

12-31-2021

## Experiences of Western Australian rural nursing graduates: A mixed method analysis

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[10.1111/jocn.15849](https://doi.org/10.1111/jocn.15849)

This is an author's accepted manuscript of: Graf, A. C., Nattabi, B., Jacob, E., & Twigg, D. (2021). Experiences of Western Australian rural nursing graduates: A mixed method analysis. *Journal of Clinical Nursing*, 30(23-24), 3466-3480.

<https://doi.org/10.1111/jocn.15849>

This Journal Article is posted at Research Online.

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## **Abstract**

**Aims and objectives:** To determine if the current rural graduate programs in Western Australia adequately supported new graduate nurses transitioning into practice.

**Background:** Graduate nurse's transition to employment is a time of significant change and challenge, often resulting in periods of transition shock. These challenges are magnified in rural areas where graduates have to relocate to commence their career with limited rural nursing experience. Graduate programs were developed to smooth the transition for university trained bachelor's degree registered nurses into the workforce. Supportive graduate nursing programs are essential for enabling transition to practice and reducing attrition rates.

**Design:** Longitudinal convergent mixed method parallel design informed by Duchscher's transition stage model.

**Method:** Thematic analysis was applied to all interviews. COREQ checklist was completed. Descriptive statistics and content analysis were used to analyse the surveys.

**Results:** New graduates cycled through both transition shock and honeymoon periods on commencement of employment, reporting high levels of satisfaction simultaneously with signs of transition shock. Satisfaction dropped within seven months indicating a transition crisis before an adjustment period occurred. Limited resources were highlighted as obstacles to providing adequate support to rural graduate nurses.

**Conclusion:** The honeymoon stage of transition co-existed with transition shock, which may obscure the need for continuing adequate support. Inadequate and/or a lack of preceptorship was evident throughout the Western Australian rural graduate programs. Graduate programs need to be structured but flexible to allow for individual differences in graduates' and clinical contexts.

**Relevance to clinical practice:** Structured but flexible graduate programs allow for individual differences in graduates and clinical situations. New graduate nurses would benefit from a break midway through their graduate year to assist and overcome the transition crisis stage. Education of nurses undertaking the preceptor role is required to deliver adequate support to graduate nurses and decrease transition shock.

**What does this paper contribute to the wider global community?**

- Honeymoon stage and transition shock co-exist for rural new graduates, which might mask the fact that focused support is needed for at least nine months
- Annual leave mid-way through the transition year would be beneficial for all new graduates.
- Preceptors need adequate education to prepare for the supportive role and help graduate nurses to decrease the initial transition shock.

## Introduction

Nursing in rural areas differs to what is expected of metropolitan nurses. Literature suggests there is greater autonomy, a sense of community and often varied clinical skills required in rural areas (Lea & Cruickshank 2007; Lea & Cruickshank, 2014). The diversity of patients and level of responsibility differ in rural hospitals, which can be attributed to lower staff ratio, and patients with varied illness or medical complaints. The clinical knowledge required for rural nursing is broad as opposed to specific (Lea & Cruickshank, 2017), with nurses moving between caring for paediatrics, adults, older adults and emergency cases.

Difference in expectation of graduate nurses in rural areas also occurs, with graduates expected to be able to take on the variable patient types and load. This is a challenge for many new graduate nurses in Western Australia (WA) who relocate from a metropolitan setting where they completed their undergraduate education to a rural area in order to begin their graduate program. Bennett, Barlow, Brown, & Jones (2012) claim that attrition rates for new graduates are as high as 86% in some rural areas in Australia. This is different to reported attrition rates in rural WA with 6% reported in 2015 (Graf, 2020). This difference in retention may be due to the availability of graduate support programs which are undertaken at rural WA health services. Transition programs are vital in rural areas to reduce the effects of transition shock and decrease attrition rates (Graf et al., 2020).

Research indicates that transition shock is widespread among graduate nurses, in both rural and metropolitan settings (Lea & Cruickshank, 2007; Phillips et al., 2014). 'Transition Shock' is a term that is used when the expectations of graduates 'new to the environment is different to reality, resulting in negative emotions (Duchscher, 2009). Within the first four months of employment, the emotional challenges of the transition vary depending on the support. New graduates who are less supported are more likely to feel overwhelmed, scared, have self-doubt and be fearful, prolonging transition shock which may result a graduate nurse's resignation (Duchscher, 2007).

The current study determined if the rural graduate programs in Western Australia adequately supported new graduate nurses transitioning into rural practice. This study explored the experiences of new graduate registered nurses and determined whether current graduate programs were effective in supporting new graduates to build the confidence and skills necessary for rural practice.

## Background

### *Rurality*

Rural areas of Western Australia encompass one third of Australia's surface area, and 25% of the Western Australian nursing population are located in rural areas (WACHS, 2010). The demographics and demands on Western Australian hospital and healthcare services vary and are dependent on remoteness and population density.

Differences in severity or types of **clinical presentation ranging from mental health concerns to penetrating wounds and farming accidents** between rural Western Australia **healthcare facilities** can present challenges for graduate nurses, particularly those trained in metropolitan **health** centres who have not had rural hospital placements during their university education. Patients can present with poor social **determinants of health, for example a lack of income, limited food choice and lack of education resulting in increased** health risks which compounds the challenge. These are known factors which impact on graduate nurses (Mills, Birks, & Hegney, 2010). What was unknown was how well graduate nurse programs in rural WA supports the graduate nurse during their transition phase.

### *Graduate nurse transition programs*

New Graduate Registered Nurse transition programs are currently offered in many countries for registered nurses. As registered nurse education is predominately conducted in universities, transition programs have become necessary to help address the gap between theory and practice aiming to decrease the initial transition shock (Fowler et al., 2018). Worldwide, newly qualified nurses are offered programs, all aimed at supporting their transition to practice. **A new graduate registered nurse for this study, is a registered nurse who has recently completed a bachelor's degree in nursing and successfully gained employment within the health system.** The aim of transition programs is to provide support to new graduate nurses to ease passage to fulltime registered nurses in order to **reduce** attrition rates. Despite this support, new graduate rural nurses often feel frustrated, abandoned and overwhelmed (Lea & Cruickshank, 2014; Fowler et al., 2018). Many suffer transition shock and feel unready for the role. **Transition shock is a term used when graduates new to a clinical area experience negative emotion due to unrealistic expectations** (Lea & Cruickshank, 2014). Duchscher's research suggests there are three distinct stages within a graduate year; doing, being and knowing (2007). The first stage is the doing stage which often aligns with transition shock or reality shock which is thought to be followed by a

second transition shock or transition crisis (Wakefield, 2018). Support programs have been found to decrease the effect of transition shock in graduate programs, however in rural areas, graduate programs often provide ad hoc support, and senior staff are inadequately supported in their roles as preceptors (Bennett et al., 2010; Lea & Cruickshank, 2015; Mellor & Greenhill, 2014; Fowler et al., 2018). **Internationally, Luger and Ford (2019) further suggest new graduates in rural areas need to become efficient generalists with less support.**

## **Methods**

### *Design*

This paper presents **both** the experiences of new graduate registered nurses and **their satisfaction with the rural graduate program. The results** are part of a larger study that followed a longitudinal convergent mixed method parallel design in which both qualitative and quantitative methods were applied concurrently. **Consolidated criteria for reporting qualitative research (COREQ)** checklist was completed (Tong et al., 2007) (See appendix A). The convergent design allowed for the triangulation of the two methods and merged the results to explore one question (Creswell & Plano Clark, 2011). **The first two stages in the design involved the data from surveys and interviews being collected at the same time and analysed separately. In stage three the data was triangulated, a comparison made before moving to stage four where the data was merged** (see Figure 1). Within the discussion the findings **are** integrated with **worldwide** literature and the theoretical framework.

