Exploring Psychosocial Safety Climate within New Zealand Midwifery

Rachel Shareef

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Primary Supervisor: Dr Tago Mharapara

Secondary Supervisor: Dr Janine Clemons

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Abstract

Psychosocial Safety Climate (PSC) is a concept that refers to employees' perceptions of psychological safety within an organisation. While research on PSC has grown globally over the past decade, there remains a gap in the literature concerning its application within healthcare settings. Consequentially, an integrative review was conducted to determine where PSC had been measured for healthcare professionals internationally. The review revealed a clear need for further investigation into PSC in midwifery. Existing literature in healthcare underscores the critical role PSC plays in promoting employee wellbeing and enhancing patient care outcomes. Insight from the integrative literature review informed the development of the research question; 'How is Psychosocial Safety Climate perceived by employed midwives working in New Zealand, and how does it influence their work engagement, job satisfaction, organisational commitment, and turnover intentions?'

Following the integrative literature review, PSC was examined for the midwifery healthcare profession, where significant recruitment and retention challenges were identified. A quantitative study was conducted to address the gap in knowledge. It examined the perceived Psychosocial Safety Climate among midwives working in hospitals and birthing facilities, and explored how PSC influences work engagement, job satisfaction, organisational commitment, and turnover intentions. The study utilised three years of data from the New Zealand Midwifery Work and Wellbeing (NZ-MidWoW) Study, with participants drawn from the New Zealand College of Midwives. It was hypothesised that PSC would be positively associated with work engagement, job satisfaction, and commitment, and negatively associated with turnover intentions. The findings supported these hypotheses, highlighting the significant role PSC plays in shaping midwives' workplace experiences and retention.

The Job Demands-Resources model was employed to examine Psychosocial Safety Climate as a job resource. The study's findings supported the relevance of this theoretical framework, demonstrating that PSC functions as a protective factor that enhances employee wellbeing and organisational outcomes. Social Exchange Theory was used to explain the relationships within the findings. Social Exchange Theory helped explain how the level of PSC within an organisation can influence reciprocal behaviours—where positive PSC fosters constructive employee attitudes and behaviours, while low PSC may lead to disengagement or withdrawal. However, both the integrative literature review and the empirical findings of this study indicate that the JD-R model provides the most appropriate and comprehensive framework for understanding PSC in the context of midwifery. Based on these insights, key recommendations include the implementation of organisational policies that promote PSC, training for all

employees on PSC principles, and ensuring leadership accountability in fostering a psychologically safe work environment.

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Attestation of Authorship

“I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor used artificial intelligence tools or generative artificial intelligence tools (unless it is clearly stated, and referenced, along with the purpose of use), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.”

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Chapter 1: Introduction

There is a need to understand the impact of Psychosocial Safety Climate (PSC) within healthcare settings. PSC is an important research subject because it is an overarching influencer of almost all psychosocial workplace health and safety behaviours and has even been described as 'the cause of causes' in relation to psychosocial risk factors (Loh et al., 2024). PSC within healthcare settings is important because of the high responsibility of patient care involved in the jobs of healthcare workers. PSC is a key factor in the wellbeing of healthcare workers which directly impacts the quality of care they provide (Freeney et al., 2013). This is important in New Zealand because the healthcare industry in New Zealand is currently facing a crisis with a shortage of workers, lack of funding and a break down in trust from the general public (Keene et al., 2024). The impact of this is felt throughout the entire healthcare workforce and the Covid-19 pandemic has amplified these health workforce issues. Midwives are a key part of this workforce with hospital-based midwives being on the frontline. There is a dire shortage of midwives in New Zealand and globally.

The World Health Organisation (WHO) acknowledges that midwifery serves a unique role that is needed in every country and provides essential care even in the most difficult settings. The WHO calls for midwives to be involved in maternity care in all countries and acknowledges that there is a global shortage of midwives (World Health Organisation, 2025). New Zealand is one of only a handful of counties globally where midwives work in an autonomous role, independent of medical physicians' orders. Midwives are the main frontline healthcare workers in the maternity sector in New Zealand. Their role is unique and does not compare to most other healthcare roles in that the relationships they build with their patients transcend the immediate healthcare need and often extend to the family members. Midwives based in hospitals and birthing centres are an integral part of the birthing process for the mother, baby and family. Being a midwife comes with great responsibility and often a huge amount of pressure. Hospital based midwives carry a significant workload and are often undervalued for the work they do (Dixon et al., 2025). It is essential to understand the impact of PSC within midwifery to ensure that midwives can provide the quality of care that is required in such a unique role.

The relationship that the birthing family have with their midwife is a crucial component of their birth experience. Midwives build trust in a short space of time and maintain this trust throughout the relationship, providing support to the whole family, not just the mother (Daellenbach et al., 2024). This level of emotional support and compassion could be exhausting and psychologically straining. Further to this, midwives work under a lot of pressure. They deal with a range of complex births, are exposed to emergency situations regularly and sometimes have to deal with loss of life. All of which leaves them

emotionally vulnerable and susceptible to conditions such as emotional exhaustion and psychological trauma (Segal & Kagan, 2025). This is why it is important for their employer to provide support and ensure psychosocial safety.

There is currently no research on PSC within New Zealand Midwifery, but research on wellbeing in midwifery suggests that hospital-based midwives are struggling and feeling invisible to their employer (Mharapara et al., 2024). Research on PSC within the healthcare industry is helpful to understand the context in which hospital-based midwives are working, but it overlooks the unique role of the midwife and the psychological pressures they face. It is important that the hospitals and birthing centres that midwives are employed by, are supporting the wellbeing of their employees through ensuring a strong PSC across the organisation. Research must be done on PSC within midwifery to ensure the impact of PSC is brought to the attention of those in power and to guide them in making decisions to support PSC within healthcare settings and to understand the specific support mechanisms that can be put in place to ensure a sustainable midwifery workforce and provide high-quality care for birthing mothers and their babies. A thorough understanding of PSC within midwifery can therefore inform organisational interventions, policies, and strategies aimed at improving both workforce sustainability and patient care outcomes.

An integrative review is required to gain insight into existing knowledge of PSC in healthcare settings and to understand PSC in the context of midwifery internationally, before conducting a quantitative study among New Zealand-based midwives in hospital settings. Building on this foundation, a research question was formulated: ‘How is Psychosocial Safety Climate perceived by employed midwives working in New Zealand, and how does it influence their work engagement, job satisfaction, organisational commitment, and turnover intentions?’ Using a quantitative cross-sectional survey design (three time-points) grounded in objectivism and positivism, the study sought to test hypotheses derived from the integrative literature review.

1.1 Psychosocial Safety Climate (PSC)

Psychosocial safety climate (PSC) refers to how employees perceive their organisation's support for their psychological health and safety (Hall, Dollard, & Coward, 2010). PSC is a collective perception that exists among a group of work colleagues, regardless of their background, beliefs, or cultural differences. It influences the overall mental well-being of employees in the workplace and can be a predictor for potential psychological strain in employees (Idris et al., 2012). PSC is an emerging concept gaining prominence in management research as the importance of employee well-being

is increasingly recognised (Dollard & Bakker, 2010; Idris et al., 2012). Employee well-being is a popular topic in recent years due to its link to work performance. Brunetto et al. (2022) examine employee well-being in healthcare and link it to work performance and engagement. In recent years, employee wellbeing has become a central focus in workplace studies, largely because of its strong association with key outcomes such as job performance, engagement and retention. Employers are seeing the benefits of investing in the wellbeing of their employees through better performance at work and increased ability to do daily tasks (Edgar et al., 2017). PSC and employee wellbeing are thought to be closely linked. A study by Juutinen et al. (2023) suggested that PSC is a predictor of employee wellbeing. If there is a strong PSC within an organisation, then it is highly likely that the organisation prioritises employee wellbeing.

Early research into PSC, for example (Dollard et al., 2012) found that employees who perceive a high level of PSC within their workplace, report greater job autonomy and stronger social support. These positive perceptions are associated with reduced psychological strain, meaning it is less likely for someone who perceives a high PSC to experience burnout. This highlights the protective role PSC can play in promoting mental wellbeing at work. When employees feel safe to speak up to management about work concerns, they have been found to be more engaged, and have fewer psychological health issues, creating a more positive work environment (Dollard & Bakker, 2010). These studies suggest that creating a safe and supportive work environment is essential to employee well-being and performance. More recent studies have shown that PSC is now more important than ever due to the shift in remote working since the Covid-19 pandemic, causing new forms of job demands in the online world (Parkin et al., 2022). Remote work has become a part of normal working patterns. Because of this, PSC is becoming much harder to manage from the top, as senior leaders are having to find new ways of engaging their teams, whilst working remotely with employees spread across various geographical locations (Sjöblom et al., 2022). Whilst remote working may not be a factor for the midwifery profession, the hospitals employing them may have remote workers to manage alongside the frontline healthcare staff and will need to ensure that they are inclusive in their efforts to promote a healthy PSC. Additionally, multi-disciplinary teams and various contract workers such as lead maternity carers (LMC's) coming in and out of the hospital creates the same challenges in maintaining a consistent level of PSC.

Low PSC can have a detrimental impact on employees' wellbeing. According to Idris, Dollard and Yulita (2014), a significant consequence of a poor PSC is emotional fatigue, which results from having to deal with emotional strain over a long period of time, particularly in an environment where psychological wellbeing is not prioritised. Although

psychological strain can still happen in high pressure work environments, Garrick et al. (2014) found that when employees perceive a high level of PSC, it is possible to recover effectively and quickly from episodes of psychological strain, meaning the likelihood of developing emotional fatigue over time is much lower than that of those who do not perceive a high level of PSC. Additionally, according to Hall et al. (2013), employees who perceive a high level of PSC are less affected by job demands because they have the job resources to cope with them. Similarly, Idris et al. (2011) found that organisations that prioritise their employees' psychological wellbeing by providing resources are more likely to have more engaged employees. Therefore, PSC can be seen as a job resource because it equips employees with the means to cope with job demands and maintain well-being. Thomson (2022) and others call for further research to establish the role of PSC within job demands-resources models.

One of the major influencing factors for PSC is leadership. An actively engaged leadership team that champions policies and filters down information to its teams can successfully impact PSC (Idris & Dollard, 2011). If an organisation does not have a leadership team that actively provides tools to help employees cope with the psychological impact of their work, they will likely have low PSC. Loh et al. (2021) explains that leaders can influence PSC both positively and negatively, and over a long period of time, this can have a significant impact on the overall PSC within an organisation. The influence for a good PSC needs to come from the most senior leaders and be filtered down through the organisation. Middle management can also struggle with the effects of poor PSC, and due to having inadequate support or resources themselves, in turn, fail to provide good support or resources to their team (Biron et al., 2018). A strong PSC must come from the top. Hospitals are complex working environments; therefore, it may be difficult for leadership teams to filter this support down to the frontline workers.

1.2 Setting: NZ Maternity Facilities

Midwifery in New Zealand is integrated within the universally funded public healthcare system. Midwives work throughout the maternity service in various roles; however, 88% of midwives work across two main roles. Self-employed, community midwives, termed Lead Maternity Carers (LMC), make up 40% of the midwifery workforce, while employed shift-workers working in hospitals represent 48% of the midwifery workforce. Hospital midwives work alongside a team of healthcare professionals on 8 or 12-hr rostered shifts reporting to a manager (Mharapara et al., 2021; Mharapara et al., 2024). The remaining roles are divided into specialist roles based on policy, professional, regulatory, educational, and leadership positions. Over 96% of

births take place in small midwifery-led birthing units or larger maternity hospitals (Health New Zealand Te Whatu Ora, 2025)

The publicly funded healthcare system that New Zealand Midwives operate within is experiencing a severe shortage of healthcare workers across all disciplines, which has been magnified by the COVID-19 pandemic (Fenton et al., 2023). According to the 2024 Midwifery Workforce Survey (Te Tatau o te Whare Kahu Midwifery Council, 2024), there have been a number of midwives who have recently returned to the profession after they had ceased practising during the COVID-19 pandemic, and there has been a steady increase in the number of practising midwives over the last 10 years. However, there is still a significant shortage of midwives across New Zealand (Te Tatau o te Whare Kahu Midwifery Council, 2024). Operating in a system that is understaffed means increased workload, which will inevitably have an impact on the psychological wellbeing of the midwife.

1.3 NZ Maternity Healthcare workers: Midwives

Midwives in New Zealand in a hospital or birthing unit (also known as core midwives) are employed by Health New Zealand | Te Whatu Ora, a single national entity responsible for planning, commissioning, and delivering hospital, primary, and community health services across the country. Prior to July 2022, they were employed by their local District Health Board (Gilkison et al., 2017). These midwives are responsible for birthing families from the moment they enter the birthing suite and act as a liaison between the hospital and the lead maternity carer (LMC). A qualified midwife provides and facilitates maternity care for birthing mothers and their families. A midwife provides all maternity care to healthy patients, during and after birth and works collaboratively with the self-employed LMC during labour. They can identify any issues or complications that may arise during pregnancy and birth and refer to appropriate care. They work closely with doctors and other healthcare professionals, such as obstetricians, and nurses and can work in various settings, such as homes, communities, hospitals, clinics, or health centres (International Confederation of Midwives, 2024). Some hospital-based midwives have the additional responsibility of managing a team that may include trainees and graduates. They contribute to the management of the department and to relationships with the various LMCs entering the hospital, helping build the department's workplace culture. The extra workload and additional responsibility can often go unnoticed, and many hospital-based midwives feel that they do not get the recognition that they deserve (Gilkison et al., 2017). If midwives in management roles do not feel supported, it is likely that the people they manage do not feel supported, creating a low psychosocial safety environment.

A recent study by Daellenbach et al. (2024), found that the maternity care experience of women and their whanau in New Zealand is highly dependent on the quality of the relationship they have with their hospital-based midwives. This highlights the importance of the hospital-based midwife's role, as well as the support they receive from the hospital and the wider organisation. Although midwives in New Zealand are such an important part of the birthing journey, they are not always recognised for their work. Mharapara et al. (2024) found that midwives often feel a lack of appreciation for what they do, particularly during the COVID-19 pandemic, when midwives put themselves at risk to help others. This has an impact on the midwife's occupational wellbeing and highlights the support that needs to be provided by the organisation.

Chapter 2: Integrative literature review – PSC within Midwifery

The integrative review will provide a foundation for guiding the study of PSC within midwifery. Integrative literature reviews are a useful way of synthesising and evaluating knowledge to summarise the studies conducted on a particular topic. An integrative review is a way of assessing what is already known about a topic and looking at what could be explored next (Cronin & George, 2023). This integrative review seeks to discover what is known and what remains to be known about the psychosocial safety climate in midwifery. The aim is to understand what literature exists on the topic and identify gaps in knowledge. It became clear that there was not enough research to gain insight into this topic, therefore it was necessary to expand the integrative review to include research on PSC within nursing and PSC healthcare. Nursing is the closest profession to midwifery, so it stands to reason that the findings of the studies would be transferable to midwifery to some extent. Researching PSC within a wider healthcare context will help to form an understanding of where research has been focused and how it might be transferable to the midwifery context. By conducting this integrative review encompassing PSC within midwifery, nursing and healthcare, it is expected that a clear picture will emerge of how PSC is perceived within hospital settings and what impact this has on the wellbeing of employees and the service they provide.

