

STUDENT AND GRADUATE NURSE WELLBEING, WORK WELLBEING AND MENTAL HEALTH



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TABLE OF CONTENTS

4	Background
6	Study 1: Registered nurses' experiences of psychological well-being and ill-being in their first year of practice: A qualitative meta-synthesis.
7	Study 2: Graduate nurse wellbeing, work wellbeing and mental health: A quantitative systematic review
8	Study 3: Nurse wellbeing during the coronavirus (2019) pandemic: A longitudinal study
9	Study 4: Nurse wellbeing during the coronavirus (2019) pandemic: A qualitative descriptive study.
10	Synthesis & summary
14	References



Background

The World Health Organisation has predicted a world nursing workforce shortage of approximately six million by 2030 (World Health Organisation, 2020). Developing an understanding of the existing workforce's wellbeing, work wellbeing and mental health will enable the strengthening of both existing and future health systems. This introduction contextualises wellbeing in terms of mental health, work, and nursing in times of COVID-19, then introduces the broad ranging research objectives and questions of the current study.

Wellbeing and mental health

Health is now commonly considered a “state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity” (World Health Organization, 1946). Early conceptions of positive psychological health proposed the importance of concepts such as: attitude toward self; growth, development, or self-actualisation; integration; autonomy; perception of reality; and environmental mastery (Jahoda, 1958). More recently wellbeing was conceptualised as a balance between an individual's resources and challenges faced (Dodge et al., 2012), or feeling good and functioning effectively (Huppert, 2009). Common models include Ryff's six-factor model of psychological wellbeing (Ryff et al., 2003) and Seligman's five-factor model (Seligman, 2011). These models typically include positive relationships, emotions, purpose in life and meaning, personal growth, autonomy, engagement, accomplishment, and self-acceptance (Hone et al., 2015).

Work wellbeing and mental health

The benefits of enhanced health workers' wellbeing extend to 1) the public (e.g., improved patient satisfaction and outcomes), 2) nurses (e.g., improved engagement and performance), and 3) organisations (e.g., lower turnover costs, risk reduction) (Brunetto et al., 2013; Duffield et al., 2014; Moghimi et al., 2016; Ray-Sannerud et al., 2015; Sharma et al., 2016; Soane et al., 2013). Nurses' wellbeing in life as a whole and nurses' work wellbeing are increasingly being differentiated. The importance of work in maintaining mental health is widely recognised, for example, in the WHO mental health action plan mental health is considered “a state of wellbeing in which the individual realises his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community” (World Health Organization, 2013, p. 6).

The characteristics of the job are related to employee motivation, engagement, satisfaction, and performance (Gordon et al., 2015; Hackman & Oldham, 1976; Verquer et al., 2003). Health workers' wellbeing impacts on healthcare system performance whereby empowerment, quality sleep and positive workplace relationships have been associated with high performance, patient satisfaction, and lower turnover intentions (Ray-Sannerud et al., 2015). In contrast, burnout, psychological distress, and poor social capital have been associated with suboptimal patient care, unprofessional conduct, and medical leave (Brunetto et al., 2013; Ray-Sannerud et al., 2015). Such findings point to the importance of wellbeing for this workforce.

The impact of COVID-19 on wellbeing and mental health

Nurse wellbeing and their mental health has been challenged throughout 2020. The year 2020 was the International Year of the Nurse and Midwife and never has the crucial role of the nurse been so evident in the global context with the emergence of the COVID-19 pandemic. Nurses have been and are at the forefront of COVID-19, and will play a major role in the consequences of COVID-19 in years to come (International Council of Nurses, 2020). In addition, given that around 10% of COVID-19 cases globally are among healthcare workers (International Council of Nurses, 2020), it is unsurprising these are times of unprecedented ill-being for nurses. Throughout late 2020 we saw the publication of novel research investigating the impact of COVID-19 on mental health and wellbeing, for example, the special issue on 'COVID-19 and wellbeing' in the International Journal of Wellbeing (International Journal of Wellbeing, 2020) and on the impact of COVID-19 on health workers (Waters et al., 2021). Just some of the research foci include nurse stress, anxiety, distress and fear (Hu et al., 2020), with recommendations to support nurse's mental health at individual, peer-to-peer, team and manager levels (Maben & Bridges, 2020). What we do not yet know is how these frontline nurses' wellbeing is prevailing, nor what strategies they are using to maintain or enhance their wellbeing.