The research design incorporated elements from the theoretical framework of Duchscher (2005). Duchscher's Stages of Transition theory divided the graduate year into three **timeframes** (3, 7 and 11 months). The research design **embedded** the three **timeframes** within the data collection period.

### *Setting*

This study was conducted in health facilities across all seven country regions of Western Australia, namely: the Kimberley, Pilbara, and Midwest, Goldfields, Wheatbelt, South West and Great Southern regions. Target health facilities for this research were non-tertiary public hospitals that held the capacity of between 18 beds in rural facilities, up to a maximum of 110 beds in regional healthcare facilities. Western Australian Health Service (WACHS) regional services operate via a 'hub and spoke' model (WA Health Clinical Services Framework,

2014-2024, p.37), consisting of a Regional Resource Centre, Integrated District Health Service and Small Hospitals/Primary Health Care Centres.

Differences exist between the rural graduate programs, depending on the area. The graduates in the Kimberley, Midwest and Wheatbelt regions rotate through several smaller health service sites during the 12-month graduate training program, however in the Pilbara, Goldfields, South West and Great Southern regions, graduate nurses stay within the one hospital and rotate throughout the various hospital departments. The length of the rotations also varied within each region and hospital. They ranged between 2, 4, 6 and 12 months in a clinical area or hospital. **Sixty-five new graduate registered nurses were employed throughout the seven regions.**

### *Recruitment*

Ethics approval was obtained from the appropriate institutions. Purposive sampling was applied to recruit new graduate nurses in rural WA, who commenced the graduate program in 2015 and **all new rural registered nursing graduates** were specifically invited to be part of the study because they are experienced in the subject area (Burns & Grove, 2009). All **65** new graduate nurses were invited by email to take part in the graduate questionnaire and **61% (n=40)** completed the survey at least once. **By completing the survey, the participants provided informed consent to involvement in the study. Furthermore, the researcher invited the graduates to participate in the semi-structured interviews. Of the 40, ten participants provided written consent and completed the semi-structured interviews following completion of the surveys.**

**Inclusion criteria included employment in a WA graduate program in 2015. Exclusion criteria included those who were employed in 2014 and still completing their graduate program, enrolled nurses and metropolitan nurses.**

### *Data Collection*

The survey was available by email - a link to Qualtrics, was distributed to the 65 new graduates at each timeframe. Paper-based copies were also distributed in person at the health service, when applicable and were subsequently entered into Qualtrics by the researcher.

**The primary researcher conducted and recorded all the** in-depth semi-structured interviews both face-to-face and with the use of technology, including teleconference facilities available throughout the clinical settings and the University campus. **Interviews were conducted with**



the same participant at the three specified 3, 7, and 11-month timeframes. The interviews ranged from 20 minutes up to 70 minutes in duration and all were audio recorded using digital recorders with consent. Interviews elicited new graduate registered nurses' views about their experience of the transition program, prompts related to reflective practice and social circumstances. A sample of the prompt questions included;

1. Describe your experiences as a graduate nurse? (best day and worst day)
2. Discuss the types of support have you received during this rotation?
3. What about social support? Is your family here; are you from a rural area, what has it been like adjusting to the rural setting?

A short notation was completed in the researcher's journal prior to the interviews which highlighted the researcher's thoughts and bias before the interviews began (Rudestam & Newton, 2014). Field notes were also made during each interview, the interviews were held outside of work hours. Interviews transcripts included verbatim by the researcher and three private transcriptionists. Member checks helped substantiate the researcher's view of the interpreted data to ensure the data captured was a true account of the participant's perspective (Streubert & Carpenter, 2011).

#### *Survey tool*

Quantitative data was collected using a survey tool (Reeves 2007) which consisted of demographic questions, questions on clinical rotations, preceptorship and levels of satisfaction with the graduate program. This survey was used previously on two occasions and the data collected were consistent, strengthening the reliability of the instrument (Reeves, 2007). Questions included pre-coded non-forced question and Likert scale questions. The survey was piloted before being used in Western Australia and reviewed for translational validity by the pilot group, assessing both face and content validity within the Western Australian context.

The online surveys contained three open-ended questions which were analysed using the content analysis approach outlined by both Jacob, McKenna and D'Amore (2014) and Chambers and Chiang (2012). The open-ended questions consisted of;

1. If you were given an opportunity to change anything about your Graduate Nurse Program to improve it for future nurses, how would you like to see it change?

2. Where do you see yourself professionally in the next 5 years?
3. Would you like to add anything further?

The survey was distributed to the participants via email. A link to the Qualtrics survey was sent at 3, 7 and 11 months.

### *Analysis*

#### Qualitative data

Braun and Clarke's step by step thematic approach was used **consisting of both inductive and deductive processes** to analyse the qualitative data (Braun & Clarke, 2006). **Firstly, the primary researcher was immersed in the data by reading and re-reading each transcript. Only then did the researcher move onto looking at the data word by word and capturing ideas (Braun & Clarke, 2006).** Coding was done manually with the use of butcher's paper and 'post-it' notes which allowed for transparency and patterns to occur. **Data was interpreted a few different ways (e.g. as a continuum) reviewing the three stages from each individual participant and information gathered from each stage was interpreted in its entirety. This allowed for inferences to be made from all separate stages and as a whole which strengthened the validity of the results (Creswell & Plano Clark, 2011).** **Two researchers worked through the data and themes** were developed from the codes creating 'significant clustered groups'. A thematic map was developed to help organise levels of significance from the main themes and sub-themes (Braun & Clarke, 2006). The themes were then reviewed by two researchers, to ensure the themes were derived from the interviews (Braun & Clarke, 2006).