Research questions guiding the review

1. How do midwives working in hospitals and birthing centres perceive the psychosocial safety climate (PSC) within their organisation?
2. How do midwives' perceptions of organisational PSC influence their work and well-being?

The following integrative review was guided by the following questions:

1. How have researchers studied PSC in a) midwifery, b) nursing and c) healthcare?
2. What are the key research findings on PSC in a) midwifery, b) nursing and c) healthcare?
3. What are the underlying assumptions of research on PSC in a) midwifery, b) nursing and c) healthcare?
4. What are the limitations of research on PSC in a) midwifery, b) nursing and c) healthcare?

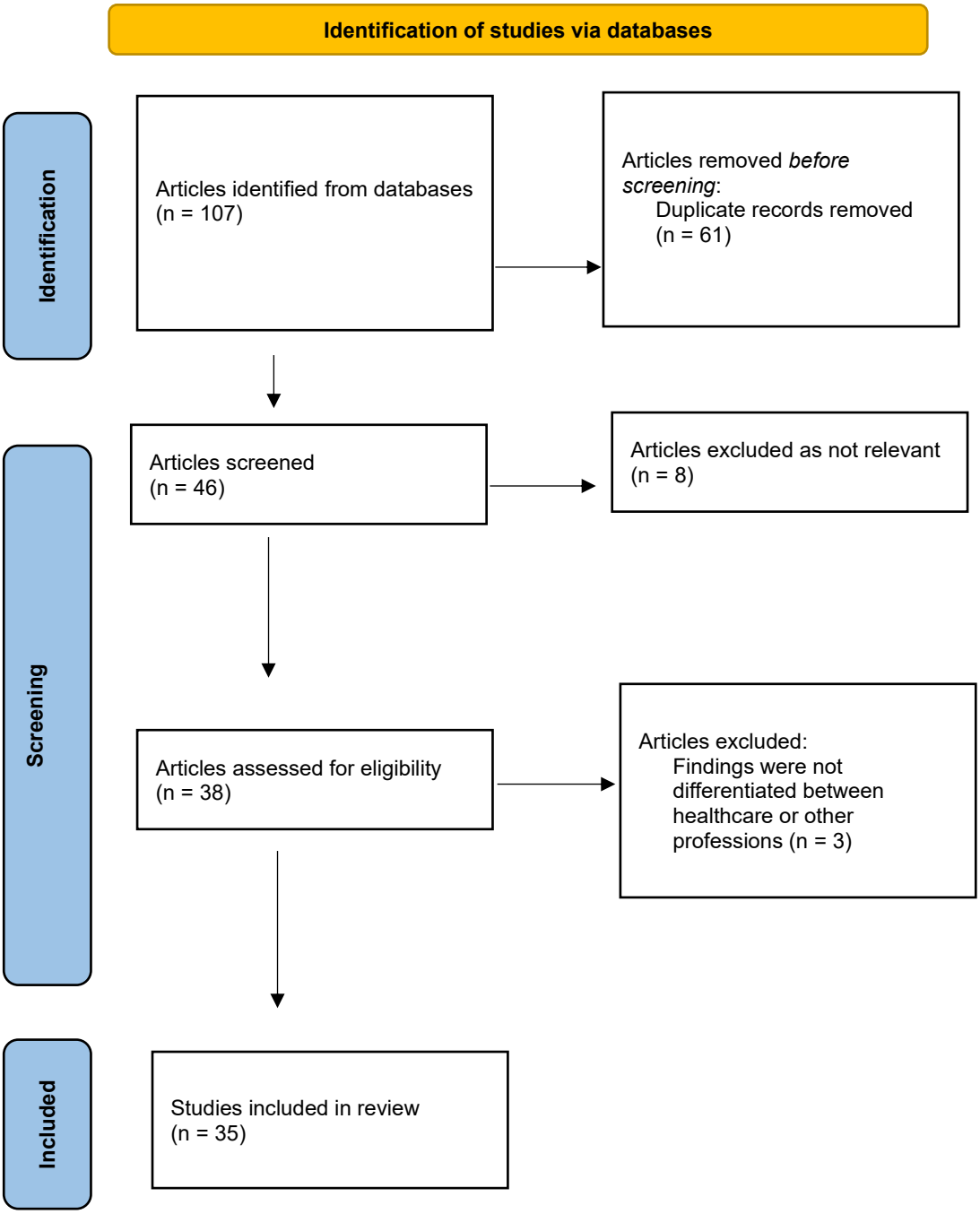
The present review

This integrative literature review aims to explore the current literature on Psychosocial Safety Climate within midwifery. Due to the lack of midwifery-specific literature, the review also included PSC within nursing and PSC within healthcare to gain a broader understanding of how PSC might affect midwives. To search the literature on Psychosocial Safety Climate in Midwifery, Nursing and Healthcare, I followed the Preferred Reporting Instrument for Systematic Reviews and Meta-analyses (PRISMA) process (Page et al. 2021). Fig. 1 illustrates the key steps in the integrative review process; identification, screening, assessment for eligibility, and data analysis. I systematically searched four main databases to identify a broad range of literature relevant to Psychosocial Safety Climate in Midwifery. The databases searched were:

- Scopus
- CINAHL
- Medline EBSCO
- PsycINFO

Filters were applied to limit the search to journal articles written in English.

Figure 1. PRISMA flow diagram for systematic reviews (Page et al., 2021).



Searches were conducted as closely as possible between databases' search fields to include the equivalents of keywords, title, and abstract fields. The same search term strings were used in each database, ensuring that the search was consistent across databases.

The search strings used were:

1. "Psychosocial safety climate" AND midwives OR midwife OR midwifery
2. "Psychosocial safety climate" AND nurse OR nurses OR nursing
3. "Psychosocial safety climate" AND healthcare OR "health care"

The search date range was limited to between 2010 and 2025, as there was very little research on PSC before 2010. The search was limited to journal articles only. All articles identified in the database searches (n = 107) were downloaded to EndNote 20, the reference management software. I removed duplicate articles by reviewing the library in EndNote 20 using the “find duplicates” function, leaving 46 articles remaining. I then screened the remaining articles for relevance to the research question by reading titles and abstracts, leaving 38 remaining articles. Finally, I excluded 3 further articles because the findings did not differentiate between healthcare and other professions. After excluding this article, a sample of 35 papers remained. Australia is leading the way in PSC research in the healthcare field. Canada, Italy, China, Malaysia, Iran and the Netherlands have also touched on PSC within nursing and healthcare.

PSC in Midwifery

There is no literature specifically focusing on PSC within midwifery. This is likely because PSC is an emerging concept within management research. Although literature on the subject began around 2010, it remained sparse until 2018, when the number of PSC studies increased significantly. 2022 saw the largest number of journal articles relating to PSC and an increased focus on the healthcare sector. However, there is still limited literature on PSC in healthcare and nursing, and only one study mentions midwifery.

PSC has been mentioned in research focusing on occupational stress and wellbeing. A study by Rickard et al. (2012) aimed to identify ways to reduce occupational stress and resulting turnover among hospital-based nurses and midwives in Australia. The study did not specifically focus on psychosocial safety climate. However, the organisational intervention implemented, which included training on stress management,

improving communication throughout the organisation, and increasing support for nurses, positively affected PSC within a hospital setting.

Additionally, a Swedish study focusing on the effects of the COVID-19 pandemic on hospital-based maternity and neonatal health care workers, including obstetricians, midwives, neonatologists, and nurses (Akerstrom et al., 2022), explored working conditions and support experienced during this time. Whilst not directly mentioning PSC, the study examined the effects of job resources on employee wellbeing and found that high job resources are associated with better wellbeing among frontline healthcare workers. If we view PSC as a job resource, the study becomes relevant to PSC within hospital-based midwives. This further identifies the need for research specifically focused PSC and work outcomes in the hospital midwifery context.

PSC in Nursing

PSC within nursing has been studied mostly in combination with other healthcare professions. However, there are some key articles focusing solely on nursing. A Taiwanese hospital study on nurses highlighted the link between PSC and workplace violence. Pien et al. (2019) found that when PSC increases, workplace violence decreases and that a low PSC may increase the risk of workplace violence. This could be because organisations with low PSC do not provide the resources or support to help employees manage negative behaviours. Additionally, Dollard et al. (2012) found that PSC directly affects psychological strain in nurses over time. A consistent high PSC has been linked to resilience and a more positive outlook for nurses working under high pressure, whereas a consistent low PSC has the opposite effect (Siami et al., 2023). This is confirmed by Mansour et al. (2022), who also linked good PSC to reduced presenteeism among nurses, with those who perceived a good PSC having a better ability to cope with high job demands than those who perceived a poor PSC. PSC has been found to influence nurses' personal and organisational outcomes. If nurses perceive a strong PSC, they may also feel an increased sense of self-esteem whilst at work, known as organisation-based self-esteem (OBSE), and in turn feel more engaged in their work (Yuan et al., 2024). This shows that a good PSC is essential to nurses' wellbeing.

More recently, McLinton et al. (2023) found that a strong PSC can help reduce the effects of burnout amongst nurses. Factors such as speaking up when something is not right and having access to resources in difficult times may make it easier to recover from burnout. More than reducing negative effects, a strong PSC can help prevent emotional exhaustion and burnout (Galanti et al., 2024), which is essential for nurses

working on the frontline of healthcare to care for their patients effectively. Ensuring that nurses do not experience burnout is important for workplace safety. As such, nurses' engagement with health and safety practices and the behaviours that contribute to a safer working environment are directly influenced by PSC (Abdi et al., 2023), making PSC an important part of both physical and psychological workplace health and safety.

There is a growing recognition that organisations need to support the psychological wellbeing of their employees. A study by Worringer et al. (2020) found that hospital nursing managers mostly want to help their staff with psychosocial strain and work stress, but they do not always have the resources to support their staff effectively. The support needs to come from a higher level. Mansour and Tremblay (2018) suggest that it would be beneficial for healthcare organisations to incorporate PSC into their policies and procedures to ensure that nurses and other frontline healthcare workers have the resources to cope with the ongoing challenges of working in the healthcare sector.

PSC in Healthcare

Low PSC across the healthcare industry is common for various reasons. Mansour and Tremblay (2018) highlight that the healthcare industry is regularly impacted by organisational change such as restructuring and recruitment freezes, which have a negative impact on the psychosocial safety climate. Regular organisational change can be unsettling, and it is likely that management within these organisations does not have the capacity or support to implement good practices that support PSC during times of change. Another reason for low PSC within healthcare is the perception of the nature of hospital work and what is expected of frontline workers as standard. McLinton et al. (2018b) refer to the general perception amongst hospital workers that high-stress incidents are just a part of their everyday job and therefore do not need to be managed from a psychological impact perspective. This type of thinking likely leads to low PSC and prevents people from speaking up when there are issues. Workers who are exposed to regular high stress scenarios need extra support and should not accept that it is a normal part of a job role.

PSC within healthcare affects the quality of patient care that is provided. Jameson and Parkinson (2022) suggest that emotional fatigue resulting from a low PSC reduces some healthcare workers' ability to show compassion towards their patients. A lack of compassion could have a negative effect on the care patients receive. A study by McLinton et al. (2019) found that a low PSC amongst frontline healthcare workers negatively impacts the level of care that their patients receive, although the same was

not found to be true of physical safety climate. However, from a workplace health and safety perspective, Bronkhorst (2015) suggests that PSC influences both the physical and psychosocial safety behaviours of healthcare employees. Furthermore, Zadow et al. (2017) found a direct link between PSC and emotional exhaustion, resulting in more workplace injuries among healthcare workers in a hospital setting. Therefore, it is increasingly clear that PSC is an essential factor in patient and healthcare worker safety. PSC should be considered in the context of workplace health and safety in healthcare.

PSC has been found to influence work engagement among healthcare workers, with low PSC increasing the likelihood of presenteeism due to poor psychological health (Liu et al., 2020). PSC has also repeatedly been linked with emotional exhaustion in the healthcare sector. According to Bronkhorst and Vermeeren (2016), results of emotional exhaustion are; more absences from work and less engagement at work. This suggests PSC influences work behaviours. This is supported by Brunetto et al. (2022) who suggest that poor performance and a lack of innovation across the healthcare industry are linked to low PSC. Employees struggle to develop new ideas or show creativity when they do not have psychosocial support available.

Research on PSC within the Healthcare sector has shown that although the job demands involved with working in frontline healthcare can lead to emotional exhaustion, having a good PSC can buffer the effects of this and help employees cope more effectively (Alshamsi et al., 2022). This is confirmed by Loh et al. (2018) who explains that PSC plays an important role in managing job-related stress. Interestingly, El-Zoghby et al. (2022) found that PSC may be perceived differently by individuals in the same organisation within the medical profession, depending on their area of specialisation. This suggests that higher job demands in some roles outweigh the job resources the organisation provides. Some specialists within the healthcare industry may also have more control over their work than others. According to Hu, Dollard and Taris (2022), employees who are supported in their workplace with adequate resources and input into the organisation of their role are more likely to show commitment to their work and contribute to the team's motivation. Some workers may have more job autonomy than others due to their specialist role or their position in the organisational hierarchy. Whilst some people may perceive a higher level of PSC than others, those who perceive a strong PSC are likely to be more engaged in their work. (Mansour & Tremblay, 2018) found that a high psychosocial safety climate is positively associated with work engagement in a healthcare setting.

Low PSC has been linked to increased stress levels in the healthcare sector, particularly among female workers (Havermans et al., 2017). Female workers are exposed to different risks than male workers. Women working in healthcare have been

found to be more likely to suffer instances of workplace violence and more likely to experience psychological burnout (Fattori et al., 2023). This could be because of the higher number of females in nursing and midwifery than males. However, this raises questions about how organisations provide support to meet the needs of different employee groups. When designing support strategies, de Wijn and van der Doef (2022) recommend that organisations create tailored, high-quality initiatives, instead of adopting generic approaches that attempt to fit all.

According to (McLinton, et al., 2018a) PSC in healthcare is influenced by leadership, communication, workload and training. The study suggests that addressing these factors can promote a positive PSC, leading to improved well-being, higher job satisfaction, and better work outcomes. A further study by (McLinton et al., 2019) confirms the importance of leadership support in creating a high PSC. The study suggests that physical and psychosocial safety climates are closely related, and that leadership plays a key role in improving employee wellbeing by prioritising employee health and safety. PSC needs to come from senior leaders and organisational policy. The importance of effective management on PSC is emphasised by Petrie et al. (2018) who found that immediate managers can have a significant influence on the mental wellbeing of their staff members by showing commitment to supporting mental health and implementing policies and procedures around this. In contrast, Fattori et al. (2022) suggest that although managers can support the psychological wellbeing of their teams to some extent, they need to have their own psychological wellbeing looked after to be able to support their teams effectively.