Objectives

The overarching objectives of this program of research were to: 1) determine the prevalence and predictors of student and graduate nurse wellbeing, work wellbeing and mental health and 2) explore student and graduate nurses' perceptions of barriers and enablers of their wellbeing, work wellbeing and mental health. To achieve these two objectives, we completed four main studies:

Study 1: Registered nurses' experiences of psychological well-being and ill-being in their first year of practice: A qualitative meta-synthesis.

Study 2: Graduate nurse wellbeing, work wellbeing and mental health: A quantitative systematic review.

Study 3: Nurse wellbeing during the coronavirus (2019) pandemic: A longitudinal study.

Study 4: Nurse wellbeing during the coronavirus (2019) pandemic: A qualitative descriptive study.

The main findings from each study are now reported in brief. Coincidentally, the longitudinal Study 3 extended from just prior to COVID-19 becoming evident in Victoria, Australia through to the end of the first peak. The Study 4 interviews occurred just after the COVID-19 peak in Victoria, Australia. As such, there were unanticipated consequences for study progress but an additional richness to the data.



STUDY 1

Study 1: Registered nurses' experiences of psychological well-being and ill-being in their first year of practice: A qualitative meta-synthesis.

Aim: To synthesise published registered nurses' self-reported perceptions and experiences of psychological well-being and ill-being during their first year of practice.

Data sources: Databases included Cumulative Index of Nursing and Allied Health Literature, Excerpta Medica database, Medical Literature Analysis and Retrieval System Online and Psychological Information. Qualitative studies were considered for inclusion if published in English, from 2009 - 2019, reporting primary data analysis including psychological well-being and ill-being experiences of graduate nurses in first year of practice.

Review Methods: Qualitative studies were systematically identified and critically appraised. A meta-synthesis was applied using an open card sort technique to organise empirical data into a matrix of graduate nurses' voices of psychological well-being and ill-being.

Results: Twenty-two studies were included. Analysis revealed patterns of positive experiences and emotions. These included feeling valued and part of the team and learning from and feeling supported by other nurses. Negative experiences and emotions such as feeling overwhelmed, stressed, alone and inadequately prepared were also identified.

Conclusion: Graduate nurses' perceptions and experiences of their psychological well-being and ill-being revealed both positive and negative dimensions during this transition period. Specific examples of strategies that may promote transition nurses' well-being and prevent ill-being were identified such as social connection and support.

Jarden, R. J., Jarden, A., Weiland, T. J., Taylor, G., Brockenshire, N., & Gerdtz, M. (2021). Registered nurses' experiences of psychological well-being and ill-being in their first year of practice: A qualitative meta-synthesis. *Journal of Advanced Nursing*. <https://doi.org/10.1111/jan.14667>



STUDY 2

Study 2: Graduate nurse wellbeing, work wellbeing and mental health: A quantitative systematic review

Background: The contribution of work to positive mental health is increasingly apparent. Transition into the workplace causes a range of stressors for new graduate nurses who experience both psychological wellbeing and illbeing in their first year of practice.

Objective: To determine published prevalence, predictors, barriers and enablers of new graduate registered nurse wellbeing, work wellbeing and mental health.

Design: Systematic review of quantitative research.

Data sources: Databases included Cumulative Index of Nursing and Allied Health Literature, Excerpta Medica database, Medical Literature Analysis and Retrieval System Online and Psychological Information. Quantitative and mixed-methods studies were considered for inclusion if published in English from 2009 to 2019 reporting primary data analysis including graduate nurses' wellbeing, work wellbeing and mental health.

Review methods: Quantitative studies were systematically identified then screened and appraised against pre-determined inclusion criteria. Analysis was conducted by grouping according to analytical methods and results reported as a narrative synthesis.

Results: Thirty-four studies were included. The quality of the evidence was variable with just a quarter of the studies being assessed as meeting the quality criteria on all nine measures. For the new graduate nurses' prevalence of wellbeing, levels of resilience, optimism, and hope were found to be high. For work wellbeing, most reported higher job satisfaction by 12-months. For work illbeing, levels of burnout were moderately high, predominantly in terms of emotional exhaustion, and stress were initially high, particularly in terms of workload, but decreased over time. For the predictors, job satisfaction was positively predicted by structural empowerment and career satisfaction, and negatively predicted by co-worker incivility, supervisor incivility and emotional exhaustion. For work illbeing, stress was a positive predictor for intent to leave. Stress reductions were associated with momentary levels of high task mastery, social acceptance and role clarity.