#### Quantitative data

The information collected from the quantitative data via Qualtrics was transformed to Excel format and then to SPSS Version 22 software for analysis. The quantitative data was cleaned, and the final number of surveys were grouped into three separate timeframes for one set of analysis. Descriptive statistics were used to summarise the quantitative data due to the small sample group. **Percentages were used to summarise both the continuous variables e.g. age, and the categorical variables e.g. gender. Percentages were also applied to the remaining questions which were analysed using a 5-point Likert scale. The three different Likert measurements consisted of agreement, valuable and satisfaction level each variable included a not applicable segment.**

QCAmap was a tool used to code, group and conceptualise the data from the three open ended questions (Mayring, 2014). The content analysis resulted in systematically obtaining measurable descriptive information, therefore strengthening the validity of the inferences (Elo & Kyngäs, 2008). The broader steps taken for data analysis are presented in the following Figure 1.

## **Figure 1 Research design**

### **Results**

#### *Interview outcomes*

Ten nursing graduates participated in the interviews for the study and twenty-two in-depth interviews were undertaken with the 10 new graduate registered nurses over the three phases of the study. The new graduate registered nurses were undertaking graduate programs at small, district and regional facilities. Participants were aged between their 20s and mid-50s and were of both genders. This longitudinal approach to the data, **collected over three timeframes within a 12-month period**, demonstrated changes to graduate nurse perceptions of the support provided throughout the graduate year. At least one new graduate registered nurse from each of the seven regions participated in the interviews.

Thematic analysis of the interviews with new graduate registered nurses identified four themes that ran across the graduate year. These themes were ‘Professional beginnings’, ‘Fractured reality’, ‘A sense of belonging’ and ‘Transference of knowledge’ (see table 1). The results within each theme and subcategory **are** broadly summarised.

#### **Table 1 Thematic analysis**

##### *Professional Beginnings*

The theme professional beginnings refer to the challenges new graduate registered nurses felt in undertaking the professional role of a registered nurse. New graduate registered nurses reported feeling unprepared for the responsibilities of a registered nurse and feeling like a ‘*stranger*’ in the clinical world after commencement of their nursing career. Within the first three months, some of the new graduate registered nurses described feeling like they were “*thrown in the deep end*” (GN 6) of a swimming pool and were drowning because support

was not available, and confidence was lacking. Many new graduate registered nurses sensed they had ‘*no safety net*’ (GN7).

At seven months, the new graduates had moved clinical area or hospital. Confidence in their abilities appeared to be building, yet many were exhausted as they were emotionally drained and struggled to navigate work-life balance. This was expressed in comments such as “*Today I just was like ‘oh my gosh’, just hit a wall...I think that sort of thing as well. I’m just struggling a bit with the whole work/life balance thing and the fact that I am just exhausted when I finish work*” (GN9) and “*I really struggled with that [being tired] and ... [it] happened while I was in ED as well and I guess the whole realisation that I’d actually been up here for the six months as well and hadn’t actually had a break or anything*” (GN1). The impact of a new home, new job, ongoing learning were identified by participants as concerns.

At 11 months, the new graduate registered nurses were able to work as independent professionals with minimal support “*as the year sort of progresses, you sort of get more confident with your own ability*” (GN1). The graduates no longer felt that extra support or ‘a floatation device’ was required to help keep their heads above water. Although graduates still faced obstacles, change was less disruptive as new graduate registered nurses were familiar with the organisation, the expectation of staff, and of patients.

### *Fractured reality*

Fractured reality refers to when graduates’ expectations were different from what they experienced. The graduates’ experience of supportive measures and time needed to adjust to the workplace was less than what they expected at the commencement of the graduate program. “*In the regional/remote areas I knew there would not be the support you have in the cities but did not realise that there would be so little*” (GN1). Even graduates who received one-on-one support through preceptorship still felt they were “*thrown in*” and “*treading quicksand for a while*” (GN3), however, some of the new graduate registered nurses believed this was “*one way of learning*” (GN1).

Lack of preceptor support was common for many participating graduates throughout all seven regions. For some graduates, this type of support was available only during the supernumerary period. Preceptors were often allocated but were sporadically available to the new graduate registered nurse due to roster issues and concurrent clinical roles. Regardless of

being employed in a small, district or regional hospital, all the new graduates shared similar experiences.

By seven months the new graduate registered nurses had developed their skills and confidence and found other self-supporting methods to assist with their graduate transition. They gravitated towards gaining assistance from nurses who were both approachable and knowledgeable, rather than just allocated preceptors. They also developed an understanding of the magnitude of the roles of rural nurses evident in comments such as “*She’s [preceptor] got so many hats and very limited time for me so and that’s the big issue in the smaller hospitals I think*” (GN2). The smaller district hospitals received oversight from the graduate nurse coordinators based in regional areas. A participating new graduate registered nurse from one of these district hospitals felt there had been no actual support; *to be honest I don’t think I actually got anything from the programme, nothing that I wouldn’t have got with them apart from the fact that I’ve actually got a job which is great* (GN2).

Graduates still managed to identify development throughout their program and at 11 months despite the fractured reality and perceived poor management of their expectations, were able to work autonomously as registered nurses.

#### *Sense of belonging*

The theme ‘a sense of belonging’ focuses on the graduates feeling like they belong whether it was on the ward or within the community. All new graduates described times when they experienced emotional struggles as they settled into their new environment, irrespective of whether family support was close or not. All but one new graduate who participated in the qualitative interviews, moved regions or states to begin their graduate program. One graduate who moved to be with their partner midway through their degree believed they were “*lucky to be awarded a graduate program*” (GN6) close to family. Another new graduate nurse who moved interstate with her children experienced some ‘teething’ problems not related to the graduate program. “*I have a had a few personal issues in the first three months, nothing to do with work my work itself, [family] but they [staff] were really good with that sort of support*” (GN4). This graduate discussed how the family adventures exploring the new country has also helped her family transition to the rural area.

At seven months new graduates felt they had to prove themselves worthy to be part of the team. The other staff rostered on a shift were important in helping develop as sense of belonging. One new graduate registered nurse suggested that having a good shift depended on

who was rostered on: *They just don't help, and they just don't notice that you're struggling. Other ones are really aware of it and just really help and because you don't want to just be all the time 'oh I'm not coping', like 'I'm really struggling' ...I don't want to be like that ...Like it depends, actually your shift really depends on who's coordinating...Like some of them just aren't supportive at all (GN9).*

At 11 months the new graduate registered nurses now spoke of their peers as part of their social circle. New graduate registered nurses shared their experience of being accepted within the clinical team, although expressed not all nurses were effective role models.

### *Transference of knowledge*

This theme reflects the value new graduate registered nurses put on the development of their clinical and nursing knowledge during the graduate year. The new graduate registered nurses felt that the first three months on the ward was a “*huge learning curve*” (GN7) and many graduates wanted to just complete the basic education requirements. It was seven months into the program when learning advanced skills became the focus. However, staff development nurses were few, one new graduate registered nurse shared her delight when the clinical nurse manager organised a day in theatre so she could complete her intravenous cannulation competency in one day. By the end of the year, the new graduate registered nurses were discussing their futures and looking into enrolling for postgraduate studies.

