International Journal of Africa Nursing Sciences 13 (2020) 100243

Contents lists available at ScienceDirect

International Journal of Africa Nursing Sciences

journal homepage: www.elsevier.com/locate/ijans

Influence of the practice environment on community service nurses' subjective well-being, compassion practice and psychological capital

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ARTICLE INFO

Keywords:
Community service nurse
Compassion practice
Practice environment
Psychological capital
South Africa
Subjective well-being

ABSTRACT

Background: The practice environment as experienced by community service nurses (CSNs) has not been explored in the South African context, and few studies have explored the influence of the practice environment on intrapersonal resources such as subjective well-being, compassion practice and psychological capital.
Aim: To describe the influence of the practice environment on CSNs' subjective well-being, compassion practice and psychological capital, and the association between these variables and selected personal and situational demographic factors.
Methods: A cross-sectional design was employed with self-report questionnaires used to collect data from an all-inclusive sample of CSNs that studied in North West Province and began their community service year there in 2016 (N = 284; n = 60).
Results: CSNs perceive the practice environment as favourable (M = 2.60; SD = 0.65). CSNs are satisfied with life (M = 24.89; SD = 5.68), have high levels of positive affect (M = 39.13; SD = 7.97), compassion satisfaction (M = 5.44; SD = 0.71) and psychological capital (M = 5.67; SD = 0.95). Nurse foundations of quality of care and nurse participation in hospital affairs had the most influence on intrapersonal resources. The positive components of subjective well-being, compassion satisfaction and psychological capital were highly correlated. Situational demographic factors were associated with intrapersonal resources and perceptions of the practice environment.
Conclusion: Healthcare facilities should provide a positive practice environment for CSNs, that includes an orientation programme with formal organisational and supervision structures, in order to strengthen CSNs' intrapersonal resources, improve their perceptions of the practice environment, and ultimately improve nurse and patient outcomes.

1. Introduction

In South Africa (SA) all persons who have completed a comprehensive programme in nursing and midwifery must first complete 12 months of remunerated community service before registration is granted as an independent nurse practitioner. In SA, community service nurses (CSNs) are new graduates with a diploma or bachelor's degree in nursing who are busy with their community service year. Internationally, such a person with less than one year of working experience is referred to as a new graduate or new diplomat nurse (Goldstein, D'Alessandro, Sussmam, & Brown, 2015).

Community service for nurses commenced in 2008 after proclamation of the Nursing Act No. 33 of 2005 (South African Nursing Council, 2010). It has the dual purpose of providing much needed human resources to the rural and underserved areas of SA, while providing CSNs with a platform to transition from a well-structured and highly supervised education environment to a more flexible and independent clinical environment (Abiodun, Daniels, Pimmer, & Chipps, 2019; Laschinger et al., 2018). Research shows that during this phase of transition nurse graduates experience high levels of stress, anxiety and burnout (Parker, Giles, Lantry, & McMillan, 2014; Laschinger, & Grau, 2012), leading many to decide to leave the nursing profession within the first 2–5 years of practice (Parker et al., 2014; Rudman, Gustavsson, & Hultell, 2014; Du Plessis & Seekoe, 2013). In SA the issue is further compounded by contextual challenges in the practice environment, such as lack of organisation and supervision structures, constrained human and material resources, high workloads and interpersonal challenges (Abiodun et al., 2019).

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https://doi.org/10.1016/j.ijans.2020.100243
Received 15 April 2020; Received in revised form 24 August 2020; Accepted 29 August 2020
Available online 05 September 2020

Research undertaken both internationally (Aiken, Sloane, Bruyneel, Van den Heede, & Sermeus, 2013) and nationally (Coetzee, Klopper, Ellis, & Aiken, 2013) has shown that nurses who work in hospitals with a positive practice environment are less likely to report poor nurse outcomes such as burnout, job dissatisfaction and intention to leave. However, the practice environment as experienced by CSNs has not been explored in the South African context, and few studies have explored the influence of the practice environment on intrapersonal resources such as subjective well-being (SWB), compassion practice and psychological capital.

2. Background

Lake (2002, p. 178) defines the practice environment as "the organisational characteristics of a work setting that facilitates or constrains professional nursing practice". According to Lake (2002), these characteristics entail: 1) nurse participation in hospital affairs; 2) nursing foundations for quality of care; 3) nurse manager ability, leadership and support of nurses; 4) staffing and resource adequacy; and 5) collegial nurse-physician relations (Lake, 2002). Positive fulfilment of all of these organisational characteristics would create a positive practice environment (Lake, 2002).