Conclusions: For new graduate nurses, levels of emotional exhaustion, workload and stress were moderately high to high initially, decreasing over time as the graduate nurses' job satisfaction increased. Most studies focused on the nurses' intent to resign or stay and both psychological capital and work engagement positively predicted intent to stay whereas work stress positively predicted intent to resign. Resilience and group cohesion moderated the negative effects of some variables, thus may be potential enablers of work wellbeing. The standards of research reporting or design were generally sub-optimal according to quality indicators.

Jarden, R., Jarden, A., Weiland, T., Taylor, G., Bujalka, H., Brockenshire, N., & Gerdtz, M. (2021). New graduate nurse wellbeing, work wellbeing and mental health: A quantitative systematic review. *International Journal of Nursing Studies*.



STUDY 3

Study 3: Nurse wellbeing during the coronavirus (2019) pandemic: A longitudinal study

Aims: First, to determine prevalence, predictors, and change over time of student and registered nurse wellbeing, work wellbeing, and mental health. Second, to explore student and registered nurses' perceptions of wellbeing, and barriers and enablers of their wellbeing, work wellbeing, and mental health.

Methods: Longitudinal mixed-methods online survey using validated measures and free-text response questions from December 2019 to July 2020. Quantitative data were analysed using Latent Growth Curve Modelling and Pearson Product Moment correlations. Qualitative data were inductively analysed thematically.

Results: Forty-nine Australian nurses were included in the study. When compared to similar samples, these nurses' levels of burnout were higher and emotional, psychological and social wellbeing lower. A strong positive correlation was found between Self-determination and Work Wellbeing, and a strong negative correlation between Work Wellbeing and Flight Risk. Regarding the work of nurses, there were several moderate relationships found, for example, a moderate positive correlation between Work Wellbeing and Nurse Manager Ability, Leadership and Support, and a moderate negative correlation between Burnout and with Staffing and Resource Adequacy. One study variable changed over the period of the study: Collegial Nurse-Physician Relationships and these deteriorated. Regarding the qualitative data, three themes of physical health, psychological wellbeing, and social connection were evident across both the characteristics and enablers of wellbeing.

Conclusion: During the coronavirus (2019) pandemic, for these nurses, Collegial Nurse-Physician Relationships deteriorated. Social connection, psychological wellbeing and physical health were perceived as key characteristics and enablers of wellbeing. Working with nurses, organisations and policy makers to determine targeted interventions to address nurse wellbeing is a next key step.

Impact: The wellbeing of nurses has been challenged during the coronavirus (2019) pandemic. This study provides a contextualised understanding of nurses' wellbeing and how this prevailed. The findings inform targeted interventions to enhance nurse wellbeing.

Jarden, R.J., Jarden, A.J., Weiland, T.J., Taylor, G., Brockenshire, N., Rutherford, M., Carbery, C., Moroney, K., Joshanloo, M., & Gerdtz, M.F., (2022). Nurses' well-being during the coronavirus (2019) pandemic: A longitudinal mixed-methods study. *Nursing Open*, <https://doi.org/10.1002/nop2.1275>



STUDY 4

Study 4: Nurse wellbeing during the coronavirus (2019) pandemic: A qualitative descriptive study.

Work can contribute to an individual's wellbeing and illbeing. In turn, worker's wellbeing influences organisational outcomes. Insight into nurses' wellbeing and work wellbeing is paramount for a high-quality workforce. This study used semi-structured interviews and a qualitative descriptive design to explore nurses' perceptions and experiences of nurse wellbeing, work wellbeing, and mental health. Nine Australian nurses were interviewed and six themes were identified: value and sense of purpose from nursing, yet also negative consequences of losing sight of oneself within the nursing role; work nurses did to disengage from their job and create a balance within their life; significance of the team and senior team as a source of both strength and opportunity for wellbeing; a range of wellbeing initiatives with a perception these were often developed, and for use, in response to crisis as opposed to preventative or proactive measures; value of additional nurse wellbeing education and promotion of available support; and novel challenges and ways to wellbeing during times where resources were stretched and usual support systems impacted. There were many opportunities identified to strengthen individual, team, and organisational support systems and responses, not just in times of a pandemic.