## **Survey outcomes**

### *Satisfaction with the graduate program*

There was a total of **n=40 (61%)** participants: **n=4** males (10%) and **n=36** females (90%). The participants were from all the seven regions of Western Australia and had graduated from four universities in Western Australia offering Nursing bachelor's degrees and universities outside of the state. The survey focused on the new graduate's level of satisfaction with the graduate program. Sixty-eight surveys were completed by new graduate registered nurses, **n=21 (32%)** surveys at three months, **n=28 (43%)** surveys at seven months, and **n=19 (29%)** surveys at 11 months. Of the 56 new graduate registered nurses employed at the beginning of 2015 within the rural regions of Western Australia, **n=34 (60%)** completed the survey at least once. Nine new graduate registered nurses were employed in the midyear intake of which six graduates completed the survey at one time point. The response from the six new graduate

registered nurses (66%) were incorporated within the first cohort data set. Six out of the possible 40 participants (15%) completed the survey at all three timeframes, 11 (27%) participants completed the survey at two different timeframes and n=22 (55%) completed the survey once only. Graduates were asked to rate their satisfaction with the clinical, and emotional support provided, graduate theory component and overall program.

## Table 2: Demographic data

### *Clinical support*

The satisfaction of graduates with the clinical supports was related to the number of supernumerary shifts at the start of a placement where they were not counted in the nurse to patient skill mix. The greater the number of supernumerary shifts provided, the greater the satisfaction rating. Satisfaction was seen to decrease across the year as the number of supernumerary shifts at the start of a ward change decreased. At three months, 71% (n=15) of graduates were satisfied with the number of supernumerary shifts, at 7 months 61% (n=17) of graduates were satisfied and at 11 months only 54% (n=10) of new graduates were satisfied with the supernumerary time offered. The level of satisfaction with preceptorship also decreased across the year from 58% (n=11) of graduates reporting they were satisfied at three months, 42% (n=8) at seven months and 47% (n=7) at 11 months. The number of hours new graduates were able to spend with the graduate nurse coordinator (GNC) also appears to influence satisfaction. The level of satisfaction with time spent with the GNC decreased as time progressed, at three months 66% (n=14) of the graduates were satisfied, at seven months 33% (n=9) and 11 months 38% (n=7).

### *Emotional support*

The emotional support available to students in the clinical environment varied throughout the year. New graduates displayed a range of emotions at the three-month survey, but regardless of whether the emotion was positive (valued, helped, encouraged, and befriended) or negative (angry, frustrated, stressed, and inadequate) 71% (n=15) of new graduate registered nurses felt satisfied with the support received during the program. At seven months the mood of new graduate registered nurse participants appeared to shift with 46% (n=13) graduates neither satisfied nor dissatisfied with the support received which indicated a mix of both negative and positive emotions. Graduates who were satisfied with the support received 39% (n= 11) displayed positive emotions more often than negative emotions such as anger and feeling

inadequate. Graduate nurses who were dissatisfied 15% (n= 4) with the support indicated negative emotions more often than positive. The level of satisfaction with new graduates feeling staff were approachable decreased during the year, at three months 71% (n=15) were satisfied, at seven months 42% (n=11) were satisfied and at 11 months the level of satisfaction increased to 55% (n=10).

#### *Graduate program theory components*

The time allocated for delivery of theoretical content remained consistent within all graduate programs at each of the three intervals. However, how theory was delivery often changed to ad hoc sessions later in the program rather than structured study days which were predominant at the start of the program. Satisfaction with the theory component was less (<70%) n=12 at three months compared to seven months (>70%) n=20, although the level of satisfaction with the theory component decreased at 11 months to 50% (n=8).

#### *Overall satisfaction*

The level of satisfaction with the overall graduate program was the highest at three months (n=17, 85%) and lowest at seven months (n=15, 54%), and improved slightly at 11 months (n=12, 62%). (See table 3) The level of satisfaction was not dependant on the university or region the new graduate registered nurses were from, indicating the transition experience was similar for all the new graduates regardless of differences in university experience and prior clinical experience.

#### **Table 3: Graduate program overall satisfaction**

#### *Content analysis*

Content analysis of the open-ended questions from the surveys revealed that graduates felt that support could have been improved throughout the graduate year. The first open-ended question was completed by n=18 (85.71%) participants at the first three-month period, n=22 (84.61%) participants at seven months, and n=17 (94.44%) participants at the 11-month period. Following data analysis, codes were generated from the comments. Twenty-eight codes were generated from 18 participants, for the first three months data, 54 codes from 22 participants during the second data collection and 37 codes from 17 participants at the 11-month data collection (Table 4). Due to the similarity in content for the question across all three time periods, the data was reported as a whole. One theme, ‘Supportive Measures’ was identified from the data.



#### **Table 4 – Content analysis**

This theme is related to the new graduate registered nurses' need for emotional, intellectual, and sociocultural support from nurse educators, preceptors, nurse managers and graduate nurse coordinators during their transition to the work environment. It has three categories of support, structure and education. The category 'Support' included both focused and informal support such as one-on-one preceptorship, supernumerary time and being welcomed by other staff. The category of 'Education' referred to the graduates need for enhancing their clinical knowledge. Assessments were viewed poorly by graduates because there was '*no real accountability*' as grading and formal feedback was rarely provided.

The final category of 'Structure' incorporated the support provided by managers and coordinators involved in the program from an operational level. Graduates commented on the need for longer rotations to consolidate skills and confidence and the importance for clear and concise direction throughout the graduate program. Despite the high level of satisfaction, overall, the percentage of graduates who felt more support was needed remained constant at each timeframe.

#### **Discussion**

Despite the lack of preceptorship due to limited resources available, by the end of the 12-month graduate program, the graduates had gained confidence and believed they had the competence and confidence to practice as independent registered nurses. Effective supernumerary time, increased length of rotations and skilled preceptors were considered facilitators within the program. Graduate nurses in rural Western Australia were found to move through three distinct stages in a transformative progression during their graduate year. The Western Australian graduates' level of satisfaction with the graduate program reflected a V-shaped pattern, with high scores at three months, a decline at seven months and an improvement at 11 months (see Figure 2). Combining the interview and survey data identified three different stages in the confidence of the new graduate nurse, labelled 'Jumping in the deep end with a floatie'; 'Sink or swim'; and, 'Swimming without floaties'.

#### **Figure 2: XXXX Transition Journey**

### *Three months: Jumping in the deep end with a 'floatie'*

The first stage, 'Jumping in the deep end with a floatie', refers to the graduates commencing their graduate year experiencing a lack of confidence, a lack of support, fearing the unknown, demonstrating transition shock, yet concurrently being excited about the chance to undertake a graduate year, commencing work as a registered nurse, the excitement of new experiences, moving to a rural area and being in a graduate program. A floatie/floatation device is reflective of the support received whilst undertaking the transition to practice.

