therefore, organisations can benefit greatly from decreasing the stress levels and bettering the overall well-being of their employees (Nekoranec & KmoŠena, 2015) (Holman et al., 2018).

As discussed, stress is not necessary an absolute negative phenomenon (Sormaz & Tulgan, 2003). Work-related stress can provide some positive benefits. Stress often prompts action in the workplace. When managed correctly, stress can improve efficiency and performance, and can be beneficial for employees (Sormaz & Tulgan, 2003). A crucial element to managing stress in the workplace correctly is to develop a deep understanding of it, in both individual and team scenarios (Sormaz & Tulgan,2003).

*1.6 Stress Management Interventions*

Organisations can implement stress management interventions (SMI) in the workplace. These are a class of measures and practices that help combat high stress levels by treating the root cause/s of stress or by minimizing the effects of stress on the individual (Holman et al., 2018). Literature on stress management categorises interventions based on the “focus” of the stress management and the “level” at which the intervention is implemented (DeFrank & Cooper, 1987; de Jonge & Dollard, 2002). SMIs can be categorised into primary, secondary, and tertiary, aswell as individual-level interventions and organisational-level interventions.

Individual level interventions concentrate on assisting employees in developing skills to deal and cope with stress, as well as helping reduce stress levels. Organisational level interventions focus on the systemic changes that can take place in an organisation that will focus on all employees or a certain team of workers (Holman et al., 2018).

While primary level interventions seek to prevent stress occurring by eliminating the sources and promoting wellbeing, secondary interventions are used when stress is already an issue. The aim of secondary interventions is to lower the severity or the duration of the stress. Tertiary interventions aim to optimise the functioning and promote rehabilitation for those who are already experiencing severe levels of stress or are experiencing psychological ill-health. Another category, called individual-organisation level intervention, focuses on modifying the relationship between the employee and organisation. Individual-organisation interventions include peer support groups (Holman et al., 2018). According to LaMontagne et al., (2007), interventions that combine elements of both individual and organisation levels and adopted a more systems-based approach proved to be more successful.

An example of a primary individual level intervention is the selection and assessment processes which choose applicants who are best equipped for the demands of the job and those who may be susceptible to experiencing stress (Bartone et al.,2008). This procedure is rarely carried out (Giga et al., 2003). Secondary individual level interventions are one of the more commonly used interventions.

This includes meditation, CBT therapy, and mindfulness (Holman et al., 2018). Scholars claim mindfulness may help lower stress levels in employees as it allows individuals to respond adaptively to stressful situations by allowing them to focus on the event in a nonjudgmental, accepting way, as well as improving their psychological wellbeing (Michel et al., 2014) (Cohen-Katz et al., 2005) (Hülsheger et al., 2013). Van der Klink et al., (2001) discovered that cognitive behavioural therapy (CBT) had substantially higher effect sizes than those for relaxation techniques.

A statistical analysis of the impact and a comparative study between mindfulness and other techniques are lacking. Various factors may influence the effectiveness of secondary individual-level SMI. These include contextual elements, variations amongst participants (e.g. enthusiasm, beginning states of well-being) or the implementation procedure (Holman et al., 2018).

Tertiary individual level interventions include Employee Assistance Programmes (EAP) deliver counselling and advice to employees suffering from high levels of stress or mental health problems, regardless of whether the issues are related to work (Bhagat et al., 2007; Csiernik, 2011; McLeod, 2008).

The implementation of organizational-level interventions often can prove to be challenging and intricate. Previous study in this area suggests that “preparation, screening, action planning, and implementation” are four essential tasks that must be implemented for effective intervention (Nielsen et al., 2010).

Primary organisational level interventions include job redesign interventions which strive to alter job characteristics, for e.g., workload, ergonomic design, in order to better the well-being of employees make up the majority of primary organisational level interventions that have been documented in literature. There is a robust theoretical and empirical basis, which demonstrates that job characteristics like such are important antecedents of workers wellbeing and stress (Humphrey et al., 2007; Demerouti et al., 2001).

Secondary organisational level interventions include activities such as peer support groups, that allow employees to talk about the challenges that they encounter in the workplace (Peterson et al., 2008) and communication skills training programmes that aim to enhance the ability of all employees’ capacity to handle stressful scenarios (Ghazav et al., 2010; Leiter et al., 2011).

According to La Montagne et al., (2007), the engagement and involvement of employees is beneficial as employees become more committed to implementing the change initiatives. It gives employees an increased feeling of responsibility. Employee participation can also enhance the quality of the initiatives by utilising employees’ skills and experience to make them suitable for the context.

Multimodal interventions combine various interventions. Some combine individual and organisation level interventions while others combine just organisational interventions. According to Richardson and Rothstein (2008), multimodal effects grow stronger over time and are longer-lasting, than effects from a singular-modal intervention. However, some contradicting meta-analytic studies carried out suggest that a multimodal secondary level intervention do not clearly outperform single secondary individual level SMI (Klink et al., 2001) (Richardson & Rothstein, 2008) (Holman et al., 2018).

Holman et al., (2018) reports on the potential disadvantage that may emerge from using this type of intervention. These include an increase in the complexity of implementation and potentially decreasing the efficacy of one intervention by lowering that of the other.

A systematic review was carried out by Janssen et al., (2018) to gain a greater insight into the impact of mindfulness-based stress reduction (MBSR) and Mindfulness-Based Cognitive Therapy (MBCT) on the psychological wellbeing of employees. Articles were identified and used, 22 of them were looking at the impact of MBSR and 1 on the impact of MBSR in combination with some elements of MBCT. The effect of MBCT isn’t described in this systematic review as there were no papers that focused on this solely. The results of this systematic review suggest that MBSR may assist in enhancing employee’s psychological functioning (Janssen et al., 2018).