There is extensive literature linking positive practice environments with improved nurse, patient and organisation outcomes (Aiken et al., 2013; Lambrou, Merkouris, Middleton, & Papastavrou, 2014; Coetzee et al., 2013). Positive practice environments have also been explored internationally among new graduate nurses, with similar findings that include improved nurse outcomes (Laschinger, Zhu, & Read, 2016; Laschinger et al., 2018) and improved perceptions of quality patient care (Laschinger et al., 2016).

According to Pearson et al. (2006) nurse outcomes include outcomes associated with positive physical and mental health, well-being, job and role satisfaction, participation in decision making, autonomous practice, control over practice and work role, and work-life balance. Most of these aspects have been studied at length among new graduate nurses (Laschinger, & Grau, 2012; Laschinger et al., 2016, 2018). However, little research has focused on the intrapersonal resources of the nurse with regard to SWB, compassion practice and psychological capital.

2.1. Subjective well-being

SWB is an expression of a person's overall sense of their own well-being, and is defined as their estimation of life satisfaction, and their positive and negative emotional affect (Wissing, Potgieter, Guse, Khumalo, & Nel, 2014; Oates, Jones, & Drey, 2016). Research on SWB among nurses has shown that it correlates with decreased depression (Ratanasiripong & Wang, 2011), anxiety (Zhang, Zhao, Mao, Li, & Yuan, 2014) and burnout (Lee, 2014), and increased levels of job satisfaction (Gurková, Cap, Ziakova, & Duriskova, 2012), career satisfaction and organisational commitment (Nemcek, 2007; Nemcek & James, 2007). SWB has been shown to fluctuate over the course of life (Fujita & Diener, 2005), and is influenced by demographics (Chanfreau et al., 2013) as well as contextual factors such as the practice environment (Nemcek & James, 2007). This suggests that there is merit in identifying how SWB may be influenced and enhanced among CSNs.

2.2. Compassion practice

Compassion requires as a basis two primary actions: firstly, a behavioural, emotional and cognitive attitude focused on acknowledging and empathising with a person, or opening oneself up to experience emotions of sorrow, suffering and pain; and secondly, an act towards alleviating or removing another's suffering or pain, or supporting a respectable death (Sinclair, Raffin-Bouchal, Venturato, Mijovic-Kondejewski, & Smith-MacDonald, 2017). Compassion satisfaction is the ability to practice with compassion and the positive feelings this evokes, and is defined as a state of being mindful of and responsive to the needs of the patient, and feeling fulfilled as a caregiver (Coetzee & Laschinger, 2018). At the opposite end of the continuum, inability to practice with compassion and the negative feelings this evokes is termed compassion fatigue. Compassion fatigue is a state of being disengaged from the patient and impotent to meet the patient's needs, and feeling unfulfilled as a caregiver as a result (Coetzee & Laschinger, 2018).

In a systematic review and *meta*-analysis, Ortega-Campos et al. (2020) found that as many as 60% of oncology nurses had medium to high levels of compassion fatigue, with 19% experiencing low levels of compassion satisfaction. Similarly, Van Mol, Kompanje, Bakker and Nijkamp (2014) reported that 40% of healthcare professionals in intensive care units experience moderate to high levels of compassion fatigue. No studies could be found that explored the incidence of compassion fatigue and compassion satisfaction among nurse graduates and CSNs. According to Sacco and Copel (2017) the consequences of compassion satisfaction are enthusiastic and meaningful patient care, improved performance, engagement and competency, a positive work environment and protection against compassion fatigue. The study of compassion satisfaction among CSNs is therefore imperative.

2.3. Psychological capital

Psychological capital is defined by Luthans, Youssef, and Avolio (2007, p. 3) as "an individual's positive psychological state of development". In addition, psychological capital is more profound than 'what you know' (human capital), 'who you know' (social capital) and 'what you have' (financial capital), and extends to 'who you are' and 'who you are becoming' (Luthans et al., 2007). Psychological capital is characterised by self-efficacy, optimism, hope and resilience (Luthans et al., 2007). Past studies have shown that psychological capital is linked to decreased anxiety and stress, and increased levels of job commitment and satisfaction, job performance, ability to cope, happiness and well-being (Burhanuddin, Ahmad, Said, & Asimiran, 2019).