Commencing their graduate year, new graduates experienced both feelings of excitement and stress and discussed emotions that included exhilaration and disappointment. The rural graduates felt valued, helped and encouraged and believed the staff to be approachable within their first three months. The positive emotions, excitement, and high level of satisfaction reflects the 'honeymoon stage' as described by Cheng, Tsai, Chang & Liou (2014) lasting around three months. The extended honeymoon period is congruent with Oberg's culture shock theory which suggests when moving to a new environment the honeymoon stage may last from a few days to six months depending on the level of emotional support, friendliness of staff and excitement of being in a new town (Oberg, 1960). The graduates felt similar level of satisfaction during the supernumerary time which marks the orientation period both Kramer and Duchscher signified as the honeymoon stage.

Within the first three months the graduates also spoke of being 'thrown in the deep end', feeling isolated, stressed, frustrated, and feared the unknown which is reflective of transition shock as described by Duchscher (2007). According to Cheng et al (2014) reality shock or transition shock involved conflict, pressure and dissatisfaction. When the graduates discussed the main concepts of the graduate program, reality shock and transition shock became evident. Fifty percent of the new graduate nurses indicated there was a lack of support and the majority of interview participants spoke of a steep learning curve and feeling like they were thrown in the deep end without a safety net. The way in which graduates in this study moved between both positive and negative emotions suggests they vacillated between both honeymoon period and transition shock initially, depending on the prevailing circumstances.

### *Honeymoon period and transition shock stages co-exist*

This research found a positive level of satisfaction indicative of the honeymoon stage occurring simultaneously with graduates experiencing negative emotions related to periods of transition shock. Duchscher's research (2007) found that once graduates were responsible for

their own patients, feelings of excitement were replaced by fear and anxiety resulting in transition shock, signifying the end of the honeymoon period (Kramer 1974; Duchscher, 2008 & 2009; Lea & Cruikshank, 2014). This would infer a longitudinal transition process, where graduates move from one stage into the next. In contrast, this research found that new graduate registered nurses experienced different stages concurrently, vacillating between positive and negative emotions primarily based on the amount of support available at any particular time or during difficult situations. The findings from this study **indicates a discrepancy between the qualitative and quantitative** findings indicating that transition shock co-existed with the honeymoon stage and **was** dependent on the support received whilst in the initial transition period.

The differences with this group of graduates, in comparison to Duchscher's **international** study in 2005, may be a reflection of the changes within nursing in Australia and the **necessity** to relocate to begin their graduate program. The number of nurses graduating from bachelor nursing degrees in Australia has doubled (Schwartz, 2019). However, health services have not been able to double the graduate program placements to accommodate the larger number of graduating nurses (Schwartz, 2019). For example, in Queensland, 2014, only 600 of the possible 2,500 new graduates were employed (Tuckett, et al., 2017, p106) yet 50% of new graduates in Western Australia **succeeded** in getting jobs (Department of Health WA, 2019). This has resulted in applications for transition programs becoming a very competitive process. The excitement of being offered a graduate program may be a reason for the prolonged effects of the honeymoon stage. With fewer places available, the graduates interviewed felt lucky to be offered a graduate program. This 'feeling lucky' may have contributed to the conflicting results from participants indicating that they were experiencing both positive emotions from a honeymoon stage and transition shock from taking a full workload as a novice nurse.

#### *Starting as a novice*

Similarities were also noted when comparing the rural graduates' transition to Duchscher's Stages of Transition Theory (2007). Lack of experience with patient populations and limited exposure to clinical practice in the undergraduate degree supports positioning the new rural graduates commencing their transition program as novice nurses. While graduates in this study had previous experience attending clinical placements as undergraduate nursing students in metropolitan hospitals, few had completed any placements in rural settings before

commencement of their graduate program. This limited exposure to the type of placement in which they would work placed them in the novice category. According to Benner (2004) a new graduate is an advanced beginner. Both Duchscher and the findings from this research argue that new graduate nurses were commencing their transition program in rural areas with limited clinical experience as a novice.

The limited exposure to different practice environments may be related to changes in education preparation in Australia, increasing the number of graduating nurses in response to a predicted nursing shortage in Australia (Al Awaisi et al., 2015; Health Workforce 2025, 2012). Recent Organisation for Economic Cooperation and Development (OECD) statistics show that Australia produce the 3rd highest number of nurses graduating (OECD, 2019). This finding is also supported by other researchers who found that educational changes increasing the number of nursing students has resulted in a decreased range of placements and increased graduates starting their career as novice nurses (Bvumbwe & Mtshali, 2018; Kavanagh & Szweda, 2017).

### *Sense of belonging*

The graduate's transition journey included sociocultural aspects which centred on the feeling of belonging and developing professional boundaries. Research proposes that it is important to bond with colleagues allowing for an increased sense of belonging, decreased sense of isolation, and ability to debrief if or when challenged (Cubit & Ryan, 2011; Rush et al., 2013). This need to develop new personal relationships in small rural communities resulted in some graduates feeling isolated. The majority of graduates felt a sense of belonging and were excited to be given the opportunity to work in rural areas.

### *Preceptorship*

The current study found that while graduates were satisfied with the initial supernumerary time on commencing in a ward, they were less satisfied with the preceptorship offered to provide ongoing support for the first three months. These findings are comparable with Bratt et al., (2014) who identified fewer preceptors were available to provide support within the rural areas. Calleja et al., (2019) also found low levels of clinical support available for new graduate registered nurses, highlighting that low resources are further exacerbated by poor communication, lower skill mix and unprepared preceptors in rural areas. However, on days when new graduates had support available from appropriate preceptors the graduates in this

study were able to thrive and feel confident and competent in their skills, moving back into the honeymoon stage.

To illustrate the lack of preceptor support available, new graduate registered nurses in the current study were often asked to find their own preceptor to help bridge the gap. The success of self-support also varied depending on senior staff working on a shift with the new graduates as not all staff were approachable (Lea & Cruickshank, 2007; 2014; 2015; Mellor & Greenhill, 2014; Ostini & Bonner, 2012). Calleja et al., (2019) suggest that inconsistent and erratic support can lead to increased confusion and loss of confidence, resulting in periods of transition shock.

### *Education*

Graduates reported feeling greater satisfaction when they mastered their time management skills or identified deterioration in patient conditions, once again moving them into a honeymoon stage. In contrast, elements of transition shock were evident when graduates were over stimulated with learning requirements, through structured study days, online learning packages and doubted their own clinical judgement. These findings are comparable to Calleja et al., (2019) which indicated new graduates required education in three stages facilitating time to develop skills. During the first three months theory components should only include; guidance with new skills and procedures, time management, routines and patient care practices, medication management and documentation. It was felt that increased education sessions in the first few months decreased the time available to develop new skills and build the foundation of rural nursing practice.