*1.7 Systematic narrative reviews*

This review follows a systematic narrative review structure. Systematic narrative reviews are a type of research design that combines elements of a systematic review and a narrative review. Systematic reviews comprehensively evaluate the existing data available in order to answer a particular research question. In order to conduct a successful systematic review, it is advisable to follow the guidelines of PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-analyses) (Moher et al., 2009) (Harris et al., 2013). Systematic reviews main aim is known to summarise data (Greenhalgh et al., 2018). Narrative reviews offer analysis and interpretation, and their primary function is to increase understanding (Greenhalgh et al., 2018). Systematic and narrative reviews are frequently viewed as complementary as they have different functions (Greenhalgh et al., 2018).

This review is important to conduct as it is crucial to tackle the rising issue of work-related stress to improve the well-being of employees and employers. The literature on stress management interventions needs to be reviewed regularly so that organisations can implement the most effective interventions so that the organisation itself and employees can greatly benefit.

**Method**

* 1. *Method design:*

The aim of the current study is to analyse the effectiveness of psychological interventions on stress in the workplace using a systematic narrative approach. Systematic narrative reviews are a combination of a systematic review and a narrative review. A systematic review analysis is usually used for a narrower research question. A systematic review analyses existing data in order to answer a particular research question (Greenhalgh et al., 2018). This research design has several limitations. Systematic reviews have been criticised for a lack of careful, interpretive, critical consideration, which can result in deception (Greenhalgh et al., 2018). A narrative review provides a more comprehensive analysis and includes a wider range of contextual information. A valid critique of narrative reviews is that they “filter out” data to support a certain viewpoint (Greenhalgh et al., 2018).

* 1. *Method procedure:*

The variables of interest for this systematic narrative review are workplace wellbeing, stress management, intervention, and stressors. To direct the subsequent search procedure, inclusion and exclusion criteria were developed based on the study’s objectives. The inclusion criteria included that the year of publication must be after 2012, the paper must be written in the English language, the paper must be from a peer reviewed journal, and the paper must mention at least one of the key words listed below in the table. The exclusion criteria for this review included that any papers published before 2012 were not deemed appropriate to be included, any papers not written in the English language were not included in this review, and if the paper was not from a recognised reviewed publication, it was also deemed as inappropriate for this study. Peer reviewed empirical publications were included in this review in order to ensure a high quality appraisal criteria.

Two different databases were used in the search process of this study (Google Scholar and Pub Med). Relevant research and publications were recognized by searching databases online for articles using the key words listed in the table below. Different combinations of these key words were used in order to find the most appropriate peer reviewed journal articles for this study. Key words were chosen from investigating similar research that has been conducted in this area.

A filter was applied during the search stage of this review which meant that only articles that were published from 2012 onwards displayed. Initially, 2,380 papers were found based on the terms discussed above. These articles were then reviewed by reading their title. Abstracts were then read of papers, and any that were not suitable for this review were removed. Reference lists of research papers were then read to search for any additional relevant papers. Full texts and reference lists were read of 22 articles. After this step, there was a total number of 10 articles that would be used in the present study. The thesis supervisor reviewed this to establish inter rater reliability. Relevant data was extracted from each selected study onto a database spreadsheet. This was done to efficiently manage the details of the data and research paper, and to aid the screening of the papers and their data. The data that was extracted included relevant details such as title of paper, year of publication, type of intervention (included details on the length of the intervention, the design of it, the different groups if stated etc), number of participants, and career field of participants.

This review was carried out in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines, which was produced by Moher (2009). This methodology offers a framework for selecting the studies that are appropriate for the review and those that are not. This improves the reliability of the results and the design’s rigor and is line with best practice and well reported in the peer review literature. Due to chronological and methodological constraints, effect sizes were not considered in the present review.

Table of key words:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Interventions  | Occupational stress | Psychological stress | Workplace stress | Psychosocial factors  |
| Stressors | Stress management | Job stress  | Wellness interventions  | Intervention benefits  |
| Well-being | Mental health  | Occupational health  | Coping strategies  | Systematic narrative review  |

*Figure 1: Flow Chart*

identification

Research papers found through reference lists of research papers.

Research papers found through searching databases.

Papers excluded as titles were not appropriate for the study.

Research paper titles screened = 2,380

screening

Papers excluded as abstracts showed they were not appropriate for the study.

Abstracts read to see if appropriate for the study.

eligibility

Papers excluded as full texts were not appropriate for the study.

Full texts screened to ensure suitability.

included

The final ten papers included in this systematic narrative review.

 Moher et al. (2009)

**Results**

*Results table: details of the papers included in this review.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name of paper**  | **Year of publication** | **Type of intervention** | **Number of participants**  | **Career field of participants**  |
| Evaluation of a brief mindfulness-based intervention to reduce psychological distress in the workplace. (Grégoire & Lachance, 2014) | 2014 | Mindfulness-based intervention: 5 consecutive weeks of x2 meditation sessions  | 43 | Call centre of a financial institution  |
| Effective and viable mind-body stress reduction in the workplace: a randomized control trial (Wolever et al., 2012) | 2012 | Mind-body stress reduction programme:12x 1-hour weekly classes plus a 2-hour intensive session at week 10 | 239  | Employees of a large national insurance carrier  |
| Mindfulness on-the-go: Effects of a mindfulness meditation app on work stress and well-being. (Bostock et al., 2019) | 2019 | 10–20-minute guided audio meditation sessions. Complete intervention once a day  | 238 | Two large UK companies  |
| Mindfulness Training Reduces Stress at Work: Randomized Controlled Trial (Chin et al., 2018) | 2018 | Two types of interventions: low dose one day mindfulness training and high dose six-week mindfulness training  | 58  | Employees of a digital marketing firm  |
| A pilot study to evaluate mindfulness as a strategy to improve inpatient nurse and patient experiences. (Horner et al., 2014) | 2014 | 10-week mindfulness training programme. Weekly sessions lasting 30 minutes. The intervention focused on breath work, developing awareness of feelings and thoughts, and applying mindfulness during patient interactions | 43 | Nurses  |
| Step by step: the feasibility of a 16-week workplace lunchtime walking intervention for physically inactive employees. (Thøgersen‐Ntoumani et al., 2014b) | 2014 | 16-week lunchtime walking intervention. per week there was 3 group led 30-minute lunchtime walks and 2 self-initiated weekend walks.  | 75 | Inactive non-academic employees from a British University that have a desk-based job  |
| Holistic Nursing in Practice: Mindfulness-Based Yoga as an Intervention to manage stress and burnout. (Hilcove et al., 2020) | 2020 | A weekly yoga class and independent practice for six weeks. The yoga class was designed based on a mix of ‘Hatha and Raja Yoga practices’ (Hilcove, 2011). The intervention group kept a weekly log and recorded their weekly minutes as well as any of their own personal observations in a journal. | 80 | Healthcare workers and nurses  |
| The effects of a relaxation intervention on nurses’ psychological and physiological stress indicators: A pilot study (Veiga et al., 2019) | 2019 | 8-week psychomotor relaxation intervention. 2x 20-minute sessions per week for 8 weeks | 15 | Nurses  |
| A complementary intervention to promote wellbeing and stress management for early career teachers (Hepburn et al., 2021) | 2021 | The intervention was a multimodal secondary-level intervention, mix of yoga, education, guided meditation.  | 24 | Early career teachers  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| A preliminary comparison of the efficacy of online Acceptance and commitment therapy (ACT) and cognitive behavioural therapy (CBT) stress management interventions for social and healthcare workers (Barrett & Stewart, 2020) | 2021 | Brief online sessions of cognitive behavioural therapy and acceptance and commitment therapy  | 42 | Social care and healthcare workers  |