In the nursing profession specifically, research has revealed that psychological capital increases job-embeddedness and performance among nurses (Sun, Zhao, Yang, & Fan, 2011), and this finding has been confirmed in a more recent study among new graduate nurses (Boamah & Laschinger, 2014). Psychological capital has also been found to serve as a protective mechanism against job dissatisfaction for new graduate nurses and their seniors (Laschinger & Fida, 2014), as well as enhancing the mental and physical well-being of all nurses (Laschinger & Fida, 2014; Laschinger & Grau, 2012). It is therefore clear that psychological capital should be explored among CSNs, in order to improve their outcomes at work and in life generally.

From the background it is clear that the practice environment has the greatest impact on nurse outcomes. Although a number of studies have been conducted on the practice environment of nurses, it appears that the practice environment as experienced by CSNs has not been explored in the South African context. Furthermore, multiple studies have found that intrapersonal resources, such as SWB, compassion practice and psychological capital, serve as protective mediators against depression, anxiety, stress and poor job outcomes (Burhanuddin et al., 2019; Zhang et al., 2014; Lee, 2014; Ratanasiripong, & Wang, 2011), while improving overall physical and mental health, well-being, and job performance (Burhanuddin et al., 2019; Sacco & Copel, 2017; Gurková et al., 2012; Nemcek, 2007; Nemcek & James, 2007). However, the influence of the practice environment on these intrapersonal resources has not been explored, nor has the relationship between SWB, compassion practice and psychological capital been explored among new nurse graduates in SA or internationally. The researchers aimed to describe the influence of the practice environment on CSNs' SWB, compassion practice and psychological capital, and the relationship between these main study variables, including selected personal and

demographic factors, in a sample of CSNs who studied at higher education institutions in North West Province.

3. Research methods and design

A cross-sectional design was employed, with self-report questionnaires used to collect data.

3.1. Instrumentation

The survey consisted of five validated instruments: the Practice Environment Scale of the Nurse Work Index – Revised (PES-NWI-R), Satisfaction With Life Scale (SWLS), Positive and Negative Affect Scale (PANAS), Compassion Practice Instrument (CPI) and Psychological Capital Questionnaire (PCQ).

The favourability or otherwise of the practice environment was measured using the PES-NWI-R (Lake, 2002). The PES-NWI-R consists of 32 items measuring nurse participation in hospital affairs; nursing foundations for quality of care; nurse manager ability, leadership and support of nurses; staffing and resource adequacy; and collegial nurse–physician relations. The PES-NWI-R employs a 4-point Likert scale ranging from 1 (Strongly disagree) to 4 (Strongly agree). A mean of 2.5 and above is considered to be indicative of a positive practice environment. The PES-NWI-R has been proven to be reliable and valid in the South African context (Klopper, Coetzee, Pretorius, & Bester, 2012). In this study, the instrument proved valid (Confirmatory Factor Analysis [CFA]), and reliability ranged from 0.66 (Staffing and Resource Adequacy) to 0.83 (Collegial Nurse-Physician Relations).

Satisfaction with life was measured using the SWLS (Diener, Emmons, Larsen, & Griffin, 1985), a 5-item instrument used to evaluate the life satisfaction of individuals. The degree of life satisfaction is measured on a 7-point Likert scale ranging from 'Strongly disagree' (1) to 'Strongly agree' (7). The scores are tallied, and a total score of 5–9 indicates being extremely dissatisfied, 10–14 indicates being dissatisfied, 15–19 indicates slightly below average life satisfaction, 20–24 indicates average life satisfaction, 25–29 indicates being satisfied, and 30–35 being highly satisfied. The SWLS is a valid and reliable measure for life satisfaction in the South African context (Wissing et al., 2014). In this study, the instrument proved valid (CFA) reliability for this scale was 0.79.

Positive and negative affect is measured using the PANAS (Watson, Clark, & Tellegen, 1988), which consists of two subscales – positive affect and negative affect – each having 10 items to describe various moods. Each mood is measured using a 5-point Likert scale ranging from 'Very slightly' or 'Not at all' (1) to 'Very much' (6). The scores are tallied for each subscale, and range between 10 and 50; higher scores indicate a higher incidence of that emotion, while lower scores indicate a lower incidence. The PANAS has been proven to be reliable and valid in the South African context (Du Plessis, & Guse, 2016). In this study, the instrument proved valid (CFA), and reliability ranged from 0.84 (Negative Affect) to 0.91 (Positive Affect).