### *Seven months: Sink or Swim*

Graduates, at seven months 'sank' when they were exhausted, disappointed, unsupported and feeling disillusioned by the reality of nursing. Following the initial stage of concurrent honeymoon and transition shock, graduates in this study experienced a period of transition crisis. Midway through the transition year graduates reported feeling exhausted and needing a holiday and felt like they were 'sinking' and not coping. The initial transition shock had deepened to crisis level due to the loss of the feeling of excitement and euphoria experienced during the honeymoon stage, decrease in level of satisfaction with support and realisation that the current role may be similar for the rest of their nursing career. Transition crisis was first identified by Duchscher (2007) as a time when graduate nurses began to show disappointment or identify inconsistency within the health care environment.

Within this study, graduates felt they needed increased support for longer durations in order to prove their capabilities with each senior nurse. Increased workload with reduced tangible feedback from preceptors or the graduate nurse coordinators at seven months were a concern. These factors resulted in graduates expressing feelings of dissatisfaction and exhaustion. The change in satisfaction and exhaustion indicated that a transition crisis or a second transition shock (Wakefield, 2018) was occurring leading to graduates feeling they were sinking. With the graduates' progression through the transition year, support measures changed as senior nurses believed that they had developed the required skills and knowledge to function independently. This is similar to other studies which suggests that by midway through programs, graduates are expected to have become familiar with the hospital environment and have developed a heightened level of confidence (Adams & Gillman, 2016; Fowler et al., 2018). This current study demonstrated that, with the loss of the honeymoon stage among nursing graduates in rural Western Australia, transition shock actually deepened into a period of crisis with graduates feeling they would either sink or swim depending on the support received. This indicated that supportive measures for graduates needed to continue past the midway period to decrease the effects of transition crisis, particularly in new clinical areas.

#### *Swimming with help*

Despite new graduates feeling exhausted midway through the program the graduates began to complete tasks with increasing level of confidence and begin to accept responsibility for clinical decision making. The graduates had moved from novice nurses to advanced beginners as defined by Benner (2004), as they had experience in the rural environment and were able to operate independently at a foundation level. The graduates in this study were less occupied with their assigned tasks and were now able to focus their own personal development as a nurse. Duchscher (2007) described this as the 'being' stage, where graduates begin to question, examine and search for answers or explanations.

#### *Sense of belonging*

The number of rotations in the graduate program influenced the ability of graduates to feel a sense of belonging in each clinical area. Graduates in this study were rotated to new clinical areas within their transition program on average every four months. According to Missen, McKenna and Beauchamp's (2016) research, graduates starting new on a ward, having to re-socialise with ward culture, and meet new members of the staff, increased stress and job dissatisfaction. This is comparable to the findings of this study as with each new rotation,

graduates felt they had to build new relationships, prove their clinical competency to new staff and work through the experience of having to prove themselves with each new rotation. Although the graduates suggested they were quicker to settle into their second ward, they were less satisfied with the support provided. The reduction in level of satisfaction was found to be directly related to the graduates increased understanding of ward management and change in supportive measures. Findings differed between clinical areas, suggesting that the level of satisfaction with the graduate program and a sense of belonging depended on both the culture of the ward and length of time spent in the clinical area.

### *Support*

Learning how to manage challenging relationships was difficult for the Western Australian new graduates. At seven months the graduates, recognised power relations within the nursing hierarchy and were aware of how personality differences impacted on working relationships within the hospital setting. When graduates felt unwelcome and/or experienced negative attitudes and felt staff were unapproachable, this contributed to the graduate's feeling like they were sinking. This is supported by other research which found negative attitudes of staff can affect a graduate's experience (Lea & Cruikshank, 2014). The Western Australian rural graduate programs did not appear to assist in buffering negative attitudes of nurses towards new graduates. The graduates believed they experienced workplace incivility when receiving critical feedback, feeling ridiculed and belittled. There were also reports of not being helped even when they asked and being left to believe they were inadequate in their role. These findings are comparable to **international** research by Chachula, Myrick, and Yonge (2015) which described these challenging behaviours as vertical violence which is associated with hierarchical organisational structures.

### *Education*

At seven months the graduates' level of satisfaction with the theory provided increased significantly. Having mastered the basics of nursing care and ward structures, the graduates were ready to learn more and make use of the advanced skills or 'ad hoc' education available. This was similar to findings by Duchscher (2007) who suggested that once the graduates work through the emotional turmoil of commencing a new role, they are committed to work towards professional growth (Duchscher & Windey, 2018). As many of the graduate programs had decreased the amount of study days by seven months, graduates had to find

other ways to increase their knowledge using the increased number of self-directed learning packages and ad hoc education.

#### *Eleven months: Swimming without 'floaties'*

The final stage 'swimming without floaties' reflected an adjustment stage. Increased satisfaction and confidence with their nursing role was evident and the graduates' discussions focused on future ambitions as a nurse. This study found that by the end of the graduate nursing program, all graduate nurses felt confident about practicing in rural areas. The graduates were proud to reflect they felt equipped to work anywhere because of the clinical experiences gained in a rural sector even more so, when they compared themselves with colleagues from metropolitan areas. This finding is supported by an **international study**, which identified increased autonomy resulted in increased job satisfaction (Bratt et al., 2014).

#### *Sense of belonging*

The graduates had successfully transitioned from student to registered nurse by the end of the graduate year. By this stage, the graduates had learnt who they could trust and rely on for positive and constructive guidance. This signified that the new graduates had learnt the skill of professional socialisation. These findings are comparable to Duchscher's (2008) **international** research who identified that graduates at the 'knowing stage' were able to answer questions and assist others with their workload, having obtained a greater ability to cope. Professional socialisation is reflected in Lea and Cruickshank's (2014) research when the graduates at the 11-12-month timeframe felt accepted by the team and had made positive relationships.

#### *Support*

New graduates highlighted the need for debriefing after critical events and that formal debriefing sessions with senior nurses were needed. Critical events were not necessarily medical crises, however in rural environments, critical events such as caring for community people they knew, added stress that may not have occurred in either undergraduate or metropolitan experiences. Lack of anonymity and the increased importance of personal, professional and confidentiality boundaries are often more apparent within small rural communities (Oosterbroek, Yonge, & Myrick, 2017). Combining personal and professional roles may reflect a sense of belonging, however learning how to apply professional boundaries, balancing the conflicting expectations often takes time (Yonge et al., 2018).