Leaders should be mindful of how they convey the organisation's values to their teams, making sure that they do not inadvertently contribute to a low PSC, and that they actively take steps to support employees by sharing available resources and championing policy reviews (Loh et al., 2021). If there are policies in place and resources available, but there is no communication around this, it is unlikely that employees will be aware of the support available to them. Mansour and Tremblay (2019) recommend that healthcare providers work towards creating a positive PSC by improving the availability of resources and providing adequate support for staff members to deal with the emotional demands of their job.

We are starting to see research evolve in this area as organisations have started to recognise PSC and have begun to take some steps towards improvement. A recent study by Abu Bakar et al. (2025) found that when a hospital in Malaysia introduced occupational health and safety initiatives and communicated health and safety-related messages, the perceived PSC amongst the healthcare employees gradually increased over time. This shows that communication is key to the perception of support.

PSC in healthcare during the COVID-19 pandemic

A lot of the more recent research on PSC was conducted during or after the COVID-19 pandemic. The COVID-19 pandemic was a time of great strain for the healthcare industry. Akerstrom et al. (2022) found that increased workload due to a lack of staff and resources, such as personal protective equipment (PPE), led to reports of higher stress levels than before the pandemic. During the pandemic, the psychosocial safety climate played an essential role in helping nurses cope with the pressures and stress associated with being on the front line of healthcare (Siami et al., 2023). PSC has been shown to amplify the effects of spirituality on healthcare workers' resilience and ability to cope with strain. As Ahmed et al. (2021) found, the effect of spirituality on resilience is stronger or weaker depending on the level of PSC present.

Additionally, Mansour et al. (2022) found that PSC was essential in helping nurses cope with high-pressure work during the pandemic. Overall, the COVID-19 pandemic caused poor PSC across the healthcare sector because there was a significant increase in workload along with fewer resources, and most organisations were not prepared for this level of strain, therefore, were not able to support their frontline workers appropriately (Platania et al., 2022). However, Brunetto et al. (2022) suggest that these issues already existed within the healthcare sector long before the pandemic and were magnified by the added pressure on the system.

Overall, the literature indicates that PSC in the healthcare sector is generally low and negatively affects all healthcare professionals. Interventions are urgently needed to relieve the psychological strain on frontline healthcare workers, thereby improving the quality of patient care and clinical outcomes. The literature shows that midwifery has not been a focus of PSC research, but there is ample evidence of a lack of PSC within hospitals, which would directly affect hospital-based midwives. The literature on PSC within midwifery, nursing and healthcare is predominantly based on quantitative studies, mainly self-reported surveys. This limits the research and opens up the possibility for future research to focus on qualitative studies. Based on the integrative literature review, this study on PSC within midwifery will be the first of its kind. The literature shows that research in this area is required to contribute to knowledge and influence policy for employed midwives to ensure wellbeing and quality care.

Author, Year	Location	Study Design	Research aim	Theoretical framework / concept model	Sample	Findings	Research limitations
Bakar et al, 2025	Malaysia	Quantitative *Three-wave longitudinal study	To assess the level of perceived PSC in healthcare working in a Malaysian hospital in a one-year period.	Psychosocial Safety Climate (PSC) framework	N=618 618 healthcare workers (remaining through all 3 time points)	PSC was found to increase over the one-year period. During this time the organisation implemented OHS initiatives.	Measurement of key constructs could have limited results.
Galanti et al, 2024	Italy	Quantitative	To explore the relationship between PSC, emotional exhaustion and other workplace stressors.	Atheoretical	N=196 196 nurses working in Italian hospitals	PSC was found to play in a significant role in the prevention of exhaustion and burnout amongst nurses.	Cross-sectional and self-reported data at self-selected hospitals. Reporting may not represent all nurses experience.
Yuan et al, 2024	China	Quantitative *Cross sectional * cluster sampling	To explore the relationship organisation-based self-esteem (OBSE) and PSC on work engagement and burnout.	Job-Demands Resources (JD-R) model.	N=1,832 1,832 nurses from 17 departments	PSC was found to reduce burnout and increase work engagement amongst nurses.	Cross-sectional study made it hard to get a full understanding of the relationship between PSC, work engagement and burnout.
McLinton et al, 2023	Australia	Quantitative *Longitudinal *Multilevel	To explore the relationship between burnout and co-worker social support, with PSC as a moderator.	PSC extended burnout–support loss spiral	N=380 380 employees within 63 teams across 3 hospitals	PSC was found to trigger and moderator in the burnout support-loss spiral. PSC is suggested as an intervention in employee wellbeing.	Self-reported surveys leave room for bias. The instrument scale may be misunderstood when rating. The respondents were mostly female.

Author, Year	Location	Study Design	Research aim	Theoretical framework / concept model	Sample	Findings	Research limitations
Abdi et al, 2023	Iran	Quantitative *Cross sectional	To develop a model that predicts safety performance amongst nurses with PSC playing a role.	Hypothesized model of safety performance	N=280 280 nurses	PSC was found to be a significant factor in the prediction of safety performance amongst nurses.	Research sample was limited to nurses in one city. Data was self-reported leaving room for bias. There are too many factors that influence safety performance.
Siami et al, 2023	Iran	Quantitative *Cross-sectional	To study the effects of PSC and leadership on hope and reliance during the COVID-19 pandemic.	Conservation of resource theory	N=623 623 nurses across 68 hospitals	PSC had a significant positive effect on resilience and hope during the Covid-19 pandemic.	Cross-sectional and self-reported data. Results may be affected by stress levels and time constraints of the participants during the pandemic.
Fattori et al, 2023	Italy	Quantitative *Cross-sectional	To investigate PSC and burnout in home based palliative care workers.	PSC theory framework	N=106 106 workers predominantly females & nurses. Inpatient hospice, and home care settings.	PSC was lower in inpatient hospice settings than in home care settings. The risk of burnout was the same across all participants.	Limited sample size and cross-sectional study. The Italian context is limiting because homecare workers likely care for patients in better conditions.

Author, Year	Location	Study Design	Research aim	Theoretical framework / concept model	Sample	Findings	Research limitations
Akerstrom et al, 2022	Sweden	Quantitative *Longitudinal	Explore the working conditions of maternity and neonatal healthcare workers in hospital settings during the COVID-19 pandemic	Atheoretical	N=660 660 maternity and neonatal health care workers. Hospitals setting.	Maternity workers reported higher stress levels during the pandemic due to lack of resources and fear of infection.	Data was collected from at employer level not individual level.
de Wijn and van der Doef, 2022	The Netherlands	Quantitative	Project for psychological risk interventions and employee wellbeing in emergency departments.	Psychosocial risk management approach "PRIMA." Job-Demands Resources (JD-R) model.	T1, N=578 T2, N=511 T3, N=533 19 emergency departments in hospitals took part with 15 covering all 3 timepoints.	PSC was found to be an intervention for psychosocial risk. The study over time showed PSC increased following intervention but effects on wellbeing was not seen in the timeframe.	There was no control group for this study due to the length of the study. PSC intervention was compared to a control group outside of the study.
El-Zoghby et al, 2022	Egypt	Quantitative *cross-sectional analytic study	Investigate workplace violence for medical residents and perceived safety climate.	Atheoretical	N=101 101 medical residents (86.1% females)	PSC was found to be high risk level throughout the study. Morning shift workers reported a high PSC than other shift workers. Workplace violence is common for Egyptian medical residents.	Potential for recall bias via self-report survey. More females filled out the survey than males and the study.

Author, Year	Location	Study Design	Research aim	Theoretical framework / concept model	Sample	Findings	Research limitations
Alshamsi et al, 2022	United Arab Emirates	Quantitative *Longitudinal	To contribute to research on PSC, social support and accreditation demands on burnout and work engagement.	JD-R model and the PSC concept	N=121 121 matched participants from 2 timepoints. Healthcare professionals in hospitals.	Perceived PSC helped protect healthcare workers from job demands in accreditation period.	PSC was assessed at an individual level and not an organisational level. Sample size was limited due to COVID-19 pandemic.
Fattori et al, 2022	Italy	Quantitative *cross-sectional	To validate the Italian PSC-4 and explore PSC and JD-R model in middle management healthcare workers.	Job-Demands Resources (JD-R) model.	N=276 276 employees in 17 wards in hospital setting	PSC-4 significantly predicted job demands and resources. Middle managers are influencers of PSC and PSC influences burnout and job satisfaction.	Cross-sectional and self-reported data. Perceived PSC was limited to middle manager level.
Platania et all, 2022	Italy	Quantitative *cross-sectional	Investigate the effects of PSC on engagement and psychological stress in healthcare workers during the COVID-19 pandemic.	Job-Demands Resources (JD-R) model. Social Exchange Theory (SET).	N=606 606 healthcare workers 41.3 % nurses. 6 organisations.	PSC had a positive effect on engagement but not if the individuals were working compulsively. Working compulsively dulled the effects of PSC.	Self-reported data and cross-sectional study has limitations and only 6 organisations were included.

Author, Year	Location	Study Design	Research aim	Theoretical framework / concept model	Sample	Findings	Research limitations
Mansour et al, 2022	Canada	Quantitative	Exploring the role of PSC in relation to presenteeism and work intensification during the COVID-19 pandemic.	COR theory and sensemaking theory.	N=1144 Registered nurses (800 at Time 1 and 344 at Time 2). Hospital setting.	PSC was found to influence presenteeism through reducing work intensification. PSC was found to be both a preventor and remedy for work intensification.	Small scope of study meant that impact of PSC on work intensification and presenteeism over time could not be tested at organisational level.
Brunetto et al, 2022	Australia	Quantitative *cross-sectional	Explore the effects of PSC on psychological coping, wellbeing and innovative behaviour during the COVID-19 pandemic.	Conservation of Resources theory	N=163 163 doctors, nurses and allied health professionals	PSC was found to impact psychological coping ability (PsyCap) which in turn had an impact on wellbeing. PSC and PsyCap together influenced innovative behaviour.	Cross sectional study. High multicollinearity between well-being and PsyCap.
Hu et al, 2022	China	Quantitative *cross-sectional	Exploring the effects of PSC on work engagement and commitment in relation to job resources and job design.	PSC theory	N=963 963 health professionals (doctors and nurses) from 66 work units in two Chinese hospitals.	PSC was found to positively effect woke engagement and commitment through job resources and job crafting.	Cross-sectional design and its use of perceptual measures.

Author, Year	Location	Study Design	Research aim	Theoretical framework / concept model	Sample	Findings	Research limitations
Jameson and Parkinson, 2022	Australia	Quantitative	Exploring compassion fatigue in personal care attendants.	Professional Quality of Life (ProQOL) model. Social Cognitive Theory (SCT).	N=169 169 Personal Care Attendants, aged between 18 and 66 years.	PSC was found to be significantly associated with compassion fatigue.	Self-reported data. Compassion fatigue in the workplace and outside the workplace could not be separated.
Loh et al, 2021	Australia	Quantitative	Exploring how leadership influences PSC over time.	Consensus emergence model (CEM)	N=330 49 team leaders and 281 Australian health care workers in 49 teams.	PSC was influenced by leadership both negatively and positively depending on the leadership PSC.	Use of CEM model is limiting. Sample was from one workplace.
Ahmed et al, 2021	Pakistan	Quantitative * cross-sectional online survey	Investigate the impact of spirituality on frontline workers engagement and the role of PSC during the COVID-19 pandemic.	Frankl's Man's search for meaning theory & Psychosocial theory	N=233 233 healthcare professionals	PSC strengthened the relationship between spirituality and resilience. Spirituality helped build resilience during the pandemic.	Small sample size due to lower response rate during the pandemic.

Author, Year	Location	Study Design	Research aim	Theoretical framework / concept model	Sample	Findings	Research limitations
Liu et al, 2020	China	Quantitative	Investigating PSC impact on presenteeism due to poor health.	Social Information Processing (SIP) theory	N=386 386 healthcare staff	PSC was found to be a predictor of ill health and lead to presenteeism in healthcare staff.	Findings may be limited to public sector healthcare professionals and those working in large hospitals
Worringer et al, 2020	Germany	Qualitative interviews *conventional structuring content analysis	Explore hospital medical and nursing managers' perspective on the mental stress of their employees.	Atheoretical	N=37 37 chief physicians (CP), senior physicians (SP) and senior nurses (SN). Hospital setting.	Managers were found to have good intentions in supporting their staff but did not have the resources to support them to do this.	Potential sampling bias due to voluntary participation. Potential for socially bias behaviour.
Pien et al, 2019	China	Quantitative	To validate the Chinese PSC-12 and explore PSC and workplace violence on nurses.	Atheoretical	N=1690 1690 nurses from 73 hospitals.	PSC was found to be negatively associated with workplace violence. The Chinese PSC-12 was found to be reliable.	Self-reported data. Participants were female only and hospital base only as participants were recruited by convenient sampling.

Author, Year	Location	Study Design	Research aim	Theoretical framework / concept model	Sample	Findings	Research limitations
McLinton et al, 2019	Australia	Quantitative *Longitudinal	Investigate relationship between physical and psychosocial safety climates in frontline healthcare.	PSC theory	N=463 463 healthcare workers within 60 teams.	PSC was found to affect quality of care for patients. Both PSC and physical safety climate both predicted job demands and job resources.	Low internal consistency in some of the scales used.
Mansour & Tremblay, 2019	Canada	Quantitative	Explore how PSC indirectly effects workarounds through emotional exhaustion and physical fatigue.	Conservation of resources theory.	N=562 562 Healthcare staff Mainly nurses in healthcare organisations.	PSC has an impact on workarounds and is mediated by physical fatigue, cognitive weariness, and emotional exhaustion.	Cross-sectional nature of the study. PSC was measured at the individual level.
Mansour & Tremblay, 2018	Canada	Quantitative *Cross-sectional	Explore the effects of PSC on work engagement and organisational citizenship.	Job Demands-Resources (JD-R) model. Theory of conservation of resources.	N=562 562 Healthcare staff Mainly nurses in healthcare organisations.	PSC was found to positively effect work engagement. PSC had no effect or organisational citizenship.	Cross-sectional nature of the study. PSC was measured at the individual level.