*3.1 Overview of results*

Participants across all ten studies were recruited from various career fields. One study recruited participants from a call centre of a financial institution (Grégoire & Lachance, 2014), three from nursing and healthcare backgrounds (Veiga et al., 2019) (Horner et al., 2014) (Hilcove et al., 2020), one included participants who were early career teachers (Hepburn et al., 2021), one recruited employees from a digital marketing firm (Chin et al., 2018), one from a national insurance carrier (Wolever et al., 2012), one from two large companies in the UK (Bostock et al., 2019), one from non-academic employees from a British university (Thøgersen‐Ntoumani et al., 2014), one from social care and healthcare workers (Barrett & Stewart, 2020). The sample size in the studies ranged from 15 to 239. Overall, the studies recruited 857 participants.

*3.2 mindfulness-based interventions results*

Of the final ten papers identified for this study, five of them looked at the effects of using mindfulness as an intervention to reduce workplace stress. The mindfulness interventions varied in lengths from 5 weeks (Grégoire & Lachance, 2014) to 16 weeks (Bostock et al., 2019).

The intervention sessions varied from 5 minutes (Grégoire & Lachance, 2014) to 30 minutes (Horner et al., 2014). All five studies that looked at the effects of implementing a mindfulness-based intervention in the workplace reported that there was an improvement in stress after the intervention. Mindfulness based interventions were found to also increase mindfulness (Grégoire & Lachance, 2014), and sleep quality (Wolever et al., 2012). The research suggests that using a more intensive/high dose version of the intervention resulted in improved results (Chin et al., 2018). Research carried out by (Bostock et al., 2019) demonstrated that similar results can be achieved from mindfulness interventions carried out via an application on smartphones. This study found an increase in employee well-being as well as a decrease in psychological distress (Bostock et al., 2019). Research suggests that consistent attendance of mindfulness interventions in the workplace is important to see full results. A study carried out by (Horner et al., 2014) suggested that the inconsistencies in attendance from their participants for their weekly 30-minute mindfulness intervention may have contributed to the results of the study not being significant in comparison to the control group. However, the intervention group did still experience an improvement in stress, mindfulness, and burnout, which really emphasizes the effectivity of implementing a mindfulness-based intervention in the workplace for employees’ stress.

*3.3 physical activity-based interventions results*

Physical activity was used as an intervention in a study conducted by Thøgersen‐Ntoumani et al., (2014). Participants in this study were previously physically inactive. They took part in a 16-week lunchtime walking intervention. For the first ten weeks of the intervention, there were three group led thirty-minute walks during employees lunchtime and two self-initiated weekend walks. For the remaining six weeks of the intervention, participants self-organised their walks. Pedometers were used to track the participants daily step counts. Results of this study showed an increase in work performance, and a decrease in work fatigue. However, there were no observed changes in relaxation at work. Physical activity in the form of mindfulness-based yoga was used as an intervention in a study by (Hilcove et al., 2020) on nurses and healthcare workers to look at the impact on stress, burnout, and indicators of wellbeing. The yoga intervention used was designed based on a combination of Hatha and Raja Yoga practices (Hilcove, 2011). The intervention group attended a yoga class every week and practiced yoga in their own time for six weeks. The intervention group also kept a journal in which they recorded the number of minutes of yoga practiced per week as well. Participants also recorded any personal observations they made while practicing yoga. Participants completed both pre and post intervention questionnaires to measure various factors. Stress was measured using the perceived stress scale ([Roberti et al., 2006](https://journals.sagepub.com/reader/content/1863ca1efaa/10.1177/0898010120921587/format/epub/EPUB/xhtml/index.xhtml?hmac=1712249803-a%2FzCjy7yN4J4L2aSrj%2BOEBiRzcRE7Mph1QHZMnsV%2Bmo%3D#bibr48-0898010120921587)), burnout was measured by the Maslach burnout inventory ([Maslach & Jackson, 1981](https://journals.sagepub.com/reader/content/1863ca1efaa/10.1177/0898010120921587/format/epub/EPUB/xhtml/index.xhtml?hmac=1712249803-a%2FzCjy7yN4J4L2aSrj%2BOEBiRzcRE7Mph1QHZMnsV%2Bmo%3D#bibr39-0898010120921587)). Sleep was measured using the global sleep quality item (extracted from the Pittsburgh Sleep Quality Index ([Buysse et al., 1989](https://journals.sagepub.com/reader/content/1863ca1efaa/10.1177/0898010120921587/format/epub/EPUB/xhtml/index.xhtml?hmac=1712249803-a%2FzCjy7yN4J4L2aSrj%2BOEBiRzcRE7Mph1QHZMnsV%2Bmo%3D#bibr9-0898010120921587)), mindfulness was measured using the mindful attention awareness scale (K. W. [Brown & Ryan, 2003](https://journals.sagepub.com/reader/content/1863ca1efaa/10.1177/0898010120921587/format/epub/EPUB/xhtml/index.xhtml?hmac=1712249803-a%2FzCjy7yN4J4L2aSrj%2BOEBiRzcRE7Mph1QHZMnsV%2Bmo%3D#bibr6-0898010120921587)). Blood pressure and salivary cortisol levels were measured before and after the intervention. Stress, sleep, and mindfulness all displayed considerable improvements in the intervention group’s self-reports. However, no significant difference between the pre and post intervention cortisol and blood pressure readings for participants was observed (Hilcove et al., 2020).