## *Education*

The graduates had an increased level of confidence with caring for complex patients. The graduate's level of confidence was incremental and developed throughout the graduate program. In contrast, McKenna and Newton's (2008) **national** study identified new graduates did not feel confident in the role of a registered nurse until the end of the 12 months transition program. Despite the graduates projecting confidence in the final stages of the graduate program, they still indicated that support was required in the form of career advice. This is similar to the findings of Duchscher (2008) who found that during the final transition stage the 'knowing stage', the graduates were interested in advancing their career paths. Graduates receiving advice in planning towards future career goals was dependent on the individual graduate nurse coordinator and each graduate. Lea and Cruickshank (2014) also identified the need for education of graduates in the final stage to include interview skills to assist in gaining further employment.

## **Limitations**

The main limitation throughout the quantitative segment of this study was the sample size. Over 50% of the newly graduated nurses participated in the study however numbers remained small due to the small population group. This would limit the ability for this study to represent all rural graduate nurses Australia wide. Gathering data at more frequent timeframes may provide further evidence of when the honeymoon stage and transition shock occurred concurrently and when changes in these occurred throughout the year. A limitation highlighted with the quantitative tool involved the segment that asked the question about theory, which was generic, limiting the ability to analyse the data in-depth, however the interviews allowed for further exploration.

## **Conclusion**

Graduate programs continue to be necessary to support the transition of new graduates from students to independent registered nurses. The decreased clinical hours offered in undergraduate degrees and increased number of graduating students each year has changed the construct of a new graduate. Graduates enter different stages throughout their graduate year. The first stage, thrown in the deep end with a floatie, involved new graduates vacillating

between transition shock and honeymoon periods resulting in a high level of satisfaction overall, however concurrently experiencing transition shock as they **were** faced with limited support. Towards the middle of the graduate year, graduates **were** exhausted from the physical and emotional changes, and their level of satisfaction dropped significantly resulting in a crisis point where graduates may sink or swim depending on available supportive measures. Questioning, advocating and being more settled signified the progression to the advanced beginner's stage by the middle of the year. The adjustment period began towards the end of the 12-month program and graduates who were 'swimming without floaties' displayed confidence and competence in working towards their future careers. The transition occurred in a linear progression over three distinct stages. The graduates support needs differed at each time point but this study showed clearly that the need for focused support was required for the whole transition year.

### **Relevance to practice**

Structured but flexible graduate programs allow for individual differences in graduates and clinical situations. New graduate nurses would benefit from a break midway through their transition year to assist and overcome the transition crisis stage. Education of nurses undertaking the preceptor role is required to deliver adequate support to graduate nurses and decrease transition shock.

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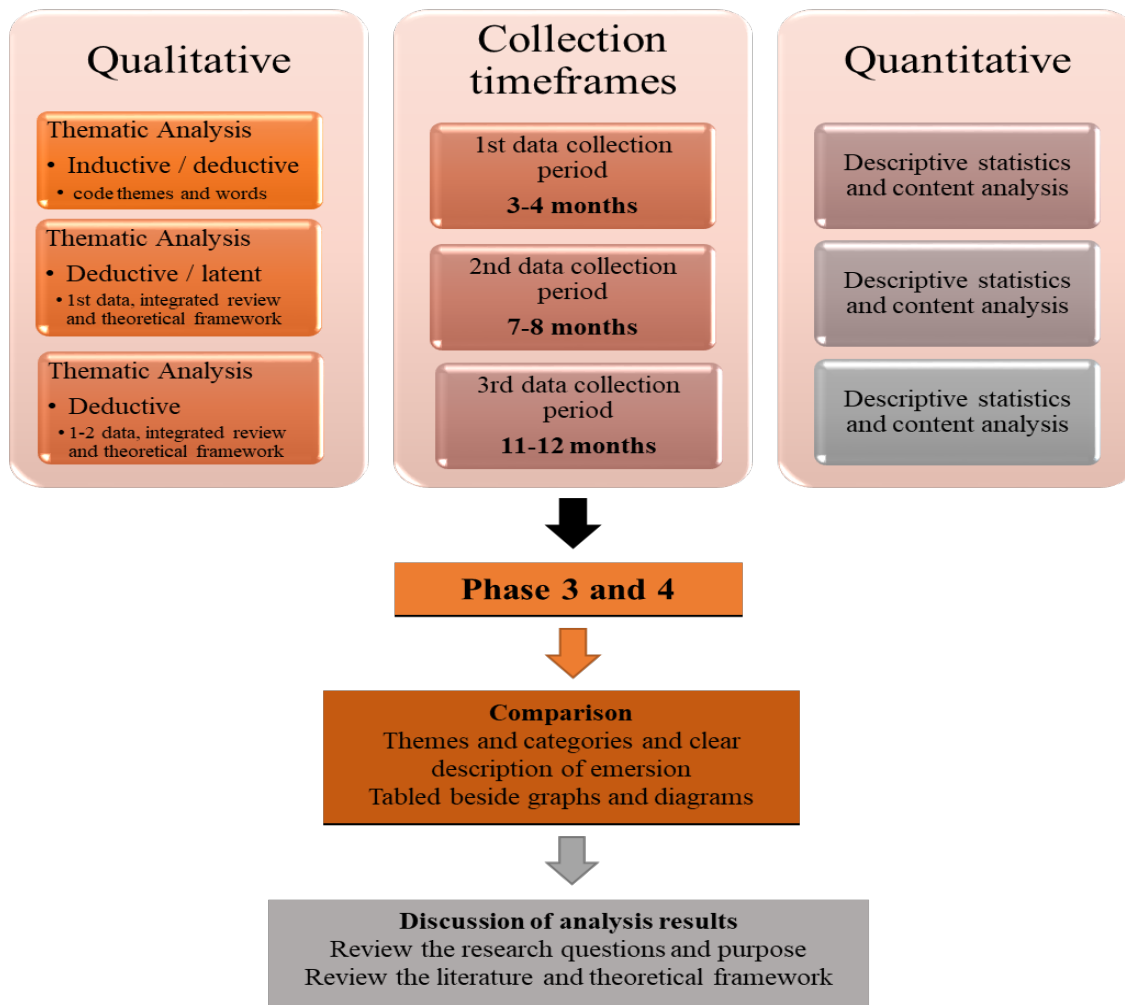
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**Figure 1** Research design mixed methods