Author, Year	Location	Study Design	Research aim	Theoretical framework / concept model	Sample	Findings	Research limitations
Loh et al, 2018	Malaysia	Quantitative * longitudinal	Investigate the relationship between PSC theory with job demands and resources.	PSC theory. Job Demands-Resources (JD-R) model.	N=429 429 Malaysian health care workers from 53 teams	PSC moderated emotional demands. PSC positively impacted psychological health. PSC moderates job demands and job resources.	Self-rated questionnaire.
Petrie et al, 2018	Australia	Quantitative	Exploring manager support in relation to mental health of ambulance workers.	Atheoretical	N=1622 1622 ambulance personnel.	Manager PSC influenced employee mental health.	Low response rate and cross-sectional design.
McLinton et a, 2018	Australia and Malaysia	Mixed-methods approach with qualitative interviews. *Cross-sectional	Investigating benchmarks for working conditions for healthcare staff.	PSC conceptual model. Job Demands-Resources (JD-R) model.	N=2383 1258 healthcare workers in Australia and 1125 in Malaysia across 3 hospitals.	PSC performs worse than physical safety across Australia and Malaysia and receives less attention. Healthcare workers have a lack of resources to do their job to a high quality and are under a lot of pressure.	None

Author, Year	Location	Study Design	Research aim	Theoretical framework / concept model	Sample	Findings	Research limitations
McLinton et a, 2018b	Australia	Mixed-methods approach with qualitative interviews.	Exploring factors that make up PSC from hospital worker perspective.	PSC theory	N=27 27 hospital employees from 3 hospitals.	The study backed up PSC theory. PSC was confirmed to be driven by senior management and needs to be filtered down through teams.	All participants were from hospitals run by the same government. Findings may be limited.
Zadow et al, 2017	Australia	Quantitative	Investigate the relationship between PSC, emotional exhaustion, and workplace injuries.	PSC theory	N=214 214 hospital workers	Low PSC was associated with emotional exhaustion. Teams with Low PSC underreported injuries at work.	Self-reported data and registered data combination – risk of inaccurate reporting.
Havermans et al, 2017	The Netherlands	Quantitative * Cross sectional	Explore the relationship between PSC and stress in healthcare focusing on autonomy and social support.	Job Demand-Control (−Support) Model. Job Demands-Resources model.	N=277 277 Healthcare workers	Low PSC was associated with high stress. Social support and autonomy individually did not change the relationship between PSC and stress. How ever together there was a small positive impact (12%).	Cross sectional study. Stress sample may be underestimated due to non-participation from people under a lot of stress.
Bronkhorst and Vermeeren, 2016	The Netherlands	Quantitative * Cross sectional survey	Explore the relationship between safety climate and performance outcomes.	Safety climate theory.	N=8761 8761 employees in 177 Healthcare organisations	PSC was negatively associated with emotional exhaustion leading to absenteeism and presenteeism.	Cross sectional study.

Author, Year	Location	Study Design	Research aim	Theoretical framework / concept model	Sample	Findings	Research limitations
Bronkhorst, 2015	The Netherlands	Quantitative * Cross sectional survey	Investigate safety behaviours under pressure of job demands in healthcare.	Safety climate theory. Job-Demands Resources (JD-R) model.	N=6230 6230 healthcare employees 52 organisations	Job demands were associated with poor safety behaviour and job resources were associated with good safety behaviour.	Cross-sectional study. Self-reported data in regard to safety behaviour could be answered to put the respondent in a favourable light.
Dollard et al, 2012	Australia	Quantitative	To investigate the effects of PSC on psychological strain.	PSC theory. Job-Demands Resources (JD-R) model.	N= 365 N=202, Time 1 N=163, Time 2 Nurses working in remote areas.	PSC was found to be a cause of hazardous work conditions and psychological strain.	There may be PSC interaction effects due to the research design. Only 2 timepoints.
Rickard et al, 2012	Australia	Quantitative	Study organisational intervention to reduce nurses' occupational stress.	Job-Demands Resources (JD-R) model.	N=484 484 nurses from two hospitals	Increase job resources and reduced job demands reduced psychological stress in hospital-based nurses.	Low response rate and turnover during the study (average 32% turnover).

Table 1. Integrative review table

Chapter 3: Theoretical framework

In establishing the theoretical foundation for this research, two key frameworks were identified as relevant for guiding the research. The first framework considered is the Job Demands–Resources (JD R) Theory (Bakker & Demerouti, 2017), which helps explain how job demands and job resources interact to shape employee experiences such as job satisfaction, work engagement, and organisational commitment. Within this model, PSC can be viewed as a job resource that supports employees in managing workplace demands and enhances their wellbeing. The second framework considered is Social Exchange Theory (SET) (Cropanzano et al., 2017), which focuses on how employees respond to their organisation based on the support and resources they perceive are provided to them. SET can help to understand how a strong PSC may encourage reciprocal positive behaviours, such as increased engagement, commitment, and adherence to organisational expectations. Together, the two frameworks provide perspectives that help explain the process through which PSC may influence midwives' workplace attitudes and behaviours.

3.1 Job Demands-Resources Theory (JD-R Theory)

The Job Demands-Resources (JD-R) theory (Bakker & Demerouti, 2017) is a theoretical framework that can guide research on how job demands and job resources affect well-being and work outcomes. According to the JD-R theory, work attitudes are classified into the following categories: job satisfaction and work engagement. Job satisfaction refers to how fulfilled a person is in their job. Job satisfaction is influenced by job resources such as support, feedback, and opportunities for development. The theory suggests that job satisfaction is more likely to be high if job resources are readily available and accessible. Work engagement refers to involvement and enthusiasm for work. Work engagement is influenced by job demands, including workload, time pressure, physical demands, and job complexity. The theory suggests that job resources moderate job demands, therefore, if there are good job resources, employees are likely to have higher levels of commitment and work engagement. Alshamsi, et al. (2022) found that PSC in healthcare organisations can influence the effects of job demands both positively and negatively. Therefore, we could view PSC as a job resource and a personal resource. Bronkhorst (2015) used JD-R Theory in a healthcare context to investigate job demands and job resources and the effects on safety behaviour. The study suggests that people behave more safely when they have adequate resources to meet the demands of their jobs. In the context of PSC as a job resource, a strong PSC is likely to lead to good safety behaviour. van Duijnhoven et al. (2025) used PSC as an extension of the job demands resource model, indicating that it sits outside job demands and job resources but can be combined with job resources within the JD-R Theory. Although Ji

et al. (2025) used the demand-induced strain compensation (DISC) model, they proposed emotional and cognitive job resources combined with PSC as a three-way interaction with job demands to study the effects on emotional exhaustion and work engagement. This is closest to viewing PSC as a job resource, however, Dollard and Bakker (2010) identified PSC as an upstream organisational resource using the JD-R framework, highlighting that a strong PSC can reduce unnecessary job demands and enhance the availability of job resources, which in turn promotes wellbeing and engagement.

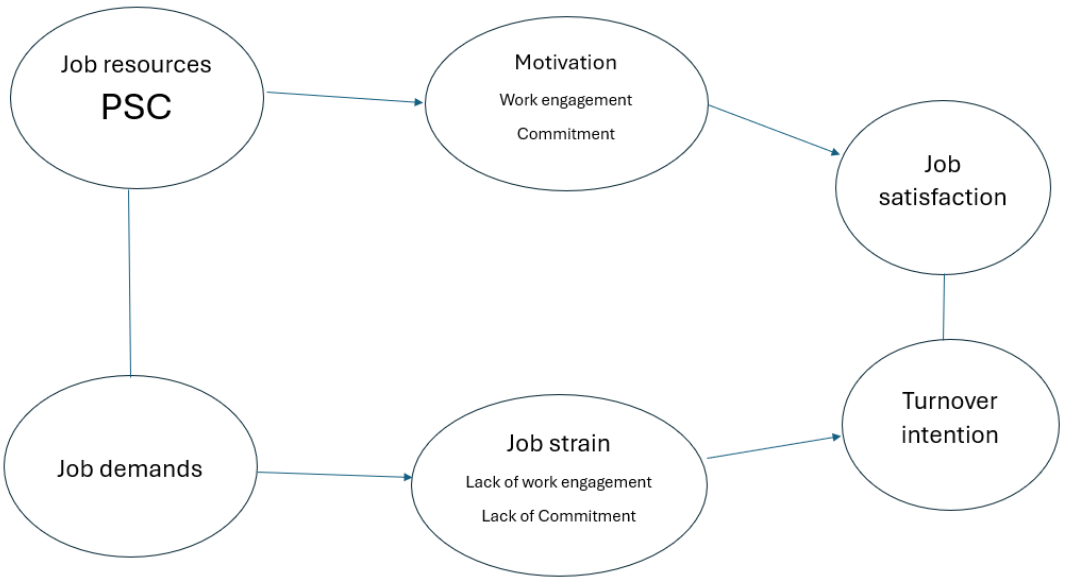


Figure2. Adapted from the Job Demands-Resources Model: (Bakker & Demerouti, 2007)

3.2 Social Exchange Theory

Social Exchange Theory (SET) holds that relationships are reciprocal. In a work setting, this could be viewed in the context of an organisation showing care for employees by providing sufficient support and resources for them to do their job and maintain their wellbeing; in return, the employees reciprocate the behaviour and do their jobs effectively, showing commitment and engagement (Mitchell et al., 2012). The same would apply in reverse, with negative behaviours being associated with a lack of organisational support. Cropanzano et al. (2017) suggest that employees who perceive their organisation as inconsiderate of their needs may react negatively or harmfully towards the company. In relation to safety, Huang et al. (2016) used SET to explain how workers are likely to adhere to safety procedures and actively practice safety when their employer demonstrates that they value safety and provide support and resources in this area. Various studies in nursing and healthcare have used SET as the underlying theory.

Ahmed et al. (2020) used SET to examine the impact of leadership on nurses' psychological distress and found that the results supported the theory. Additionally, Almeida et al. (2020) used SET to explain how a mutually positive relationship between employee and employer is essential for organisations in the context of work well-being and work engagement. Therefore, this could also be applied to the psychosocial safety climate, if we theorise that organisations with high PSCs are likely to have more engaged and committed employees. A different concept used by Azeem et al. (2020) is psychological contract violation (PCV), which explains the reciprocal relationship between an organisation and its employees when the organisation fails to deliver the support it claims to offer. In turn this impacts the employee's intention to leave or become disengaged with their work, similarly to social exchange theory. If PCV can affect social exchange, then logically so can PSC. However, there is currently no literature focusing on PSC using SET framework.

The Generic Model of Social Exchange (Cropanzano et al., 2017). Can be adapted to show PSC as the first step, which can either be perceived as positive or negative, which in turn leads to positive behaviour or negative behaviour.

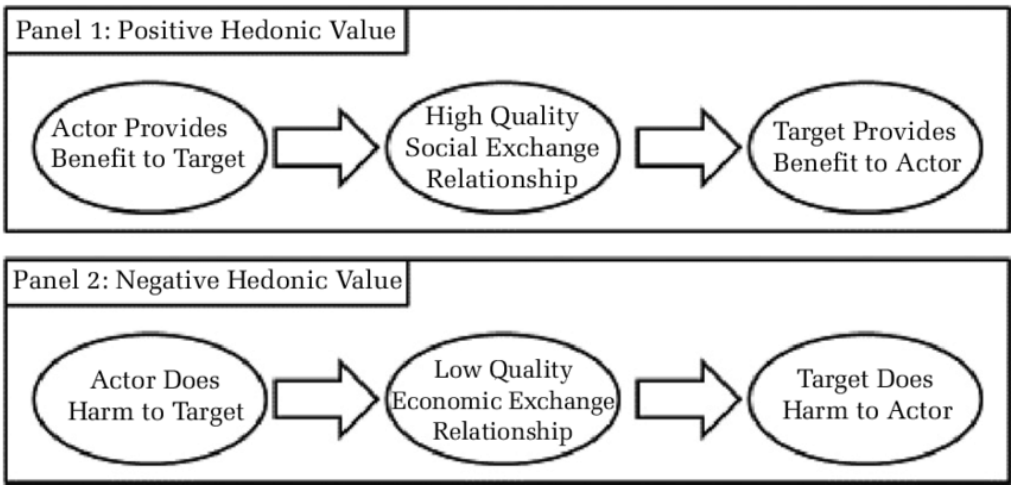


Figure3. Generic Model of Social Exchange (Cropanzano et al., 2017).

Chapter 4: The current study

Exploring psychosocial safety climate in New Zealand midwifery is an important area of research that warrants further investigation. Midwifery is a profession that involves providing emotional and psychological support to families throughout their maternity experience (International Confederation of Midwives, 2024). Therefore, it is crucial to investigate the PSC of midwives in a hospital setting to ensure that they are well-supported and can provide the highest quality of care. Midwives based in hospitals and birth centres are at high risk of psychological distress due to the nature of their work. A recent study by Matthews et al. (2023) reported a high burnout rate amongst midwives in an Australian hospital setting, with many midwives considering leaving their profession in favour of a less stressful career. Key factors contributing to burnout are highlighted by Matthews et al. (2023) were staff shortages, a lack of skilled or qualified team members and a high rate of workplace bullying. Additionally, an article by MacDonald (2022) highlighted that an ongoing struggle for fair pay is a major issue for midwives, with other similarly qualified healthcare workers being paid much higher salaries. The same article also mentions continued staff shortages impacting the wellbeing of midwives in New Zealand and explains that there is a lack of midwives in senior management positions, which means that the challenges midwives face are being overlooked. Midwives lack the institutional power to effect positive change within their organisations and, by extension, the profession (Mharapara et al., 2024). In short, there is not enough support available to New Zealand midwives, and there is no one to advocate for them.

The Health and Safety at Work Act (2015) highlights the significance of psychosocial safety in the workplace. Under this act, employers have a duty to identify and manage psychosocial hazards and provide information and training on managing the risks. Idris et al. (2012) highlight that most workplaces primarily focus on physical safety and often neglect employees' psychological safety. It needs to be clearer that safety does not just mean physical safety. Amoadu et al. (2023) argue that PSC has a direct impact on health and safety in the workplace, therefore, it is important that psychosocial safety is investigated further, and more information is made available for employers to ensure they meet the requirements of The Health and Safety at Work Act (2015) and are educated on what those requirements are.

There is limited research on PSC in midwifery compared to other healthcare professions, so our understanding of the concept in this context is still developing. Research into PSC is a relatively new field, with very little mention of the topic prior to the last 10 years. However, a growing body of literature suggests that it is a critical factor in determining employee well-being and organisational outcomes. By exploring the psychosocial safety climate in midwifery, this research can contribute to the broader

academic understanding of this concept and its implications for employee well-being as well as highlight the need for better support in the midwifery field.

Almost all the research included in this integrative review is quantitative research. Future research should take a qualitative approach to better understand PSC in midwifery.Throughout this integrative review, a clear picture emerged of the gaps in current knowledge, which in turn informed the development of the research question: 'How is Psychosocial Safety Climate perceived by employed midwives working in New Zealand, and how does it influence their work engagement, job satisfaction, organisational commitment, and turnover intentions?'

Based on the information drawn from the current literature, and removing from the motivational pathway of the J-DR theory (Bakker & Demerouti, 2017; Bakker, Demerouti, & Sanz-Vergel, 2023), I will hypothesise the following:

Hypothesis 1:

PSC will be positively related to a) job satisfaction, b) commitment, and c) engagement amongst facility-based midwives.

Hypothesis 2:

PSC will be negatively related to turnover intention amongst facility-based midwives.

Job Satisfaction

Job satisfaction refers to how happy an individual is at work and how content they feel in their job (Judge et al., 2017). If a person is satisfied in their job, they will usually feel good about going to work and enjoy their role. If a person is not satisfied with their job, then they may feel unhappy and have the intention to leave the company in the near future. Things that can influence job satisfaction include day-to-day duties and the feeling of doing meaningful work, relationships with colleagues, pay, recognition and work-life balance (Cunningham et al., 2023). In management research, job satisfaction is the most widely studied job attitude, with studies showing that it has a significant effect on job performance (Schleicher et al., 2004). Amongst other work attitudes, job satisfaction has also been shown to be a significant driver for turnover intention, with employees who are not satisfied in their job having a much higher likelihood of leaving the organisation (Hu et al., 2022). Job satisfaction has been linked to wellness within the healthcare industry, with better job satisfaction reported in employees who feel there is a focus on wellness within their organisation (O'Hara et al., 2025).