Jarden, R., Jarden, A., Weiland, T., Taylor, G., Brockenshire, N., Rutherford, M., Carbery, C., Moroney, K., & Gerdtz, M. (2021). Nurse wellbeing during the coronavirus (2019) pandemic: A qualitative descriptive study. *Collegian*.
<https://doi.org/10.1016/j.colegn.2021.06.002>

Synthesis & summary

This program of research firstly examined and synthesised the existing published research. The qualitative research highlighted graduate nurses experienced patterns of positive experiences and emotions. These included feeling valued and part of the team and learning from and feeling supported by other nurses. Negative experiences and emotions such as feeling overwhelmed, stressed, alone and inadequately prepared were also identified. Specific examples of strategies that may promote transition nurses' well-being and prevent ill-being were identified such as social connection and support. These patterns are illustrated in figure 1.

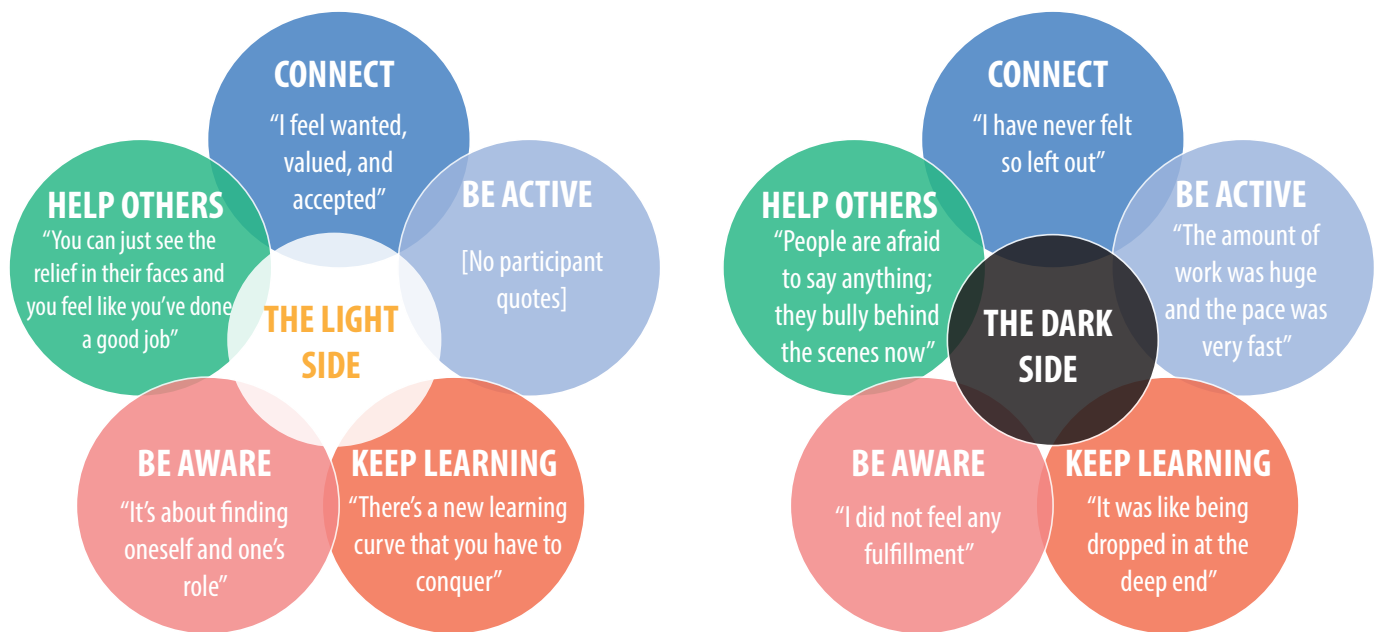


Figure 1. Graduate nurses' voices and the 5-ways to well-being model.

Note. This model is adapted from the New Economic Foundation's (Aked et al., 2008) 5-ways to well-being model. The quotes in the model are presented in italics and references for these quotes can be found in Table 1 from the published manuscript – this figure is adapted from that presented in the published manuscript (Jarden et al., 2021)¹.

¹Jarden, R. J., Jarden, A., Weiland, T. J., Taylor, G., Brockenshire, N., & Gerdtz, M. (2021). Registered Nurses' experiences of psychological well-being and ill-being in their first year of practice: A qualitative meta-synthesis. *Journal of Advanced Nursing*. doi:10.1111/jan.14667

The quantitative research revealed, for prevalence, levels of emotional exhaustion, workload and stress were moderately high to high initially, decreasing over time as the graduate nurses' job satisfaction increased. For predictors, most studies focused on intent to resign or stay, for example, both psychological capital and work engagement positively predicted intent to stay whereas work stress positively predicted intent to resign. Resilience and group cohesion moderated the negative effects of some variables thus may be potential enablers of work wellbeing. An overview of the existing research foci is illustrated in Figure 2.