## Graduates Level of Satisfaction over their Transition Journey

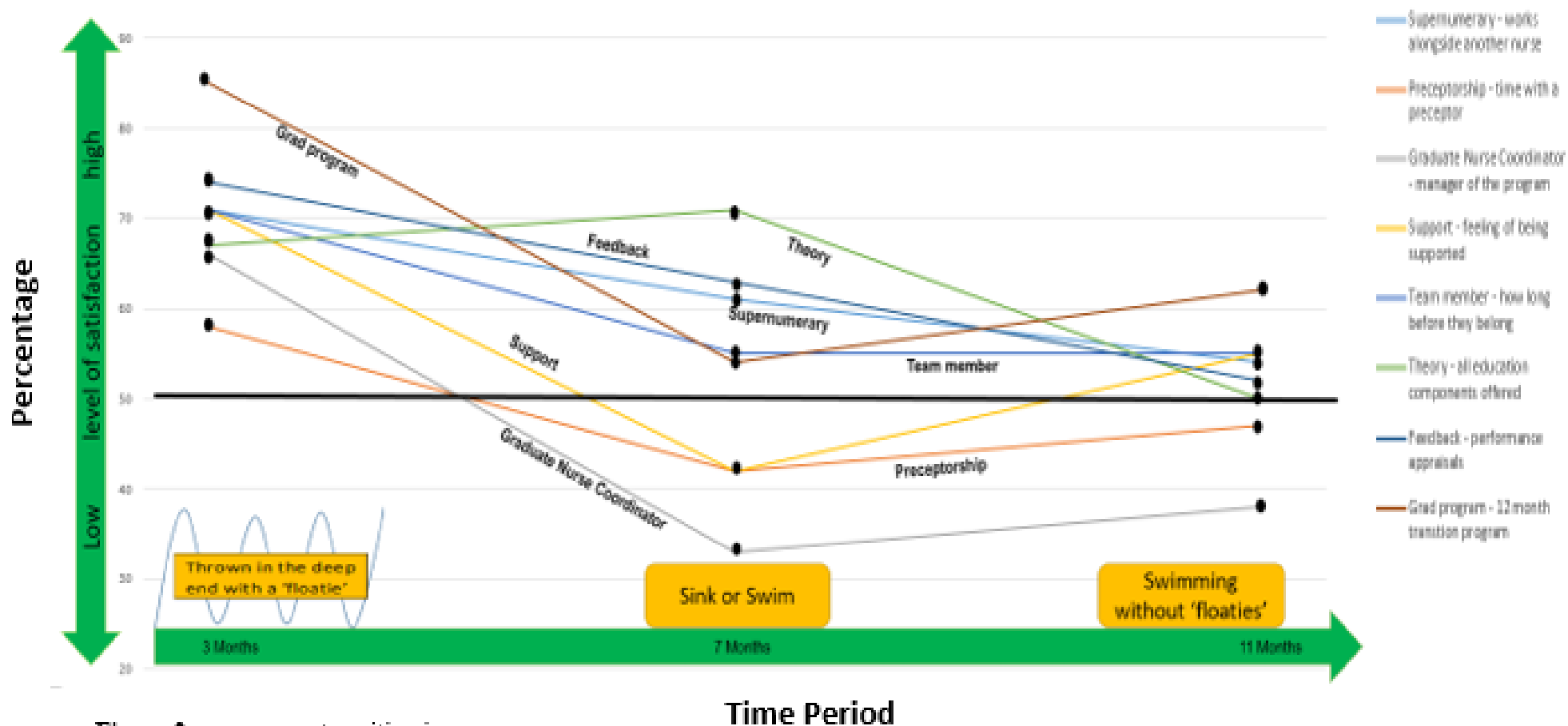


Figure 2

transition journey

Time Period

**Table 2** *Demographic characteristics of the participants (New graduate registered nurses)*

<b>Time period survey conducted</b>	<b>3 months</b>	<b>7 months</b>	<b>11 months</b>	<b>Completed the survey once</b>
<b>Total number</b>	n=21*	n=28*	n=19*	n=40**
<b><i>Gender</i></b>				
Male	2 (9%)	2 (7%)	1 (6%)	4 (10%)
Female	19 (91%)	26 (93%)	18 (94%)	36 (90%)
<b><i>Region</i></b>				
1	5 (24%)	4 (14%)	2 (10%)	7 (17%)
2	4 (19%)	4 (14%)	3 (16%)	5 (12%)
3	0	2 (7%)	1 (5%)	2 (5%)
4	6 (28%)	3 (10%)	3 (16%)	7 (17%)
5	2 (17%)	4 (14%)	2 (10%)	5 (12%)
6	4 (19%)	7 (25%)	4 (21%)	11 (27%)
7	0	3 (10%)	2 (10%)	3 (7%)
<b><i>Age Range (years)</i></b>				
Age group 20 – 29	9 (42%)	13 (46%)	11 (57%)	19 (48%)
Age group 30 – 39	7 (33%)	9 (32%)	5 (26%)	12 (30%)
Age group 40 – 49	4 (19%)	6 (21%)	3 (15%)	8 (20%)
Age group 50 – 59	1 (5%)	0	0	1 (2%)
<b><i>University</i></b>				
A	9 (43%)	12 (46%)	7 (39%)	17 (43%)
B	3 (14%)	2 (4%)	4 (22%)	7 (17%)
C	2 (9%)	6 (23%)	3 (17%)	6 (15%)
D	1 (5%)	1 (4%)	1 (6%)	1 (2%)
E	6 (28%)	7 (23%)	4 (17%)	9 (23%)

\* Percentages are as a proportion of the respondents who completed the survey at that time period

\*\* Percentages are as a proportion of the total number of participants

**Table 3: Overall level of satisfaction of rural graduate program**

University	3 months (n=20)						7 months (n=28)						11 months (n=19)					
	Satisfied		Neutral		Dissatisfied		Satisfied		Neutral		Dissatisfied		Satisfied		Neutral		Dissatisfied	
A	6	30%	1	5%	0	0	8	29%	2	7%	2	7%	2	11%	3	15%	2	11%
B	3	15%	1	5%	0	0	1	4%	1	4%	0	0	3	15%	1	6%	0	0
C	2	10%	0	0	0	0	3	10%	3	10%	0	0	3	15%	0	0	0	0
D	1	5%	0	0	0	0	1	4%	0	0	0	0	1	6%	0	0	0	0
E	5	25%	0	0	1	5%	2	7%	3	10%	2	7%	3	15%	0	0	1	6%
<b>TOTAL</b>	<b>17</b>	<b>85%</b>	<b>2</b>	<b>10%</b>	<b>1</b>	<b>5%</b>	<b>15</b>	<b>54%</b>	<b>9</b>	<b>31%</b>	<b>4</b>	<b>14%</b>	<b>12</b>	<b>62%</b>	<b>4</b>	<b>21%</b>	<b>3</b>	<b>17%</b>

**Table 4** If you were given an opportunity to change anything about your graduate nurse program to improve it for future nurses, how would you like to see it change?

<i>Ranking</i>	<i>Category</i>	<i>N° Codes 3 months</i>	<i>%</i>	<i>N° Codes 7 months</i>	<i>%</i>	<i>N° Codes 11 months</i>	<i>%</i>	<i>Theme</i>
1	Support	13	46.42%	25	46.29%	16	43.24%	Supportive Measures
2	Structure	8	28.57%	16	29.62%	12	32.43%	
3	Education	7	25%	13	24.07%	9	24.32%	