Commitment

Commitment refers to an individual's loyalty and responsibility to their job or organisation, usually through sharing the organisation's values and working somewhere for a long period of time (Judge et al., 2017). Committed employees tend to be more productive and more willing to put in extra effort for the organisation. Callado, Teixeira and Lucas (2023) found a strong link between commitment to an organisation and turnover intention, suggesting that if a person is committed to their company, they will be less likely to think about leaving their job. Additionally, Binkanan, et al. (2024) found that when there is high turnover within an organisation, there is also a high number of employees who do not feel connected to the organisation or who feel indifferent towards their employer.

Work engagement

Work engagement can be viewed from three dimensions: vigour, the level of energy felt whilst working, dedication, enthusiasm for doing daily work and absorption, the level of immersion in daily work and everyday tasks (Schaufeli et al., 2019). Work engagement may be a key indicator of employee wellbeing, with engaged employees being less likely to experience burnout or emotional fatigue (Schaufeli et al., 2008). Work engagement has also been found to reduce turnover in healthcare, with engaged employees less likely to leave the organisation (Poku et al., 2025). Like commitment, work engagement is an essential component to avoiding high levels of turnover within the organisation.

Turnover intention

Turnover intention refers to an individual's perception of when they are likely to leave their current job and find a new job (Hu et al., 2022). Turnover intention is closely linked to job satisfaction, with low job satisfaction leading to a higher risk of turnover intention among healthcare workers (Aras & Gümüşsoy, 2024). Along with job satisfaction, there are many other job attitudes that impact turnover intention, including commitment and work engagement (Poku et al., 2025). Turnover intention within healthcare is an important factor to be aware of because it can impact the quality of care provided to patients (Callado et al., 2023). The COVID-19 pandemic was responsible for a considerable increase in turnover intention amongst healthcare workers due to the burnout and lack of organisational support that was experienced during that time (D'Alessandro-Lowe et al., 2024).

4.1 Methodology

The research used quantitative methods, including a self-reported survey administered at three separate time points (2019, 2020, 2021). The philosophical assumptions of a positivist research paradigm guided this study. A research paradigm is a framework for guiding a study based on the researchers' beliefs and their preferences, and consists of an ontology, epistemology and methodology (Kekeya, 2019). The positivist paradigm values the use of facts that are observed and measured, along with evidence-based reasoning, rather than relying on theories or speculation (Kankam, 2019). This research was guided by an ontology of objectivism, an epistemology of positivism and a methodology of quantitative survey research. Ontology and epistemology are theoretical concepts referring to reality and how we view things (Ontology) and the understanding and knowledge generation of the concept (epistemology) whilst a methodology is the practical method for conducting the study (Scotland, 2012). This framework was chosen because the goal is to test the hypothesis through the analysis of quantitative data, using the integrative literature review as a basis for the research.

4.2 Procedure

Data for this study were obtained from the New Zealand Midwifery Work and Wellbeing (NZ-MidWoW) Study (Mharapara et al., 2022). The NZ-MidWoW Study was approved by the Auckland University of Technology Ethics Committee (AUTEC 19/33) and collected midwives' work and well-being data at three time points between 2019 and 2021. At each time point, a Qualtrics link to an online questionnaire was sent to registered New Zealand College of Midwives (NZCOM) members who agreed to receive research study invitations. NZCOM is the professional organisation for midwives in New Zealand. The survey was sent to approximately 2,000 NZCOM members each year. Usable participants who met the criteria of being employed in a hospital or birthing centre setting and whose data could be used in this study were as follows: 2019 (timepoint 1) n=281, 2020 (timepoint 2) n=231, 2021 (timepoint 3) n=234. Participation in the NZ-MidWoW study was voluntary, and participants could withdraw from the research surveys at any time. Reminder emails were sent two and four weeks after the initial invitation to increase participant response rates. Upon completing the survey questionnaire at each time point, participants became eligible to enter a prize draw for one of 20 retail grocery vouchers valued at $50.

4.3 Participants

The samples for the current research were comprised of facility-based midwives primarily working in hospitals or birth centres. The data used in this study consisted of

participants who completed the section of the survey that asked: “Do you have a line manager or supervisor whom you report to?” Midwives who work in organisations such as small or large hospitals, educational institutions, and managerial settings responded to the survey. This was a requirement to be able to answer the questions related to PSC essential to this study. Demographic data of participant midwives at each time point are presented in Tables 1-3.

Most participants in this study across all three time points identified as female (96.6%-100%). This is aligned with the current industry data presented in the 2024 Midwifery Workforce Survey (Te Tatau o te Whare Kahu Midwifery Council, 2024) which identified 99.5% of the midwifery workforce as female (0.3% male and 0.1% gender diverse). Participants identified their ethnicity mainly as New Zealand European (60.2%-62.7%), with the remaining participants a mixture of non-New Zealand European, New Zealand Māori and ‘other’ ethnicity. More participants were located in urban areas than in rural areas, and 59.8%-71.4% were educated to degree level. Salaries across the three timepoints were reported in ranges from below $20,000 to above $100,000, with the majority of participants earning over $50,000.

Table 2. Timepoint 1. Demographic details of participant midwives (n = 281)

Category		Statistic
Income		
	Less than $20,000	2.9% (*n* = 10)
	$20,000 to $34,999	8% (*n* = 27)
	$35,000 to $49,999	22.4% (*n* = 76)
	$50,000 to $74,999	35.7% (*n* = 121)
	$75,000 to 99,999	24.2% (*n* = 82)
	More than $100,000	5.3% (*n* = 18)
Work location		
	Urban	85.7% (*n* = 36)
	Rural	2.4% (*n* = 1)
	Remote Rural	11.9% (*n* = *5*)
Education		
	Bachelor's Degree	67% (*n* = 187)
	Diploma	9.4% (*n* = 26)
	Hospital-based qualification	19.4% (*n* = 54)
Mean Age		46.9 years (*SD* = 37.63)
Ethnicity		
	New Zealand European	62.7% (*n* = 175)
	New Zealand Māori	6.8% (*n* = 19)
	Non-New Zealand European	21.1% (*n* = 59)
	Other Ethnicity	9.3% (*n* = 26)
Gender		
	Female	99.6% (*n* = 280)
	Male	0% (*n* = *0*)
	Other	0.4% (*n* = 1)

Table 3. Timepoint 2. Demographic details of participant midwives (n = 231)

Category		Statistic
Income		
	Less than $20,000	4.9% (*n* = 14)
	$20,000 to $34,999	8% (*n* = 23)
	$35,000 to $49,999	15.3 % (*n* = 44)
	$50,000 to $74,999	36.5% (*n* = 105)
	$75,000 to 99,999	23.3% (*n* = 67)
	More than $100,000	9.7% (*n* = 28)
Work location		
	Urban	64.7% (*n* = 11)
	Rural	29.4% (*n* = 5)
	Remote Rural	5.9% (*n* = *1*)
Education		
	Bachelor's Degree	59.8% (*n* = 138)
	Diploma	12.6% (*n* = 29)
	Hospital-based qualification	23.8% (*n* = 55)
Mean Age		49.05 years (*SD* = 11.64)
Ethnicity		
	New Zealand European	60.2% (*n* = 139)
	New Zealand Māori	7.4% (*n* = 17)
	Non-New Zealand European	24.7% (*n* = 57)
	Other Ethnicity	7.7% (*n* = 18)
Gender		
	Female	98.3% (*n* = 227)
	Male	0.4% (*n* = *1*)
	Other	1.3% (*n* = *3*)

Table 4. Timepoint 3. Demographic details of participant midwives (n = 234)

Category		Statistic
Income		
	Less than $20,000	3.7% (*n* = 11)
	$20,000 to $34,999	7.1% (*n* = 21)
	$35,000 to $49,999	12.9% (*n* = 38)
	$50,000 to $74,999	38% (*n* = 112)
	$75,000 to 99,999	28.5% (*n* = 84)
	More than $100,000	8.1% (*n* = 24)
Work location		
	Urban	83.3% (*n* = 10)
	Rural	16.7% (*n* = 2)
	Remote Rural	0% (*n* = *0*)
Education		
	Bachelor's Degree	71.4% (*n* = 167)
	Diploma	9.4% (*n* = 22)
	Hospital-based qualification	17.1 % (*n* = 40)
Mean Age		48.26 years (*SD* = 11.31)
Ethnicity		
	New Zealand European	61.5% (*n* = 144)
	New Zealand Māori	7.3 % (*n* = 17)
	Non-New Zealand European	20.9 % (*n* = 49)
	Other Ethnicity	10.2 % (*n* = 24)
Gender		
	Female	100% (*n* = 234)
	Male	0% (*n* = *0*)
	Other	0% (*n* = *0*)

4.4 Measures

Psychosocial Safety Climate (PSC). PSC was measured using the PSC-4 (Dollard, Dormann, & Idris, 2019), a parsimonious scale derived from the PSC-12 (Hall, Dollard, & Cowar, 2010). Example items are: “senior management show support for stress prevention through involvement and commitment” and “senior management considers midwives psychological health to be as important as productivity”. Responses were captured on a Likert scale ranging from 1 (Strongly disagree) to 6 (Strongly agree). The PSC-4 scale is relatively new but has demonstrated good scale reliability (α=0.87-0.88) when tested by Dollard (2019) in comparison with the PSC-12 scale (α=0.93-0.94), which was deemed acceptable by the study. The PSC-4 has been used in a university employee wellbeing study during the COVID-19 pandemic (Juutinen et al., 2023) and showed good reliability (α=0.88-0.89). Within healthcare, the PSC-12 scale has been successfully used in previous studies, including one measuring PSC during the COVID-19 pandemic (Brunetto et al., 2022) and another measuring PSC among frontline healthcare workers (McLinton et al., 2019). Therefore, it was deemed acceptable to use the PSC-4 in this study.

Job satisfaction. Job satisfaction was measured using the attitude scale from Brayfield and Rothe (1951), ‘An index of Job Satisfaction’. This is a 5-item scale with items such as “I consider my job rather pleasant” and “Most days I am enthusiastic about my work”. Responses were captured on a Likert scale ranging from 1 (never) to 6 (always). The overall job satisfaction survey has been successfully used to study job satisfaction in relation to performance (Schleicher et al., 2004) and has demonstrated a good scale reliability (α=0.92). In nursing, the job satisfaction index has been used to study job satisfaction in relation to turnover intention (Hu et al., 2022) and has also demonstrated good reliability here (α = 0.83).

Work engagement. Work engagement was measured using the ‘Ultra short work engagement scale’ by Schaufeli et al. (2019) which is a 3-item scale developed by scaling down from a 9-item scale in order to streamline surveys to make it easier for participants to answer. The three items are “At my work, I feel bursting with energy”, “I am enthusiastic about my job” and “I am immersed in my work”. Responses to these three items were captured on a Likert scale ranging from 1 (never) to 6 (always). The ultra-short work engagement scale has demonstrated excellent reliability (α=0.96) in a study on the quality of working life for Saudi Arabian Nurses (Hassona, Albaqawi, & Laput, 2021). The scale has also been used to assess work engagement for Spanish

Nurses during the COVID-19 pandemic (María del Carmen, Vicente, & Ana, 2020) and demonstrated reasonably good reliability (α=0.81).

Turnover intention. Turnover intention was measured via the uniform model of turnover from organisations by Bluedorn (1982) which was developed by reviewing and streamlining three existing turnover models to produce a more accurate measure of turnover intention. A 4-item scale was used with items such as “leaving the midwifery profession in the next three months” and “leaving the midwifery profession sometime in the next two years”. The responses were captured on a Likert scale ranging from 1 (extremely unlikely) to 5 (extremely likely). This scale was used to assess turnover intention in relation to psychological contract violation (Azeem et al., 2020) and demonstrated good reliability (α=0.86).

Commitment. Commitment was measured using the ‘assessment of commitment’ model developed by Klein et al. (2014) which is referred to as the KUT (Klein et al., Unidimensional, Target-free) and consists of a 4-item measure designed to effectively gauge commitment to an organisation. The use of the 4-item measure encourages response rates and simplifies the reporting process for the participants (Klein et al., 2014). Example items used in this study are “To what extent do you care about your work as a midwife” and “How dedicated are you to your work as a midwife”. Responses were captured on a Likert scale ranging from 1 (not at all) to 7 (completely). When tested by Klein et al. (2014), the KUT demonstrated high reliability (α=0.86-0.97). The scale also showed high reliability (α=0.97) when used in a study to assess auditors' commitment to their company (Cannon & Herda, 2016).

Demographic items. Demographic data was collected using six items that required participants to indicate their age, gender, ethnicity, highest level of educational attainment, work setting and income.

4.5 Data Analysis

I analysed the data using Jamovi version 2.3.28. Jamovi is an intuitive, free, and open statistical platform. Jamovi is user-friendly and is not wedded to a specific statistical ideology; it serves as a safe space for different statistical approaches (Ashour, 2024). First, I filtered the NZ-MidWoW data at each time point to ensure that my working dataset included only facility-based midwives in the study. Second, I performed reliability tests to determine the consistency of each measure across the three-time points (Collins, 2007). To assess the internal consistency of the measures, I used Jamovi’s reliability analysis function to calculate Cronbach’s alpha.

Results for my reliability analyses are shown in Table 4. Secondly, a correlation analysis was performed between PSC and each outcome variable. I used to ‘correlation matrix’ function to perform this analysis and selected Pearson’s correlation coefficients.

Finally, a mini meta-analysis was performed on the Pearson’s correlations to determine the aggregated correlation between each outcome variable across the three time points. An aggregated correlation is a way to assess each variable over the three timepoints and present them as one result (Zhang & Wang, 2014). I used the ‘correlation coefficients’ function to perform this analysis. I could not perform this analysis for the ‘commitment’ variable as there was only data for two time points.

Chapter 5: Results

Reliability testing

As shown in Table 5, there was no significant difference between the three time points on any of the five variables. The Cronbach's alpha suggests internal consistency between the scales across the three timepoints and the five variables (range $\alpha = 0.74$ – $\alpha = 0.94$). The standard deviation is small across each variable and timepoint (range SD = 0.83 – SD = 1.22), indicating the data is close to the mean in each instance.

Correlation analysis

As shown in Table 6 and in line with Hypothesis 1, I found a statistically significant positive aggregated correlation between PSC and job satisfaction ($\rho = -.40$; $p < .001$), and engagement ($\rho = -.24$; $p < .001$). With only two time points for commitment, it was not possible to do an aggregated correlation, however, the correlation for 2020 and 2021 was positive (2020; $\rho = .19$ and 2021; $\rho = .16$). In line with Hypothesis 2, I found a statistically significant negative aggregated correlation between PSC and turnover intention ($\rho = -.25$; $p < .001$).