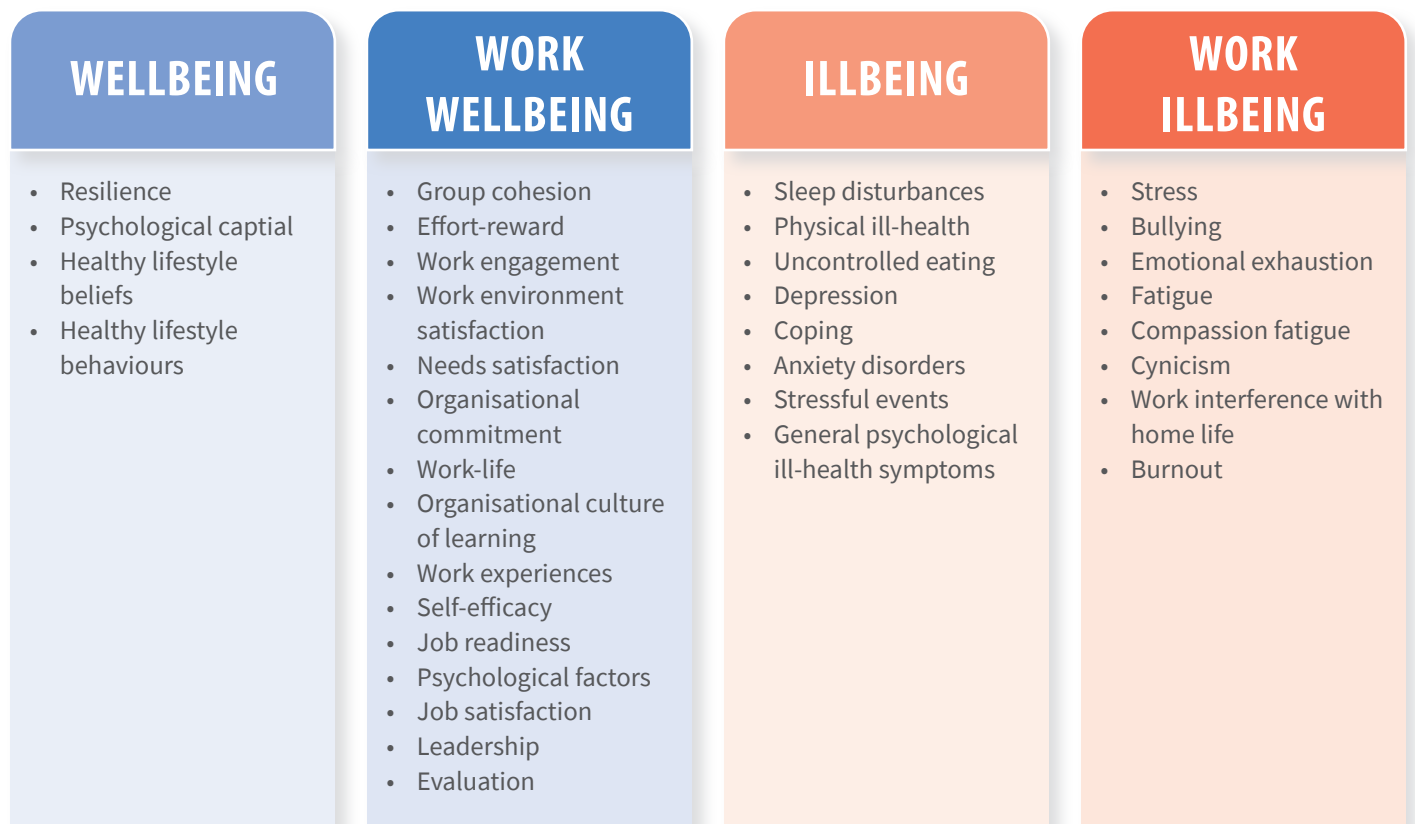


Figure 2. Overview of research foci for new graduate nurse wellbeing and illbeing – this figure is adapted from that presented in the published manuscript.