*3.4* *Relaxation-based intervention results*

(Veiga et al., 2019) looked at the impact of using a relaxation intervention on nurses’ indications of psychological and physical stress. Affective states were measured by the Portuguese short version of the profile of mood states (McNair et al., 1971). Salivary cortisol samples were taken from participants at the start and end of the second and fifteenth session. The psychomotor relaxation programme was carried out for a duration of eight weeks. The intervention consisted of two twenty-minute psychomotor relaxation sessions per week. The intervention combined elements of breathing exercises, muscle tone regulation, and body awareness. The intervention group displayed a decrease in emotional exhaustion, depression, and salivary cortisol. This relaxation intervention was an effective strategy for reducing stress amongst these participants.

*3.5 multimodal based intervention results*

An Australian study carried out in 2021 by Hepburn et al., looked at the impact of a multimodal secondary level intervention on early career teachers’ stress management and wellbeing. The intervention consisted of six weekly sessions. Each session combined yoga, guided meditation, and education on various topics including the impact of stress, the benefits of relaxation, the importance of exercise, diet, and stress. There was a three month follow up from the intervention. The Mindful Attention Awareness Scale was used to measure mindfulness (Brown & Ryan, 2003). The Personal Wellbeing Index was used to measure well-being. The Personal Wellbeing Index is based on the Comprehensive Quality of Life Scale (Cummins, 1994). The Perceived Stress Scale was used in this study to assess psychological distress (Cummins, 1996). The Maslach Burnout Inventory Educators Survey is a self-report measure that is used to assess how often a person experiences a feeling in relation to their teaching role (Maslach et al., 1996). The Job-related Affected Wellbeing Scale is a self-report tool that examines the relationship between occupational pressures and different affective states and feelings that are specific to a certain job (Van Katwyk et al., 2000). Participant’s salivary cortisol levels were measured the day after each weekly session. The results of this study showed that there was a significant decrease in perceived stress in participants and an increase in attention awareness and subjective well-being.

*3.6 cognitive behavioural therapy and acceptance and commitment therapy intervention*

 A study examining the differences between implementing a cognitive behavioural therapy intervention (CBT) and an acceptance and commitment therapy (ACT) intervention (Barrett & Stewart, 2020) for social care and health care workers. The participants were assigned to either the CBT group or the ACT group, and then completed the relevant intervention online for two weeks. The ACT intervention consisted of videos in a therapist’s role was played by an actor. Participants were informed on the principles of ACT for stress management. The CBT intervention consisted of a number of assessments and tasks that participants carried out. This three-session intervention consisted of many exercises that followed the CBT approach. Stress and burnout were measured at baseline and post intervention. The results showed that there were significant improvements for both groups in stress, burnout, and mental scores. There was no significant difference in results between the two intervention types.

**Discussion**

*4.1 Overview of findings*

The present study aimed to explore the efficiency of different stress management interventions in the workplace using a systematic narrative review. Of a total of 2380 studies identified, ten were included for consideration. Of the interventions included, five considered mindfulness-based interventions.

The duration of the mindfulness-based interventions ranged from five (Grégoire & Lachance, 2014) to sixteen (Bostock et al., 2019) weeks. The duration of the intervention sessions ranged from five (Grégoire & Lachance, 2014) to thirty minutes (Horner et al., 2014). Stress levels decreased among employees following the implementation of a mindfulness-based intervention in the workplace, according to all five of the studies that examined the impact of such interventions (Chin et al., 2018) (Grégoire & Lachance, 2014) (Wolever et al., 2012) (Bostock et al., 2019) (Horner et al., 2014).

Two considered physical activity-based interventions (Hilcove et al., 2020) (Thøgersen‐Ntoumani et al., 2014b), one considered a relaxation intervention (Veiga et al., 2019), one considered a multimodal intervention consisting of yoga, education, and meditation (Hepburn et al., 2021, and one considered an intervention based on a combination of cognitive behavioural therapy and acceptance and commitment therapy (Barrett & Stewart, 2020).

Of the ten papers included, there was consistency in showing that stress management interventions based on concepts such as mindfulness, physical activity, cognitive behavioural therapy etc, are effective in reducing stress in the workplace. Not only did these interventions reduce stress in the workplace, also resulted in improved mindfulness (Horner et al., 2014), work performance (Thøgersen‐Ntoumani et al., 2014), and sleep (Hilcove et al., 2020).

The primary findings from this study are that stress management interventions that are consistently engaged with and that follow a design based on research, can reduce stress in the workplace for employees. These findings are consistent with other previous analysis in the area as well as previous research looked at in the introduction section.

A study conducted by Van der Klink et al., (2001) suggests that interventions that follow a cognitive behavioural therapy framework had significantly higher effect sizes than relaxation-based interventions. Both types of interventions were looked at during this systematic narrative review (Barrett & Stewart, 2020) (Veiga et al., 2019). Both interventions were successful in reducing stress among employees. However, this review could not conclude which had a higher effect size as a meta-analysis was not carried out due to time restraints. Future research suggestions included carrying out a meta-analysis in order to reach a conclusion.

This review suggests that many factors such as attendance, enthusiasm, and personal factors among employees can affect the effectiveness of stress management interventions (Holman et al.,2018). This is line with previous research which suggests that the engagement and involvement of participants is beneficial and crucial to implementing interventions (La Montagne et al., 2007).