Table 5. Reliability analysis for all variables

Variable	**2019**				**2020**				**2021**			
	Range	*M*	*SD*	Cronbach's α	Range	*M*	*SD*	Cronbach's α	Range	*M*	*SD*	Cronbach's α
PSC	1.00 - 5.00	2.47	1.09	0.91	1.00 - 5.00	2.59	1.21	0.94	1.00 - 5.00	2.09	1.01	0.90
Job satisfaction	1.00 - 6.00	3.82	0.96	0.93	1.00 - 6.00	4.22	1.01	0.94	1.00 - 6.00	3.76	1.01	0.94
Engagement	1.00 - 6.00	3.68	0.83	0.73	1.00 - 7.00	3.87	0.85	0.77	1.00 - 5.67	3.55	0.85	0.74
Commitment					1.00 - 6.00	5.61	1.19	0.94	1.00 – 7.00	5.27	1.22	0.92
Turnover	1.00 – 5.00	1.87	0.98	0.92	1.00 – 5.00	1.91	1.10	0.94	1.00 – 5.00	2.17	1.09	0.92

Table 6. Bivariate and aggregated correlations between PSC and job satisfaction, engagement, commitment, and turnover.

Variable	**2019**		**2020**		**2021**		**Aggregated**		
	r	*N*	*r*	*N*	*r*	*N*	ρ	*p*	CI
Job satisfaction	.42	148	.36	159	.37	166	.40	< .001	.31 - -.50
Engagement	.21	148	.28	160	.21	170	.24	< .001	.15 - -.33
Commitment			.19	159	.16	170			
Turnover	-.31	141	-.22	156	-.20	164	-.25	< .001	-.34 - -.16

5.1 Discussion

The aim of this study was to explore the psychosocial safety climate (PSC) in New Zealand midwifery through an integrated literature review, followed by a quantitative study examining the relationships among PSC, job satisfaction, work engagement, organisational commitment, and turnover intentions. The findings support the hypothesis that PSC is positively associated with job satisfaction, work engagement, and commitment, and negatively associated with turnover intentions.

This research contributes to the broader PSC literature by reaffirming its impact at the individual level and addressing a knowledge gap regarding New Zealand midwifery employees. The study's primary value lies in its practical implications: leadership teams in New Zealand can use these insights to inform policy development and targeted interventions. By strengthening the evidence linking PSC to midwifery employee wellbeing—particularly in relation to job satisfaction and turnover intentions—this study aligns with international findings on healthcare workforce wellbeing.

5.2 Theoretical implications

The integrative review, combined with the research results, is in line with the hypotheses, indicating that a good PSC leads to higher levels of job satisfaction, work engagement and commitment, and a poor PSC leads to increased turnover intention. As expected, the results are in line with the job demands resource model (Bakker & Demerouti, 2017) when PSC is viewed as a job resource. PSC as a job resource is significant because of the impact on job demands. The results show that if PSC positively affects work engagement which suggests that good PSC enables employees to deal with their job demands effectively. The results also fit with the social exchange theory (Cropanzano et al., 2017), in the sense that when the organisation provides a good PSC, in return employees show their appreciation through commitment, engagement and being more satisfied with their job. If the organisation is low in PSC, employees are more likely to leave sooner. However, for the purpose of this study, PSC as a job resource in line with the JD-R Theory works better to explain the organisational outcomes, such as job satisfaction, and SET helps to explain the relationship between the behaviours.

This study contributes to the research on PSC within management and healthcare internationally and highlights the importance of research around the psychosocial safety of midwives in New Zealand. The findings of this study could be used to support further research in this area or towards expanding research within the midwifery profession. The study could also support management research around PSC in relation to job satisfaction, commitment, work engagement and turnover intentions.

5.3 Practical implications

The results of this study demonstrate that PSC significantly influences job satisfaction, work engagement, organisational commitment, and turnover intentions among maternity hospital healthcare workers (midwives). When PSC is actively promoted, organisations are likely to experience lower turnover, higher employee engagement, stronger commitment, and greater job satisfaction. Conversely, poor PSC can lead to disengagement and increased turnover intentions, which carry substantial financial costs for the organisation (Loh, Dollard, & Friebel, 2024). Given these implications, prioritising PSC should be a strategic focus for every organisation. Unfortunately, evidence suggests this is not yet common practice.

While achieving a strong PSC may be an organisational goal, significant challenges can hinder meaningful progress. Some organisations may have policies designed to foster PSC, and managers and colleagues may act with the best intentions. However, if senior leadership is not fully committed and actively cascading support throughout the organisation, employees are unlikely to perceive a positive PSC.

In healthcare, this influence is particularly difficult to disseminate due to complex management structures and the collaboration of multiple specialised teams. Midwives, for example, have autonomy in providing primary care but also work under obstetricians and neonatologists as employees. They collaborate with maternity nurses, yet possess greater autonomy and education than nurses who report to physicians. This layered structure makes it challenging to maintain a consistently high level of PSC across teams.

Moreover, within hospital midwifery, policy implementation can be ineffective because of the autonomy and unique nature of the role. Generic healthcare policies may not adequately address midwifery-specific needs (Sonmezer, 2021). Therefore, tailored policies and interventions are essential, as the midwifery role differs significantly from other healthcare positions.

PSC is often unrecognised within organisations because employees become accustomed to working only the way they have experienced it. For some, it feels normal to remain silent about problems—whether due to a lack of confidence in leadership or fear of negative consequences (Wawersik et al., 2023). A growing body of literature is gradually emphasising the need for change. In response, some organisations have begun prioritising staff retention through wellbeing programs and inclusivity initiatives, which can help foster a positive PSC. This research adds to that conversation by underscoring PSC as a critical issue within the midwifery profession.

PSC should be prioritised and actively promoted within midwifery and the wider healthcare sector. Healthcare organisations need to place PSC at the forefront of their health and safety strategies. Too often, health and safety is narrowly interpreted as preventing physical incidents such as slips, trips, and falls—areas where most organisations already have established procedures. However, when it comes to psychological safety, there is a noticeable gap in policy, procedure, and awareness. The fact that PSC is a relatively new concept in healthcare suggests that, historically, employers have paid limited attention to the psychological wellbeing of staff. There is still considerable work to be done to help organisations understand the importance of prioritising psychological health and to integrate psychological safety into the Health and Safety Act (2015) framework.

There are challenges that arise that can make PSC low. Organisational change in the form of a restructure, particularly if there are redundancies, can be damaging to an employee's psychological wellbeing. In these circumstances, it may be difficult to maintain a positive PSC due to widespread uncertainty throughout all levels of employees, including senior leadership. Change can be difficult for an organisation to manage and often leads to turnover which can have a negative impact on employees' psychological wellbeing. If they do not feel supported by the organisation this can lead to an overall negative feeling amongst employees (Backhaus et al., 2024).

Interventions such as wellbeing support, stress management policies, supportive leadership, and training on speaking up and where to access resources should become common practice. Midwives should be included in wider teams even if their role is sometimes solitary.

5.4 Limitations

This study was a repeated cross-sectional survey over a 3-year period (3 time points). Results may have been more accurate with a longitudinal study. However, because the study was conducted during the COVID-19 pandemic, which significantly impacted the healthcare sector, the response rate was likely affected. Additionally, although each variable measure showed good reliability, the data were self-reported, which leaves room for bias and memory inaccuracies. Bias can occur when the respondent is not fully focused on the questions, does not understand the questions or when the respondent is trying to select answers that they feel is the 'right answer' (Podsakoff et al., 2012).

Chapter 6: Future research

Future research would benefit from a qualitative study to gain deeper insights into PSC within the midwifery profession, drawing on conversations with practicing midwives. A longitudinal study could also strengthen the evidence base by validating the findings of this research over time. Further exploration from a management perspective would be valuable, particularly examining the practicalities of implementing PSC-related policies and best practices at the leadership level. Research could also address the challenges of creating midwifery-specific policies and differentiating psychological wellbeing needs in midwifery from those of other frontline healthcare professions. Additionally, investigating PSC across an entire maternity ward or birthing centre could provide a broader understanding of its relationship to service outcomes and the quality of patient care.

Chapter 7: Recommendations

Improving PSC is within an organisation's best interest. Idris and Dollard (2011) suggest that if leaders want engaged and productive employees, they need to ensure they are managing the impacts of workplace stress and collectively working towards building a strong PSC within the organisation. Additionally, research (Huyghebaert et al., 2018) suggests that leadership teams should equally prioritise productivity and psychological wellbeing by requiring managers to report on what they are doing to look after their employees' psychological wellbeing. Leadership teams need to understand their responsibilities to influence PSC and must be actively involved in implementing policies and procedures to ensure PSC is felt by their employees. An effort must be made to ensure that multidisciplinary teams with different reporting structures are supported, and the complex nature of the team is considered when implementing interventions. If leadership is not fully engaged, then it will not be possible to make changes.

It is recommended that a written policy outlining the activities and behaviours that lead to a strong PSC be implemented as standard practice. Policy should be specific to the hospital's maternity service team, not generic to the healthcare industry. Training should be compulsory for all employees on best practices for a strong PSC, and clear processes should be in place for employees to raise concerns without adverse consequences. Having multiple approaches to addressing PSC at all levels has been shown to be most effective (Loh et al., 2024). Additionally, all senior leaders should be required to show an understanding of what PSC is and commit to behaviours that encourage PSC to flourish. Leadership behaviours that encourage a strong PSC include actively championing PSC policies, open communication, quality job descriptions and a focus on wellbeing (Amoadu et al., 2023). Leaders within healthcare organisations should understand the unique role of maternity healthcare workers (midwives) and the need for strong psychological support.

Organisations should consider the financial impact of having a poor PSC and view these policies as a key cost-saving measure that will avoid costly recruitment processes, absences and lack of productivity (Loh et al., 2024). In an already over stretched sector, hospitals cannot afford to lose qualified and experienced midwives. It can be argued that a poor PSC within hospital maternity teams is not just financially costly, it is a matter of life or death.

Whilst the profession can and should take collective action to improve the PSC within NZ hospital maternity settings, the issues are systemic and extend beyond the profession itself. Other professional groups and NZ Health must be included in these

efforts to ensure meaningful and sustainable change. Additionally, PSC appears to be essential to workplace health and safety, and employers should consider this when reviewing health and safety policies, ensuring the psychological components are given the same priority as the physical components and are specific to the midwifery role.

Chapter 8: Conclusion

This study confirms that PSC is a critical factor influencing job satisfaction and turnover intentions among New Zealand midwives working in hospital settings. Steps should be taken to address low PSC and provide adequate psychological support interventions for midwives. The findings also show that PSC impacts work engagement and organisational commitment, emphasising the need for hospitals employing midwives to take action to keep staff engaged and committed—ultimately ensuring the highest quality of patient care. Furthermore, this study positions PSC as a job resource within the framework of the Job Demands–Resources (JD-R) theory (Bakker & Demerouti, 2017). When midwives experience a strong PSC provided by their organisation, they are more likely to be engaged, committed, and satisfied with their work, reducing the likelihood of turnover. To improve PSC in midwifery, hospital leadership teams should implement policies tailored specifically to the midwifery role and ensure managers at all levels are trained to support PSC effectively. Leadership must also collaborate to overcome challenges posed by the complex reporting structures within maternity care facilities, ensuring that a high level of PSC is consistently experienced across the entire team.

Overall, this study underscores the importance of PSC for midwives and demonstrates its impact on commitment, work engagement, and key organisational outcomes such as job satisfaction and turnover intentions. The literature review revealed a gap in research and highlighted the need to examine PSC within the midwifery context. It also emphasised the unique role of hospital-based midwives, the challenges they face, and the lack of organisational support within the healthcare sector. Further research is needed to fully understand the extent to which PSC influences the quality of patient care.

References

Abdi, F., Jahangiri, M., Kamalinia, M., Cousins, R., & Mokarami, H. (2023). Developing a model for predicting safety performance of nurses based on psychosocial safety climate and role of job demands and resources, job satisfaction, and emotional exhaustion as mediators. *BMC Psychology*, *11*(1), 187. https://doi.org/10.1186/s40359-023-01223-1

Abu Bakar, N., Bulgiba, A., & Isahak, M. (2025). Perceived psychosocial safety climate (PSC) level and its association with occupational outcomes among clinical unit healthcare workers in a Malaysian hospital: a three-wave longitudinal study. *BMC Public Health*, *25*(1), 1-9. https://doi.org/10.1186/s12889-025-22562-1

Ahmed, A., Jan, G., Barkat, W., Ahmed, R., & Mahmood, A. (2021). The Impact of Spirituality on Resilience and Engagement during the COVID-19 Pandemic [Article]. *Journal of Management, Spirituality and Religion*, *18*(5), 400-424. https://doi.org/10.51327/NAEU8792

Ahmed, F., Zhao, F., & Faraz, N. A. (2020). How and When Does Inclusive Leadership Curb Psychological Distress During a Crisis? Evidence From the COVID-19 Outbreak. *Front Psychol*, *11*, 1898. https://doi.org/10.3389/fpsyg.2020.01898

Akerstrom, M., Carlsson, Y., Sengpiel, V., Veje, M., Elfvin, A., Jonsdottir, I. H., Degl'Innocenti, A., Ahlstrom, L., Wijk, H., & Linden, K. (2022). Working conditions for hospital-based maternity and neonatal health care workers during extraordinary situations – A pre-/post COVID-19 pandemic analysis and lessons learned [Article]. *Sexual and Reproductive Healthcare*, *33*, Article 100755. https://doi.org/10.1016/j.srhc.2022.100755

Almeida, S., Bowden, A., Bloomfield, J., Jose, B., & Wilson, V. (2020). Caring for the carers in a public health district: A well-being initiative to support healthcare professionals. *Journal of Clinical Nursing*, *29*(19-20), 3701-3710.

Alshamsi, A. I., Santos, A., & Thomson, L. (2022). Psychosocial Safety Climate Moderates the Effect of Demands of Hospital Accreditation on Healthcare Professionals: A Longitudinal Study. *Front Health Serv*, *2*, 824619. https://doi.org/10.3389/frhs.2022.824619

Amoadu, M., Ansah, E. W., & Sarfo, J. O. (2023). Influence of psychosocial safety climate on occupational health and safety: a scoping review [Article]. *BMC Public Health*, *23*(1). https://doi.org/10.1186/s12889-023-16246-x

Aras, F. M., & Gümüşsoy, S. (2024). Emotional burnout, job satisfaction, and intention to leave among pre-hospital emergency healthcare workers during the COVID-19 pandemic. *Work*, *79*(1), 47-59. https://doi.org/10.3233/WOR-230589

Ashour, L. (2024). A review of user-friendly freely-available statistical analysis software for medical researchers and biostatisticians. *Research in Statistics*, *2*(1), 2322630. https://doi.org/10.1080/27684520.2024.2322630

Azeem, M. U., Bajwa, S. U., Shahzad, K., & Aslam, H. (2020). *Psychological contract violation and turnover intention: The role of job dissatisfaction and work disengagement* [doi:10.1108/ER-09-2019-0372]. Emerald Publishing.

Backhaus, I., Lohmann-Haislah, A., Burr, H., Nielsen, K., di Tecco, C., & Dragano, N. (2024). Organisational change: challenges for workplace psychosocial risks and employee mental health. *BMC Public Health*, *24*(1), 2477. https://doi.org/10.1186/s12889-024-19815-w

Bakker, A. B., & Demerouti, E. (2007). The Job Demands-Resources model: State of the art. *Journal of Managerial Psychology*, *22*(3), 309-328. https://doi.org/10.1108/02683940710733115

Bakker, A. B., & Demerouti, E. (2017). Job demands-resources theory: Taking stock and looking forward. *Journal of Occupational Health Psychology*, *22*(3), 273-285. https://doi.org/10.1037/ocp0000056

Bakker, A. B., Demerouti, E., & Sanz-Vergel, A. (2023). Job demands–resources theory: Ten years later. *Annual Review of Organisational Psychology and Organisational Behavior*, *10*, 25-53.