The longitudinal study then identified that during COVID-19, for the Victorian nurses, Collegial Nurse-Physician Relationships deteriorated. The nurses experienced higher levels of burnout and lower levels of emotional, psychological and social wellbeing compared to other similar samples at different times. Social connection, psychological wellbeing and physical health were perceived as key characteristics and enablers of wellbeing. Specific enablers of work wellbeing included work-life balance, a positive workplace, and the work environment. The qualitative descriptive study revealed there was an openness to conceiving new ways of working and supporting each other and themselves when resources were stretched and organisations were working to establish or maintain a safe working environment. There were many opportunities to strengthen organisational, team and individual responses to this pandemic, and the voices of these nurses have identified some new potential ways forward. The key themes and subthemes for nurse wellbeing are illustrated in Figure 3.



Figure 3. Nurse wellbeing: 'Me', 'We', and 'Us' – this figure is adapted from that presented in the published manuscript.

Specifically, in relation to COVID-19, the subthemes are illustrated in figure 4.

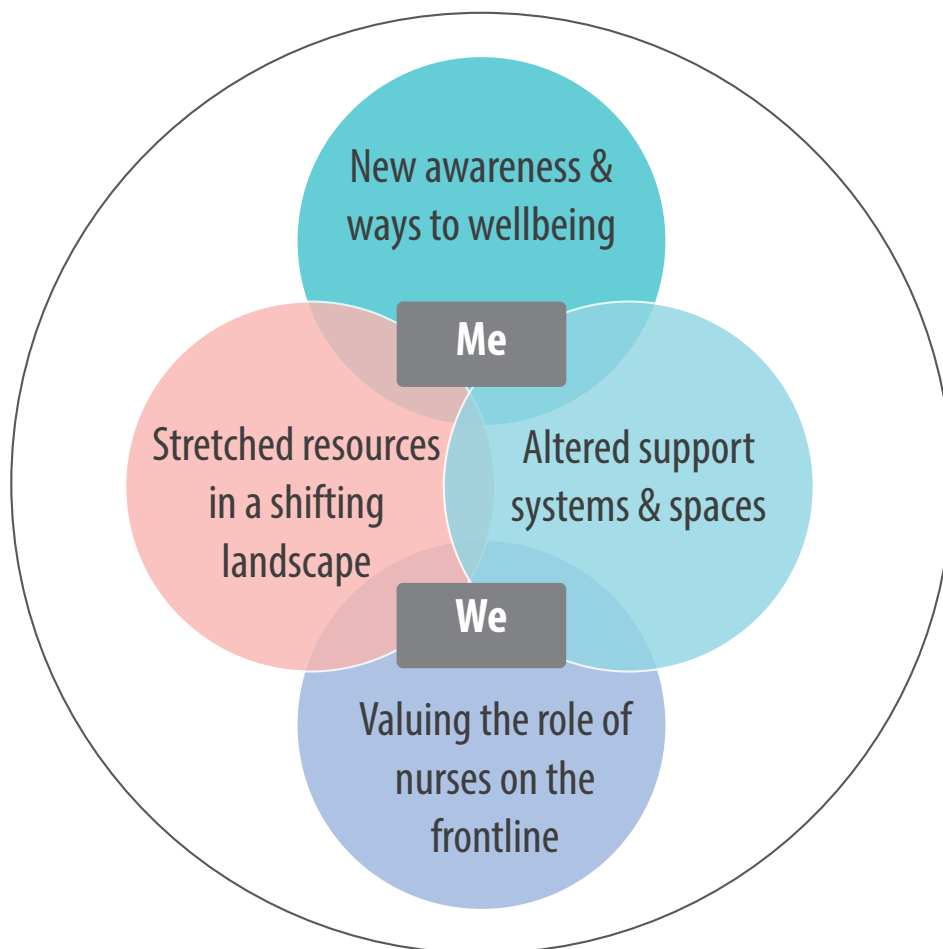


Figure 4. Nursing wellbeing and COVID-19 – this figure is adapted from that presented in the published manuscript.

In sum, this program of research has elucidated new knowledge in terms of the extant research, and the prevalence, predictors, enablers and barriers of wellbeing and mental health for a sample of Australian nurses. Understanding the prevalence, predictors, barriers and enablers of nurse wellbeing provides the foundations to now:

- connect stakeholders
- drive forward a targeted and cohesive approach to the assessment of nurse wellbeing
- inform future workplace wellbeing programs in the unique contexts of nursing.

For further information please contact Dr. Rebecca Jarden.

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