Previous research contradicts one another when looking at the effectiveness of multi-modal interventions (Klink et al., 2001) (Richardson & Rothstein, 2008). This review looked at a study carried out by Hepburn et al., (2021) that implemented a multi-modal stress management intervention in a work organisation. The intervention was successful in reducing stress among employees. However, this review did not conclude whether this type of multimodal intervention is more successful that a single level intervention due to it not being a meta-analysis.

During the systematic review protocol for the present study, it was found that the majority of studies examining stress management interventions looked at mindfulness-based interventions. This is perhaps due to the accessibility of such material, and the relative ease at which they can be implemented and controlled. This may also be due to a perceivedtime efficiencyand that mindfulness may be currently seem as the ‘de jour’ intervention in the popular psychology literature.

*4.2 Strengths of the review*

The nature of this systematic narrative review combines the strengths of both a systematic review and a narrative review. This review has a very structured methodology, which complies to the PRISMA guidelines. Following a structured methodology allows this review to be easily replicated. The review also allows for the report of background but relative details, such as the specific type of employees used. This leads to a more comprehensive understanding of the studies carried out.

*4.3 Limitations of the review*

There are a number of identifiable limitations within the present study. The most notable of these being the relatively small number of papers included. Ten papers were included in the final study. By increasing the number of papers included, the findings of the study will become more valid and reliable. A small number of papers were included due to time restrictions.

Another limitation of this review is accuracy amongst the ten research papers included in this study. It is not appropriate to deem the intervention that was carried out as being fully responsible for the results of the study. For example, a participant’s decrease in stress, or increase in wellbeing could have been influenced by other factors such as their personal life. These factors could impact the results and are not taken into consideration as being influential factors in the papers included in this review.

The studies selected for this systematic narrative review did not employ a randomized controlled trial design. Double blind testing was not present in the papers included in this study. Implementing double blind testing and a randomized controlled trial design in a workplace may prove difficult as there would be a need for a lot of cooperation from participants. For example, there could be no discussion of intervention details amongst participants which would be challenging to monitor in a large workplace.

*4.4 Theoretical and practical implications*

This systematic narrative review synthesizes data on the effectiveness of stress management interventions in the workplace. This review continues to contribute to the research carried out on intervention types and can aid in the development of beneficial psychological interventions, tools, and mechanisms of coping and managing work-related stress. This review can provide guidance and advice for employers and work organisations when it comes to helping employees deal with stress in the workplace. This review can aid them to select what type of intervention to implement, the duration of the intervention, and the structure of the intervention to see which type is most compatible with the work organisation. The implementation of these interventions highlights to employees how important it is to take care of their mental wellbeing. This may spark an interest in employees to take care of their mental wellbeing outside of the workplace, as well as in it.

*4.5 Future directions*

*Future directions for research*

Future research in this area should continue to conduct research on implementing non-mindfulness-based interventions in the workplace as these are commonly researched in order to continue to analyse the effectivity of such interventions on workplace stress. When conducting similar research in the future, it would be beneficial to include more papers in the review.

Future research should use a wider search criterion during the search stage of methodology. By using a larger number of key words across more repositories, more useful research will be found and could therefore be evaluated. It would be interesting to focus future research on the comparison of the efficacy of stress management interventions across different sectors, for example in the education sector or in mental health services.

Future research could also look at meta-analysis of research papers that look at the effectiveness of mindfulness-based interventions. This way we could find out exactly what type of mindfulness-based intervention is the most successful in reducing stress in the workplace.

Future research could add intervention weighting to the papers. This is a way of trying to find the most successful intervention out of the ten included in this systematic narrative review. The findings from this study further emphasise the effectiveness and necessity to keep up to date with current stress management interventions in the workplace for the well-being of employees. This is a very prominent and topical subject that requires research and consideration.

*Future directions and suggestions on how to run future interventions.*

When running stress management interventions in the future, researchers should encourage and ensure consistent attendance from participants in order to seek optimal results. (Horner et al., 2014) suggested that the attendance of participants has an effect on the results of the interventions and that consistent attendance leads to a greater success of workplace stress reduction interventions.

When researching the effectivity of interventions in the workplace in the future, researchers could focus on the interventions being short in duration and time controlled. Implementing time limited interventions could be more effective than having weekly interventions throughout the year. A short, condensed intervention may be more appealing to employees to take part in also. A meta-analysis looking at the effect of intervention duration could be interesting to look at in the future.

The goal standard for the implementation of stress management interventions should be double blinded randomized control using multiple types of interventions across groups and future research should strive for this goal. The implementation of interventions can often be difficult and complex. Previous research in this area suggests that “preparation, screening, action planning, and implementation” are four crucial steps that should be followed in order for an intervention to be effective (Nielsen et al., 2010).

*4.6 Conclusion*

The results of the present study demonstrate that stress management interventions are beneficial tools if effectively utilised in the workplace in order to improve stress levels in individuals. There are many additional benefits to implementing such interventions as well as reducing stress levels of employees. Stress management interventions can also reduce burnout among employees, improve sleep quality, and improve work performance in employees. Mindfulness based interventions appear to be the most common type of interventions that have been researched and successfully implemented in work organisations. This study outlines the importance of stress management in the workplace and further emphasises the need for this topic to be continued to be researched and kept up to date so that the most efficient and effective stress management interventions can be implemented in workplaces to benefit not only the work organisation itself, but most importantly it’s employees.