Binkanan, A., Ayesh, A. R., & and Alqassab, H. A. (2024). Assessment of Organisational Commitment and Turnover Intention Among Wound Care Staff in Saudi Arabia. *Chronic Wound Care Management and Research*, *11*(null), 31-41. https://doi.org/10.2147/CWCMR.S464380

Biron, C., Parent-Lamarche, A., Ivers, H., & Baril-Gingras, G. (2018). Do as you say. *International Journal of Workplace Health Management*, *11*(4), 228-244. https://doi.org/10.1108/IJWHM-01-2018-0009

Bluedorn, A. C. (1982). A unified model of turnover from organisations. *Human Relations*, *35*(2), 135-153. https://doi.org/10.1177/001872678203500204

Brayfield, A. H., & Rothe, H. F. (1951). An index of job satisfaction. *Journal of Applied Psychology*, *35*(5), 307-311. https://doi.org/10.1037/h0055617

Bronkhorst, B. (2015). Behaving safely under pressure: The effects of job demands, resources, and safety climate on employee physical and psychosocial safety behavior [Article]. *Journal of Safety Research*, *55*, 63-72. https://doi.org/10.1016/j.jsr.2015.09.002

Bronkhorst, B., & Vermeeren, B. (2016). Safety climate, worker health and organisational health performance Testing a physical, psychosocial and combined pathway [Article]. *International Journal of Workplace Health Management*, *9*(3), 270-289. https://doi.org/10.1108/ijwhm-12-2015-0081

Brunetto, Y., Saheli, N., Dick, T., & Nelson, S. (2022). Psychosocial Safety Climate, Psychological Capital, Healthcare SLBs' Wellbeing and Innovative Behaviour During the COVID 19 Pandemic [Article]. *Public Performance and Management Review*, *45*(4), 751-772. https://doi.org/10.1080/15309576.2021.1918189

Callado, A., Teixeira, G., & Lucas, P. (2023). Turnover Intention and Organisational Commitment of Primary Healthcare Nurses. *Healthcare (Basel)*, *11*(4). https://doi.org/10.3390/healthcare11040521

Cannon, N. H., & Herda, D. N. (2016). Auditors' Organisational Commitment, Burnout, and Turnover Intention: A Replication [Article]. *Behavioral Research in Accounting*, *28*(2), 69-74. https://doi.org/10.2308/bria-51455

Collins, L. M. (2007). Research Design and Methods. In J. E. Birren (Ed.), *Encyclopedia of Gerontology (Second Edition)* (pp. 433-442). Elsevier. https://doi.org/https://doi.org/10.1016/B0-12-370870-2/00162-1

Cronin, M. A., & George, E. (2023). The Why and How of the Integrative Review. *Organisational Research Methods*, *26*(1), 168-192. https://doi.org/10.1177/1094428120935507

Cropanzano, R., Anthony, E., Daniels, S., & Hall, A. (2017). Social Exchange Theory: A Critical Review with Theoretical Remedies. *The Academy of Management Annals*, *11*, 1-38. https://doi.org/10.5465/annals.2015.0099

Cunningham, R., Westover, J., & Harvey, J. (2023). Drivers of job satisfaction among healthcare professionals: a quantitative review [Article]. *International Journal of Healthcare Management*, *16*(4), 534-542. https://doi.org/10.1080/20479700.2022.2126671

D'Alessandro-Lowe, A. M., Brown, A., Sullo, E., Pichtikova, M., Karram, M., Mirabelli, J., McCabe, R. E., McKinnon, M. C., & Ritchie, K. (2024). Why Are Healthcare Providers Leaving Their Jobs? A Convergent Mixed-Methods Investigation of Turnover Intention among Canadian Healthcare Providers during the COVID-19 Pandemic. *Nursing Reports*, *14*(3), 2030-2060. https://doi.org/10.3390/nursrep14030152

Daellenbach, S., Dixon, L., Anderson, J., Nisa-Waller, A., Lockwood, S., & Neely, E. (2024). Partnership in a hospital setting: Consumer perspectives of hospital midwifery care in Aotearoa New Zealand. *New Zealand College of Midwives Journal*(60), 1-10. https://doi.org/10.12784/nzcomjnl.246001

de Wijn, A. N., & van der Doef, M. P. (2022). Reducing Psychosocial Risk Factors and Improving Employee Well-Being in Emergency Departments: A Realist Evaluation [Article]. *Frontiers in Psychology*, *12*, Article 728390. https://doi.org/10.3389/fpsyg.2021.728390

Dixon, L., Clemons, J. H., & Mharapara, T. Exploring the midwifery workplace environment in Aotearoa New Zealand over the three years 2019-2021. *New Zealand College of Midwives Journal*, *2025*(61). https://doi.org/10.12784/nzcomjnl.256104

Dollard, M. (2019). The PSC-4; A Short PSC Tool. In (pp. 385-409). https://doi.org/10.1007/978-3-030-20319-1_16

Dollard, M., Dormann, C., & Idris, M. A. (2019). *Psychosocial Safety Climate A New Work Stress Theory: A New Work Stress Theory*. https://doi.org/10.1007/978-3-030-20319-1

Dollard, M. F., & Bakker, A. B. (2010). Psychosocial safety climate as a precursor to conducive work environments, psychological health problems, and employee engagement [Article]. *Journal of Occupational and Organisational Psychology*, *83*(3), 579-599. https://doi.org/10.1348/096317909x470690

Dollard, M. F., Opie, T., Lenthall, S., Wakerman, J., Knight, S., Dunn, S., Rickard, G., & MacLeod, M. (2012). Psychosocial safety climate as an antecedent of work characteristics and psychological strain: A multilevel model [Article]. *Work and Stress*, *26*(4), 385-404. https://doi.org/10.1080/02678373.2012.734154

Edgar, F., Geare, A., Saunders, D., Beacker, M., & Faanunu, I. (2017). A transformative service research agenda: A study of workers' well-being. *The Service Industries Journal*, *37*(1), 84-104.

El-Zoghby, S. M., Ibrahim, M. E., Zaghloul, N. M., Shehata, S. A., & Farghaly, R. M. (2022). Impact of workplace violence on anxiety and sleep disturbances among Egyptian medical residents: a cross-sectional study [Article]. *Human Resources for Health*, *20*(1), Article 84. https://doi.org/10.1186/s12960-022-00786-1

Fattori, A., Comotti, A., Bordini, L., Dollard, M. F., & Bonzini, M. (2022). Psychosocial safety climate (PSC) at middle management level in the healthcare sector: A contribution to the Italian validation of psychosocial safety climate-4 [Article]. *Frontiers in Psychology*, *13*, Article 1046286. https://doi.org/10.3389/fpsyg.2022.1046286

Fattori, A., Pedruzzi, M., Cantarella, C., & Bonzini, M. (2023). The burden in palliative care assistance: A comparison of psychosocial risks and burnout between inpatient hospice and home care services workers [Article]. *Palliative and Supportive Care*, *21*(1), 49-56. https://doi.org/10.1017/s1478951521001887

Fenton, E., Wild, C. E. K., Derraik, J. G. B., Grant, C., & Anderson, Y. (2023). The need to nurture Aotearoa New Zealand's healthcare workforce. *New Zealand Medical Journal*, *136*(1572), 61-65. https://ezproxy.aut.ac.nz/login?url=https://search.ebscohost.com/login.aspx?direct=true&site=eds-live&db=edb&AN=162615604

Freeney, Y., Fellenz, M. R., McDermott, A. M., & Keating, M. A. (2013). Work engagement as a key driver of quality of care: a study with midwives. *Journal of Health Organisation and Management*, *27*(3), 330-349. https://doi.org/10.1108/JHOM-10-2012-0192

Galanti, T., Cortini, M., Giudice, G. F., Zappalà, S., & Toscano, F. (2024). Safeguarding nurses' mental health: The critical role of psychosocial safety climate in mitigating relational stressors and exhaustion. *AIMS Public Health*, *11*(3), 905-917. https://doi.org/10.3934/publichealth.2024046

Garrick, A., Mak, A. S., Cathcart, S., Winwood, P. C., Bakker, A. B., & Lushington, K. (2014). Psychosocial safety climate moderating the effects of daily job demands and recovery on fatigue and work engagement [Article]. *Journal of Occupational and Organisational Psychology*, *87*(4), 694-714. https://doi.org/10.1111/joop.12069

Gilkison, A., McAra-Couper, J., Fielder, A., Hunter, M., & Austin, D. (2017). The core of the core: What is at the heart of hospital core midwifery practice in New Zealand? *New Zealand College of Midwives Journal*, *53*. https://doi.org/10.12784/nzcomjnl53.2017.4.30-37

Hall, G. B., Dollard, M. F., & Cowar, J. (2010). Psychosocial Safety Climate: Development of the PSC-12. *International Journal of Stress Management*, *17*(4), 353-383. https://doi.org/10.1037/a0021320

Hall, G. B., Dollard, M. F., & Coward, J. (2010). Psychosocial Safety Climate: Development of the PSC-12 [Article]. *International Journal of Stress Management*, *17*(4), 353-383. https://doi.org/10.1037/a0021320

Hall, G. B., Dollard, M. F., Winefield, A. H., Dormann, C., & Bakker, A. B. (2013). Psychosocial safety climate buffers effects of job demands on depression and positive organisational behaviors [Article]. *Anxiety, Stress and Coping*, *26*(4), 355-377. https://doi.org/10.1080/10615806.2012.700477

Hassona, F. M., Albaqawi, H., & Laput, V. (2021). Effect of Saudi nurses' perceived work-life quality on work engagement and organisational commitment [Article]. *International Journal of Advanced and Applied Sciences*, *8*(6), 79-87-87. https://doi.org/10.21833/ijaas.2021.06.009

Havermans, B. M., Boot, C. R. L., Houtman, I. L. D., Brouwers, E. P. M., Anema, J. R., & Van Der Beek, A. J. (2017). The role of autonomy and social support in the relation between psychosocial safety climate and stress in health care workers [Article]. *BMC Public Health*, *17*(1), Article 558. https://doi.org/10.1186/s12889-017-4484-4

(2015). https://www.legislation.govt.nz/act/public/2015/0070/latest/DLM5976660.html

Hu, H., Wang, C., Lan, Y., & Wu, X. (2022). Nurses' turnover intention, hope and career identity: the mediating role of job satisfaction. *BMC Nursing*, *21*(1), 1-11. https://doi.org/10.1186/s12912-022-00821-5

Hu, Q., Dollard, M. F., & Taris, T. W. (2022). Organisational context matters: Psychosocial safety climate as a precursor to team and individual motivational functioning [Article]. *Safety Science*, *145*, Article 105524. https://doi.org/10.1016/j.ssci.2021.105524

Huang, Y.-H., Lee, J., McFadden, A. C., Murphy, L. A., Robertson, M. M., Cheung, J. H., & Zohar, D. (2016). Beyond safety outcomes: An investigation of the impact of safety climate on job satisfaction, employee engagement and turnover using social exchange theory as the theoretical framework. *Applied Ergonomics*, *55*, 248-257. https://doi.org/https://doi.org/10.1016/j.apergo.2015.10.007

Huyghebaert, T., Gillet, N., Fernet, C., Lahiani, F. J., & Fouquereau, E. (2018). Leveraging psychosocial safety climate to prevent ill-being: The mediating role of psychological need thwarting [Article]. *Journal of Vocational Behavior*, *107*, 111-125. https://doi.org/10.1016/j.jvb.2018.03.010

Idris, M. A., & Dollard, M. F. (2011). Psychosocial safety climate, work conditions, and emotions in the workplace: A malaysian population-based work stress study [Article]. *International Journal of Stress Management*, *18*(4), 324-347. https://doi.org/10.1037/a0024849

Idris, M. A., Dollard, M. F., Coward, J., & Dormann, C. (2012). Psychosocial safety climate: Conceptual distinctiveness and effect on job demands and worker psychological health [Article]. *Safety Science*, *50*(1), 19-28. https://doi.org/10.1016/j.ssci.2011.06.005

Idris, M. A., Dollard, M. F., & Winefield, A. H. (2011). Integrating psychosocial safety climate in the JD-R model: A study amongst Malaysian workers [Article]. *SA Journal of Industrial Psychology*, *37*(2). https://doi.org/10.4102/sajip.v37i2.851

Idris, M. A., Dollard, M. F., & Yulita. (2014). Psychosocial safety climate, emotional demands, burnout, and depression: A longitudinal multilevel study in the Malaysian private sector [Article]. *Journal of Occupational Health Psychology*, *19*(3), 291-302. https://doi.org/10.1037/a0036599

International Confederation of Midwives. (2024). *International Definition and Scope of Practice of the Midwife*.

Jameson, S., & Parkinson, L. (2022). Work-related well-being of personal care attendants employed in the aged care sector: Prevalence and predictors of compassion fatigue [Article]. *Australasian Journal on Ageing*, *41*(2), e131-e139. https://doi.org/10.1111/ajag.13019

Ji, T., Loh, M. Y., De Jonge, J., Peeters, M. C. W., Taris, T. W., & Dollard, M. F. (2025). "Are you feeling safe?": an investigation of psychosocial safety climate in the relations of job characteristics and employee exhaustion and engagement. *Industrial health*, *63*(1), 3-13. https://doi.org/10.2486/indhealth.2024-0027

Judge, T. A., Weiss, H. M., Kammeyer-Mueller, J. D., & Hulin, C. L. (2017). Job attitudes, job satisfaction, and job affect: A century of continuity and of change [Article]. *Journal of Applied Psychology*, *102*(3), 356-374-374. https://doi.org/10.1037/apl0000181

Juutinen, S., Sjöblom, K., Mäkikangas, A., & Dollard, M. F. (2023). Psychosocial safety climate: Measurement and relationship with well-being in a four-wave longitudinal study during remote work [Article]. *Scandinavian Journal of Psychology*, *64*(4), 504-511-511. https://doi.org/10.1111/sjop.12917

Kankam, P. K. (2019). The use of paradigms in information research. *Library & Information Science Research*, *41*(2), 85-92. https://doi.org/https://doi.org/10.1016/j.lisr.2019.04.003

Keene, L., Wild, H., & Mills, V. (2024). Anatomy of a health crisis. *New Zealand Medical Journal*, *137*(1594), 9-12. https://doi.org/10.26635/6965.6578

Kekeya, J. (2019). The commonalities and differences between research paradigms [Journal Article]. *Contemporary PNG Studies*, *31*, 26-36. https://doi.org/10.3316/informit.904599192994019

Klein, H. J., Cooper, J. T., Molloy, J. C., & Swanson, J. A. (2014). The assessment of commitment: Advantages of a unidimensional, target-free approach. *Journal of Applied Psychology*, *99*(2), 222-238. https://doi.org/10.1037/a0034751

Liu, B., Lu, Q., Zhao, Y., & Zhan, J. (2020). Can the psychosocial safety climate reduce ill-health presenteeism? Evidence from chinese healthcare staff under a dual information processing path lens [Article]. *International Journal of Environmental Research and Public Health*, *17*(8), Article 2969. https://doi.org/10.3390/ijerph17082969

Loh, M. Y., Dollard, M. F., & Friebel, A. (2024). Economic costs of poor PSC manifest in sickness absence and voluntary turnover. *The Economic and Labour Relations Review*, *35*(3), 635-648. https://doi.org/10.1017/elr.2024.42

Loh, M. Y., Dollard, M. F., McLinton, S. S., & Brough, P. (2024). Translating psychosocial safety climate (PSC) into real-world practice: two PSC intervention case studies. *Journal of Occupational Health*, *66*(1). https://doi.org/10.1093/joccuh/uiae051

Loh, M. Y., Dollard, M. F., McLinton, S. S., & Tuckey, M. R. (2021). How Psychosocial Safety Climate (PSC) Gets Stronger Over Time: A First Look at Leadership and Climate Strength [Article]. *Journal of Occupational Health Psychology*, *26*(6), 522-536. https://doi.org/10.1037/ocp0000308

Loh, M. Y., Idris, M. A., Dollard, M. F., & Isahak, M. (2018). Psychosocial safety climate as a moderator of the moderators: Contextualizing JDR models and emotional demands effects [Article]. *Journal of Occupational and Organisational Psychology*, *91*(3), 620-644. https://doi.org/10.1111/joop.12211

MacDonald, C. (2022). *Midwifery workforce challanges - help is at hand* https://issuu.com/collegeofmidwives/docs/midwife_magazine_issue_107_-_digital/s/17579697

Mansour, S., Faisal Azeem, M., Dollard, M., & Potter, R. (2022). How Psychosocial Safety Climate Helped Alleviate Work Intensification Effects on Presenteeism during the COVID-19 Crisis? A Moderated Mediation Model [Article]. *International Journal of Environmental Research and Public Health*, *19*(20), Article 13673. https://doi.org/10.3390/ijerph192013673

Mansour, S., & Tremblay, D. G. (2018). The mediating role of work engagement between psychosocial safety climate and organisational citizenship behaviours: A study in the nursing and health sector in Quebec [Article]. *International Journal of Human Resources Development and Management*, *18*(1-2), 51-71. https://doi.org/10.1504/ijhrdm.2018.092287

Mansour, S., & Tremblay, D. G. (2019). How can we decrease burnout and safety workaround behaviors in health care organisations? The role of psychosocial

safety climate [Article]. *Personnel Review*, *48*(2), 528-550. https://doi.org/10.1108/PR-07-2017-0224

María del Carmen, G.-E., Vicente, P.-G., & Ana, S.-R. (2020). Psychosocial Risks, Work Engagement, and Job Satisfaction of Nurses During COVID-19 Pandemic [article]. *Frontiers in Public Health*, *8*. https://doi.org/10.3389/fpubh.2020.566896

Matthews, R., Hyde, R., Llewelyn, F., Shafiei, T., Newton, M., & Forster, D. (2023). Who is at risk of burnout? A cross-sectional survey of midwives in a tertiary maternity hospital in Melbourne, Australia. https://doi.org/10.26181/21729047.v1

McLinton, S. S., Afsharian, A., Dollard, M. F., & Tuckey, M. R. (2019). The dynamic interplay of physical and psychosocial safety climates in frontline healthcare [Article]. *Stress and Health*, *35*(5), 650-664. https://doi.org/10.1002/smi.2898

McLinton, S. S., Dollard, M. F., & Tuckey, M. M. R. (2018a). New perspectives on psychosocial safety climate in healthcare: A mixed methods approach [Article]. *Safety Science*, *109*, 236-245. https://doi.org/10.1016/j.ssci.2018.06.005

McLinton, S. S., Jamieson, S. D., Tuckey, M. R., Dollard, M. F., & Owen, M. S. (2023). Evidence for a Negative Loss Spiral between Co-Worker Social Support and Burnout: Can Psychosocial Safety Climate Break the Cycle? *Healthcare (Basel, Switzerland)*, *11*(24). https://doi.org/10.3390/healthcare11243168

McLinton, S. S., Loh, M. Y., Dollard, M. F., Tuckey, M. M. R., Idris, M. A., & Morton, S. (2018b). Benchmarking working conditions for health and safety in the frontline healthcare industry: Perspectives from Australia and Malaysia [Article]. *Journal of Advanced Nursing*, *74*(8), 1851-1862. https://doi.org/10.1111/jan.13580

Mharapara, T. L., Ravenswood, K., Clemons, J. H., Kirton, G., & Greenslade-Yeats, J. (2024). Enhancing midwives' occupational well-being: Lessons from New Zealand's COVID-19 experience. *Health Care Management Review*, *49*(3). https://journals.lww.com/hcmrjournal/fulltext/2024/07000/enhancing_midwives__occupational_well_being_.6.aspx

Mharapara, T. L., Staniland, N., Stadler, M., Clemons, J. H., & Dixon, L. (2021). Drivers of job satisfaction in midwifery—A work design approach. *Women and Birth*, *35*(4), e348-e355. https://doi.org/https://doi.org/10.1016/j.wombi.2021.07.004

Mharapara, T. L., Staniland, N., Stadler, M., Clemons, J. H., & Dixon, L. (2022). Drivers of job satisfaction in midwifery—A work design approach. *Women and Birth*, *35*(4), e348-e355. https://doi.org/https://doi.org/10.1016/j.wombi.2021.07.004

Mitchell, M., Cropanzano, R., & Quisenberry, D. (2012). Social Exchange Theory, Exchange Resources, and Interpersonal Relationship: A Modest Resolution of Theoretical Differences. In (pp. 99-115). https://doi.org/10.1007/978-1-4614-4175-5_6

O'Hara, S., Melnyk, B. M., Hsieh, A. P., Helsabeck, N. P., Giuliano, K. K., & Vital, C. (2025). Innovation, Wellness, and EBP Cultures Are Associated With Less Burnout, Better Mental Health, and Higher Job Satisfaction in Nurses and the Healthcare Workforce. *Worldviews on Evidence-Based Nursing (John Wiley & Sons, Inc.)*, *22*(2), 1-11. https://doi.org/10.1111/wvn.70012

Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., . . . Moher, D. (2021). The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ*, *372*, n71. https://doi.org/10.1136/bmj.n71

Parkin, A. K., Zadow, A. J., Potter, R. E., Afsharian, A., Dollard, M. F., Pignata, S., Bakker, A. B., & Lushington, K. (2022). The role of psychosocial safety climate on flexible work from home digital job demands and work-life conflict. *Industrial health*. https://doi.org/10.2486/indhealth.2022-0078

Petrie, K., Gayed, A., Bryan, B. T., Deady, M., Madan, I., Savic, A., Wooldridge, Z., Counson, I., Calvo, R. A., Glozier, N., & Harvey, S. B. (2018). The importance of manager support for the mental health and well-being of ambulance personnel [Article]. *PLoS ONE*, *13*(5), Article e0197802. https://doi.org/10.1371/journal.pone.0197802

Pien, L. C., Cheng, Y., & Cheng, W. J. (2019). Psychosocial safety climate, workplace violence and self-rated health: A multi-level study among hospital nurses [Article]. *Journal of Nursing Management*, *27*(3), 584-591. https://doi.org/10.1111/jonm.12715

Platania, S., Morando, M., Caruso, A., & Scuderi, V. E. (2022). The Effect of Psychosocial Safety Climate on Engagement and Psychological Distress: A Multilevel Study on the Healthcare Sector [Article]. *Safety*, *8*(3), Article 62. https://doi.org/10.3390/safety8030062

Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of method bias in social science research and recommendations on how to control it. *Annu Rev Psychol*, *63*, 539-569. https://doi.org/10.1146/annurev-psych-120710-100452

Poku, C. A., Bayuo, J., Agyare, V. A., Sarkodie, N. K., & Bam, V. (2025). Work engagement, resilience and turnover intentions among nurses: a mediation analysis. *BMC Health Serv Res*, *25*(1), 71. https://doi.org/10.1186/s12913-025-12242-6

Rickard, G., Lenthall, S., Dollard, M., Opie, T., Knight, S., Dunn, S., Wakerman, J., MacLeod, M., Seller, J., & Brewster-Webb, D. (2012). Organisational intervention to reduce occupational stress and turnover in hospital nurses in the Northern Territory, Australia. *Collegian (Royal College of Nursing, Australia)*, *19*(4), 211-221. https://doi.org/10.1016/j.colegn.2012.07.001

Schaufeli, W. B., Shimazu, A., Hakanen, J., Salanova, M., & De Witte, H. (2019). An ultra-short measure for work engagement: The UWES-3 validation across five countries. *European Journal of Psychological Assessment*, *35*(4), 577-591. https://doi.org/10.1027/1015-5759/a000430

Schaufeli, W. B., Taris, T. W., & Van Rhenen, W. (2008). Workaholism, Burnout, and Work Engagement: Three of a Kind or Three Different Kinds of Employee Well-being? [Article]. *Applied Psychology: An International Review*, *57*(2), 173-203. https://doi.org/10.1111/j.1464-0597.2007.00285.x

Schleicher, D. J., Watt, J. D., & Greguras, G. J. (2004). Reexamining the Job Satisfaction-Performance Relationship: The Complexity of Attitudes. *Journal of Applied Psychology*, *89*(1), 165-177. https://doi.org/10.1037/0021-9010.89.1.165

Scotland, J. (2012). Exploring the Philosophical Underpinnings of Research: Relating Ontology and Epistemology to the Methodology and Methods of the Scientific, Interpretive, and Critical Research Paradigms. *English Language Teaching*, *5*(9), 9-16. https://ezproxy.aut.ac.nz/login?url=https://search.ebscohost.com/login.aspx?direct=true&site=eds-live&db=eric&AN=EJ1080001

Segal, K., & Kagan, I. (2025). Traumatic experiences, quality of life, and organisational commitment among midwives: A cross-sectional study. *Birth: Issues in Perinatal Care*, *52*(1), 112-122. https://doi.org/10.1111/birt.12868

Siami, S., Gorji, M., & Martin, A. (2023). Psychosocial safety climate and supportive leadership as vital enhancers of personal hope and resilience during the COVID-19 pandemic [Article]. *Stress and Health*, *39*(2), 404-413. https://doi.org/10.1002/smi.3192

Sjöblom, K., Mäkikangas, A., & Mäkiniemi, J. P. (2022). “I Was Given Three Marks and Told to Buy a Porsche”—Supervisors’ Experiences of Leading Psychosocial Safety Climate and Team Psychological Safety in a Remote Academic Setting [Article]. *International Journal of Environmental Research and Public Health*, *19*(19). https://doi.org/10.3390/ijerph191912016

Sonmezer, E. (2021). Professional autonomy for midwives in the contemporary UK maternity system: part 2. *British Journal of Midwifery*, *29*(1), 19-25. https://doi.org/10.12968/bjom.2021.29.1.19

Te Tatau o te Whare Kahu Midwifery Council. (2024). *Midwifery Workforce Survey* https://www.midwiferycouncil.health.nz/common/Uploaded%20files/Workforce%20surveys/Midwifery%20Workforce%20Survey%202024.pdf

van Duijnhoven, A., de Vries, J. D., Hulst, H. E., & van der Doef, M. P. (2025). Sustainable employability of Dutch medical doctors: a test of the role of psychosocial safety

climate in the Job Demands-Resources model. *Psychology, health & medicine*, 1-22. https://doi.org/10.1080/13548506.2025.2463031

Wawersik, D. M., Boutin, E. R., Jr., Gore, T., & Palaganas, J. C. (2023). Individual Characteristics That Promote or Prevent Psychological Safety and Error Reporting in Healthcare: A Systematic Review. *J Healthc Leadersh*, *15*, 59-70. https://doi.org/10.2147/jhl.S369242

World Health Organisation. (2025). *Maternal Health.* https://www.who.int/teams/maternal-newborn-child-adolescent-health-and-ageing/maternal-health/midwifery

Worringer, B., Genrich, M., Müller, A., Gündel, H., & Angerer, P. (2020). Hospital medical and nursing managers' perspective on the mental stressors of employees [Article]. *International Journal of Environmental Research and Public Health*, *17*(14), 1-35, Article 5041. https://doi.org/10.3390/ijerph17145041

Yuan, T., Ren, H., Yin, X., Liang, L., Fei, J., Liu, X., Zheng, C., Wang, H., Gao, J., Mei, S., & Li, H. (2024). How does psychosocial safety climate cross-level influence work engagement and job burnout: the roles of organisation-based self-esteem and psychological detachment. *BMC Nursing*, *23*(1), 389. https://doi.org/10.1186/s12912-024-01935-8

Zadow, A. J., Dollard, M. F., McLinton, S. S., Lawrence, P., & Tuckey, M. R. (2017). Psychosocial safety climate, emotional exhaustion, and work injuries in healthcare workplaces [Article]. *Stress and Health*, *33*(5), 558-569. https://doi.org/10.1002/smi.2740

Zhang, Q. J., & Wang, L. P. (2014). Aggregating and Testing Intra-Individual Correlations: Methods and Comparisons. *Multivariate Behav Res*, *49*(2), 130-148. https://doi.org/10.1080/00273171.2013.870877

Auckland University of Technology Ethics Committee (AUTEC)

Auckland University of Technology
D-88, Private Bag 92006, Auckland 1142, NZ
T: +64 9 921 9999 ext. 8316
E: ethics@aut.ac.nz
www.aut.ac.nz/researchethics

APPENDIX A

13 March 2019

Tagonei Mharapara
Faculty of Business Economics and Law
Dear Tagonei

Re: Ethics Application: **19/33 Midwifery Work & Wellbeing (MidWoW) Study**

Thank you for your request for approval of amendments to your ethics application.

The minor edits to the questionnaire are approved.

I remind you of the **Standard Conditions of Approval**.

1. A progress report is due annually on the anniversary of the approval date, using form EA2, which is available online through http://www.aut.ac.nz/research/researchethics.
2. A final report is due at the expiration of the approval period, or, upon completion of project, using form EA3, which is available online through http://www.aut.ac.nz/research/researchethics.
3. Any amendments to the project must be approved by AUTEC prior to being implemented. Amendments can be requested using the EA2 form: http://www.aut.ac.nz/research/researchethics.
4. Any serious or unexpected adverse events must be reported to AUTEC Secretariat as a matter of priority.
5. Any unforeseen events that might affect continued ethical acceptability of the project should also be reported to the AUTEC Secretariat as a matter of priority.

Please quote the application number and title on all future correspondence related to this project.

AUTEC grants ethical approval only. If you require management approval for access for your research from another institution or organisation then you are responsible for obtaining it. If the research is undertaken outside New Zealand, you need to meet all locality legal and ethical obligations and requirements.

For any enquiries please contact ethics@aut.ac.nz

Yours sincerely,

Kate O'Connor
Executive Manager
Auckland University of Technology Ethics Committee

Cc: Janine Clemons