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**Appendices**

* *Appendix A: Ethics form*

**IADT Psychology Ethics Committee (PEC)**

**Application Form 2023-2024**

Instructions:

1. Please read all sections carefully, include all of the information relevant to your project, and include all necessary appendices.
2. All students must complete Sections 1, 2, 3, and 4. You will also need to complete at least one other section, depending on the type of research that you plan to do.
3. Email the completed form to your supervisor for approval.
	1. If your project is a Red route application then it must be submitted to your supervisor by **5pm on Monday 20th November 2023.**
	2. If your project is a Green or Amber route application then it must be submitted to your supervisor by **5pm on Monday 27th November 2023.**
4. Your supervisor will then complete Section 0 and will forward the application to the ethics committee.
5. If your application is under the Red Route, then you may also be required to submit four printed copies of your application (including all appendices). You will be advised closer to the deadline if this is necessary or not.
6. If your study changes from how you have described it in this form then you will need to reapply for approval from the PEC. The PEC does not guarantee that a revised project will be approved, even if the original project was approved.
7. All communication between students and the PEC will occur via the student’s project supervisor.
8. The PEC will consider all of the information provided in the form when making their decision. **Incomplete forms (including forms which do not include all of the necessary Appendices) will be rejected.**
9. If the PEC’s decision is that a revised application must be made then they will provide a list of required changes which are necessary to ensure participant wellbeing. Even if all of these are followed, the PEC makes no commitment to approve a revised application.
10. It is highly recommended that ‘Red Route’ students continue to formulate ideas for projects which fit the criteria for ‘Green Route’ and ‘Amber Route’ submissions until they are advised that their application has been approved. This is to ensure that the student can still complete the module, even if their ‘Red Route’ project does not receive approval from the PEC.
11. There is an obligation on the researcher to bring to the attention of the PEC any issues with ethical implications not clearly covered by the checklist in Section 6 of this form.
12. ‘Signatures’ may be typed, scanned in, or digitally signed.
13. The Psychology Ethics Committee can refuse any application which they consider unsuitable for student research.
14. Occasionally further information may be requested by the PEC with regard to Green and Amber route project applications where there is uncertainty regarding these applications. In some cases a Green or Amber route project ethics application may need to be reformatted and resubmitted as a ‘Red’ route application.
15. If you receive approval from the Psychology Ethics Committee to proceed with your research, this is valid for 2 calendar years from the date approval is issued by the PEC chair. All data collection must be completed within these 2 calendar years. If this time lapses during the course of your project data collection then you must reapply for ethical approval.
16. If your project when conducted does not conform to the project as described in your ethics application then you may be subject to certain outcomes. Depending on the circumstances, these can include a reduction in grade, a capping of the project module grade at a ‘C’, receiving an ‘F’ grade on the module, and/or potential invocation of the IADT Student Disciplinary Procedures.
17. Occasionally students wish to conduct projects on highly sensitive topics which would not be suitable for primary data collection. In these cases the student can consider ‘Green’ route methodologies (e.g. analysis of existing datasets, completing a Rapid Structured Literature Review, or similar). Approval by the PEC for all projects relating to sensitive topics is dependent on an appropriate and willing supervisor being available for such projects, and on the student’s recognition that their pursuance of such a project is not mandatory and that they voluntarily chose such a project. Students should ensure that they are familiar with the supports available to them (for example, the student counselling service) and should ensure that their actions follow relevant legal statutes and requirements at all times. In exceptional cases a student can cease work on projects on highly sensitive topics and prepare a new project idea, although this may result in the need for a deferral or leave of absence in some cases.

**Section 0: For Completion by the Supervisor**

I confirm that this application to the PEC by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (student name) accurately reflects all of the ethical implications in the project.

Application type (tick all that apply for mixed methods): Green Route \_\_\_\_\_

 Amber Route \_\_\_\_\_

 Red Route \_\_\_\_\_

**Signed \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Section 1: Project Information**

Student Name: Mary Nangle

Student Email Address: N00200292@iadt.ie

Supervisor Name: Andrew Magee

Working Project Title: A systematic narrative review on the effectiveness of psychological interventions on stress in the workplace

Main Variables Being Investigated: Qualitative narrative systematic review

**Section 2: External Agencies**

|  |  |  |
| --- | --- | --- |
| Does your project involve recruitment from any external agency (e.g. a school, sports club, medical centre, voluntary organisation, or any other organisation outside of the IADT)?  | Yes\* | **No** |
| \* You must include a letter from a senior manager of each organisation stating that you have approval to collect data within that organisation. Include copies of each of these letters in the Appendices to your application. If the organisation has its own ethical review board (which is very common in some settings, such as hospitals), then you are also required to get ethical approval from that board prior to starting data collection, and to submit notice of this approval to your supervisor so that it can be forwarded on to the ethics committee. Some online forums also require permission to post requests for participants – make sure to check the relevant forum/organisation’s code of conduct or terms and conditions. You do not need to include approval letters if you are conducting recruitment using mainstream social media routes (e.g., Twitter, Instagram, Facebook, Snapchat, TikTok) to your own followers, and/or snowball sampling/word of mouth recruitment.  |

**Section 3: Project Methodology – Please tick which type of project you are seeking approval from the PEC for. If your project involves mixed methods, then tick all which apply.**



|  |  |  |
| --- | --- | --- |
| **Route Type** | **Methodology** | **Tick here** |
| Green Route (no direct contact with participants required, and no data is collected/recorded which could identify participants) | Theoretical paper / systematic literature review / Rapid Structured Literature Review (RSLR) |  |
| Novel analysis of an existing dataset gathered by another researcher or group which you are certain has abided by appropriate ethical procedures for the relevant discipline |  |
| Observation of participants in a public place in which they could reasonably be expected to be observed by strangers or in an online space which does not require users to log in to access. |  |
| Content analysis of material which is publicly available and does not require users to log in to access content.  |  |
| Other method without direct contact with participants \*\* |  |
|  |
| Amber Route (direct contact with participants, but no additional ethical considerations beyond the minimum requirements) | Requirements gathering for and/or user testing of a prototype which is highly unlikely to cause any harm or distress to participants and which does not aim to collect data from a potentially vulnerable group  |  |
| An experiment which is highly unlikely to cause any harm or distress to participants and which does not aim to collect data from a potentially vulnerable group |  |
| A survey/questionnaire design which is highly unlikely to cause any harm or distress to participants and which does not aim to collect data from a potentially vulnerable group |  |
| An observational study which is highly unlikely to cause any harm or distress to participants and which does not aim to collect data from a potentially vulnerable group |  |
| Content analysis research which is highly unlikely to cause any harm or distress to participants and which does not aim to collect data from a potentially vulnerable group |  |
| Interviews and/or focus groups which are highly unlikely to cause any harm or distress to participants and which do not aim to collect data from a potentially vulnerable group |  |
| Other method which is highly unlikely to cause any harm or distress to participants and which does not aim to collect data from a potentially vulnerable group \*\* |  |
|  |
| Red Route (direct contact with participants, including one or more project aspects which require special ethical consideration) | Requirements gathering for and/or user testing of a prototype which may cause harm or distress to participants and/or which involves collecting data from any potentially vulnerable group  |  |
| An experiment which may cause harm or distress to participants and/or which involves collecting data from any potentially vulnerable group |  |
| A survey/questionnaire design which may cause harm or distress to participants and/or which involves collecting data from any potentially vulnerable group |  |
| An observational study which may cause harm or distress to participants and/or which involves collecting data from any potentially vulnerable group |  |
| Content analysis research which may cause harm or distress to participants and/or which involves collecting data from any potentially vulnerable group |  |
| Interviews and/or focus groups which may cause harm or distress to participants and/or which involves collecting data from any potentially vulnerable group |  |
| Any project which includes use of any illegal materials or substances as part of the materials for the study, regardless of methodology employed. |  |
| Any project which includes use of any dangerous materials or substances as part of the materials for the study, regardless of methodology employed. |  |
| Any project employing ethnographic or autoethnographic methodologies. |  |
| Other method which may cause harm or distress to participants and/or which involves collecting data from any potentially vulnerable group \*\* |  |
|  |
| \*\* If you are using a methodology not listed above then provide a short description (fewer than 100 words) here:  |

**Section 4: Checklist of Attached Appendices and Other Completed Sections**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Applicable Project Ethics Route Colour Guide |  | Section / Item | I have attached this item/completed this section | I have checked with my supervisor and we have agreed that this item/section is not relevant to my project |
|  |  |  | 1 | Section 1 |  |  |
| 2 | Section 2 |  |  |
| 3 | Section 3 |  |  |
| 4 | Section 4 |  |  |
| 5  | Letters of permission from any external agencies to be used for data collection | N/A |  |
| 6 | Statement of approval from ethical review boards in external agencies | N/A |  |
|  | 7 | Section 5 (Green Route Projects only) |  |  |
|  |  | 8 | Section 6 (Amber and Red Route Projects only)  |  |  |
|  | 9 | Section 7 (Amber Route Projects only) |  |  |
|  | 10 | Section 8 (Red Route Projects only) |  |  |
| 11 | Section 9 (Red Route Projects only) |  |  |
| 12 | Evidence of why you need to complete a Red Route Project (see note in Section 8) |  |  |
| 13 | Project Information Sheet (Red Route Projects only) |  |  |
| 14 | Project Consent Form (Red Route Projects only) |  |  |
| 15 | Project Demographic Questionnaire (Red Route Projects only) |  |  |
| 16 | All Other Questionnaires and Data Collection Materials (Red Route Projects only) |  |  |
| 17 | Project Debrief (Red Route Projects only) |  |  |

**Section 5: Declaration of a Green Route project**

I hereby declare that [all of / this aspect of (delete as appropriate)] my project involves no direct interaction between me and any research participants, and that having checked with my supervisor, that I do not need to seek informed consent from those whose data I use in my research. In addition, I will ensure that all data which I do gather is held in a manner which is compliant with GDPR, and will be deleted once it is no longer required (and definitely within 6 years of collection). At all times my study will be conducted in adherence to the ethical policies of the Psychological Society of Ireland and the British Psychological Society.

Student Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:27/11/2023

**Section 6: Confirmation of Adherence to Basic Ethical Principles for Amber and Red Route Projects**

Complete the Table below with guidance from your supervisor. If you need to tick any of the ‘red’ boxes, then your project must be submitted under the ‘Red Route’.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | **Yes** | **No** | **N/A** |
| **6.1** | **I will describe the main research procedures to participants in advance so that they know what to expect. I will use the sample Information Sheet provided by PEC to do this.**  |  |  |  |
| **6.2** | **I will tell participants that their participation is voluntary.** |  |  |  |
| **6.3** | **I will obtain written consent from participants using a ‘tick’ consent form which follows the current template provided by PEC prior to starting data collection.** |  |  |  |
| **6.4** | **I will verify that participants still wish to include their data in online studies by including a final indicator of consent at the end of the questions.**  |  |  |  |
| **6.5** | **If my research involves content analysis or observation in any private or partially private setting then I will ensure to obtain informed consent prior to collecting data.**  |  |  |  |
| **6.6** | **I will explain to participants that they can withdraw from the study at any time and for any reason.** |  |  |  |
| **6.7** | **I will ensure that participants know that they can refrain from answering any question that they don’t want to, even if this is part of a psychometric scale.** |  |  |  |
| **6.8** | **If using an online data collection method I will ensure that the only questions which require answers in order to proceed are the questions relating to providing informed consent, and I will ensure that participants are provided with an option which indicates that they do not give their consent.**  |  |  |  |
| **6.9** | **I will inform participants that their data will be treated with full confidentiality, and that, if published, it will not be identifiable as theirs.** |  |  |  |
| **6.10** | **I will debrief participants at the end of their participation (i.e. give them a brief explanation of the study, whether or not deception was involved) following the current template provided by PEC** |  |  |  |
| **6.11** | **I will obtain passive consent from parents/guardians for studies involving people aged between 16 and 18 years, as well as active consent from the participant and their school/organisation** |  |  |  |
| **6.12** | **I will obtain active consent from parents/guardians for studies involving people aged under 16 years. Where feasible I will also obtain active consent from the participant themselves. I will ensure that the parent/guardian or their nominee (e.g. a teacher) will be present throughout the data collection period.** |  |  |  |
| **6.13** | **I will ensure that my project supervisor has full access to the data that I collect and will only use data collection software which permits this.**  |  |  |  |
| **6.14** | **I will ensure that my project supervisor retains full rights to the data collected, including the ability to delete all data at any time, and that third-parties (e.g., software companies) will not ‘own’ the data collected.** |  |  |  |
| **6.15** | **I will ensure that participants in studies involving Virtual Reality (VR) are not susceptible to extreme motion sickness or other physical conditions which may result in harm to the participants. I will ensure that a chaperone is present during VR sessions, and that the participant has the option of also having a nominee of their choosing present as well.**  |  |  |  |
| **6.16** | **I will ensure that any equipment used in this study is cleaned and disinfected after each participant, and that appropriate hygienic barriers (e.g. masks) are used by all participants** |  |  |  |
| **6.17** | **Is there any realistic risk of any participant experiencing either physical or psychological distress or discomfort?** |  |  |  |
| **6.18** | **I plan to use animals as part of my research study** |  |  |  |
| **6.19** | **I plan to tell participants their results on a task or scale which I am using in my research.** |  |  |  |
| **6.20** | **I am researching a sensitive topic which may cause some participants distress (such as, but not limited to, religion, sexuality, alcohol, crime, drugs, mental health, physical health, parenting, family relationships)** |  |  |  |
| **6.21** | **One or more aspects of my study is designed to change the mental state of participants in a negative way (such as inducing aggression, frustration, sadness, etc.)** |  |  |  |
| **6.22** | **My study involves deception or deliberately misleading participants in some way.** |  |  |  |
| **6.23** | **My target population includes people who have learning or communication difficulties** |  |  |  |
| **6.24** | **My target population includes patients (either inpatient or outpatient)** |  |  |  |
| **6.25** | **My target population includes people in custody** |  |  |  |
| **6.26** | **My target population includes people who may feel under personal or professional pressure to take part in my research (for example, close friends; family; employees or staff of managers or school principals who may support the research).**  |  |  |  |
| **6.27** | **My project includes the use of any illegal materials or substances as part of the materials for the study, regardless of methodology employed.** |  |  |  |
| **6.28** | **My project includes the use of any dangerous materials or substances as part of the materials for the study, regardless of methodology employed.** |  |  |  |
| **6.29** | **My project employs ethnographic or autoethnographic methodologies.** |  |  |  |

**Section 7: Declaration of an Amber Route project**

I hereby declare that [all of / this aspect of (delete as appropriate)] my project involves no risk of physical, emotional, social or cognitive harm to participants; that I will obtain full informed consent from all participants and provide a full debrief afterwards (using the templates provided); that I will provide full anonymity and/or confidentiality to participants; and that my participants are not a potentially vulnerable population. In addition, I will ensure that all data which I gather is held in a manner which is compliant with GDPR, and will be deleted once it is no longer required (and definitely within 6 years of collection). At all times my study will be conducted in adherence to the ethical policies of the Psychological Society of Ireland and the British Psychological Society.

Student Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Section 8: Additional Information For Red Route Projects**

|  |
| --- |
| 8.1 What are the aims of your research? Include your research question and hypotheses for all studies which are not exploratory in nature (Max. 100 words) |
| 8.2 What is the specific reason(s) why this is a Red Route project? (Max. 100 words) |
| 8.3 How will you ensure that participants are not harmed as a result of participation in your research, given your answer to 8.2 above (Max. 100 words) |
| 8.4 Why do you need to do this project at this stage in your career? For example, is there a specific postgraduate programme which you wish to apply for which requires you to have completed research in this area? Do you have specific additional qualifications or experience which equip you to manage the additional ethical implications in this project? Bear in mind that if your main reason for wishing to do this research is because the area of study is important then your application is likely to be refused – in general it is better for research with important societal implications to be conducted at a time when you have more research experience. (Max. 100 words) |
| 8.5 Provide rationale as to why other methodologies related to your chosen topic (such as a systematic review, RSLR, theoretical paper, content analysis, or analysis of an existing dataset) cannot be done in your case (Max. 100 words)  |
| 8.6 List supporting documentation which you have included in an Appendix to this application to justify the need for you to do a Red Route project (this might be: the list of entry requirements for a specific postgraduate programme which you are planning on applying for, along with the link to the website where you found this information; a transcript or certificate for a training course related to the area; a letter from your manager or supervisor where you are engaged in voluntary work related to the area, etc.).1.2.3.4.5.6. |
| 8.7 List below the final grades that you received in each module in your most recent completed year of study in IADT (i.e. Fourth year students should provide their 3rd year end-of-year results; Third year students should provide their 2nd year end-of-year results; MSc students should provide their grades to date in each module, ‘provisional’ grades are acceptable when final grades are not yet available). A Red Route ethics project requires a very high level of competence and attention to detail which we have found often correlates with higher grades in earlier modules. 1.2.3.4.5.6.7.8. |
| 8.8 Planned Study Design (Max. 50 words) |
| 8.9 Description of Planned Materials (Max. 200 words). All materials should be included as Appendices to this application. Materials include information sheets, consent forms, debriefs, demographic questionnaire, attitude or psychometric questionnaires, intervention materials, score sheets, technical equipment, and anything else that will be used during data collection. If you intend to use a video/game/app/other media, then you must provide the committee with full access to this through a video file or access to the game/app/media.  |
| 8.10 Planned Participant Population and Recruitment Method (Max. 100 words) |
| 8.11 Planned Procedure (Max. 100 words) |

**Section 9: Declaration of a Red Route project**

I hereby declare that [all of / this aspect of (delete as appropriate)] my project involves no ethical implications other than those listed and described in Section 8. It involves no risk of physical, emotional, social or cognitive harm to participants other than those outlined in Section 8. It involves no deception other than that indicated in Section 8. I will obtain full informed consent from all participants and provide a full debrief afterwards (using the templates provided) and I will provide full anonymity and/or confidentiality to participants, except where explicitly explained otherwise in Section 8. Unless stated otherwise in Section 8, my participants are not a potentially vulnerable population. In addition, I will ensure that all data which I gather is held in a manner which is compliant with GDPR, and will be deleted once it is no longer required (and definitely within 6 years of collection). At all times my study will be conducted in adherence to the ethical policies of the Psychological Society of Ireland and the British Psychological Society.

Student Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* *Appendix B: Evidence of dissemination*

This dissertation will be disseminated at the IADT On Show Showcase