Compassion practice is measured using the CPI (Coetzee, Laschinger, & Ellis, 2020), which consists of 19 items and employs a 6-point scale ranging from 'Never' (1) to 'Always' (6). A mean score of 0–2 is indicative of compassion distress, while 2–4 indicates compassion stress, and 4–6 indicates compassion fatigue. With regard to compassion satisfaction, a mean score of 0–2 is indicative of low levels of compassion satisfaction, while 2–4 indicates moderate levels of compassion satisfaction, and 4–6 high levels of compassion satisfaction. The CPI is a valid and reliable measure for compassion fatigue and compassion satisfaction in the South African context (Hlongwane, 2016). In this study, the instrument proved valid (CFA), and reliability ranged from 0.77 (Compassion Fatigue) to 0.84 (Compassion Satisfaction).

Individuals' psychological capital is measured using the PCQ (Luthans, Avolio, Avey, & Norman, 2007). It is a 24-item scale with four subscales: self-efficacy, optimism, hope, and resilience. It employs a 6-point Likert scale ranging from 'Strongly disagree' (1) to 'Strongly agree' (6). Higher means indicate higher levels on the specific subscale or (in the case of the overall mean) of psychological capital. The reliability, and internal and external validity of the questionnaire have been established in a South African population (Görgens-Ekermans, & Herbert, 2013). In this study, the instrument proved valid (CFA), and reliability ranged from 0.60 (Resiliency) to 0.88 (Efficacy).

3.2. Population and sampling

This study was conducted in North West Province, which was purposively chosen because it is a rural province and no study has previously been conducted on CSNs there. All-inclusive sampling was applied to CSNs who completed their training in 2015 at any higher education institution in North West Province (North-West University [NWU] Potchefstroom Campus, NWU Mafikeng Campus, Mmabatho College of Nursing, or Excelsius Nursing College) and who began their community service year in 2016. There were 293 CSNs working in North West Province in 2016; however nine of these studied at institutions outside of the province (University of Limpopo (n = 6), Tshwane University of Technology (n = 2), and University of the Free State (n = 1)) and were thus excluded from the study. These CSNs were excluded because their education environment differed and they had relocated to North West Province to conduct their community service year, which would have affected their perceptions of SWB, compassion practice and psychological capital.

The all-inclusive sample therefore consisted of 284 CSNs, of whom 60 participated in the study, a response rate of 21.1%. The power calculation in Statistica Version 13 (Tibco Statistica, 2020) indicated that a sample size of 60 would be sufficient to measures correlations of 0.3 and larger, when statistical significance (p) is 0.05 with 80% power. Online surveys are less likely to achieve response rates that are as high as paper-based surveys, despite applying various methods to improve participation: the average response rate for online surveys is around 33% on average, while for paper-based surveys it is around 56% (Nulty, 2008). Hill (1998) indicates a wide range of possibilities (from 30 to 500) as the recommended sample size in an online survey, while Alreck and Settle (1995) state that it is seldom necessary to sample more than 10% of the parent population.

3.3. Data collection

The Deputy Director of Nursing Education in the North West Department of Health, who is the person responsible for the placement of students in North West Province, served as the gatekeeper in this project. The gatekeeper made the contact details of the CSNs available to a mediator (information technology technician), independent of the study, in the form of cellular phone numbers with no linked personal identification (i.e. name, surname or area of placement). The mediator sent short message service (SMS) invitations to all participants (n = 284) containing the title of the project, the institutional details, contact details of the researcher and a URL directing the participants to Survey Monkey, which served as the survey administration tool.

When a participant followed the link, the website opened a page showing the informed consent form. In order to continue to the survey, the participant had to click on either 'Accept' or 'Decline' on the informed consent form. Clicking on the 'Accept' option allowed the participant to continue on to complete the survey, while those clicking on the 'Decline' option exited the site.

The first round of data collection commenced in June 2016, and invitations were sent on days 1, 3 and 7. As this round of invitations did not yield a satisfactory response rate (n = 31), a second round of data collection was initiated three months later, and invitations were again sent on days 1, 3 and 7 (n = 29).

Table 1
Personal and situational demographics (n = 60).

Personal demographics			
Frequencies		**n**	**%**
Gender	Male	23	38.3
	Female	37	61.7
Nursing was my first choice as career	Yes	42	77.0
	No	18	30.0
Descriptive data	**n**	**Mean**	**SD**
Age (years)	60	23.00	5.42
Situational demographics			
Frequencies		**n**	**%**
Was your current community service year placement?	1st choice	23	43.3
	2nd choice	9	15.0
	3rd choice	7	11.7
	4th choice	7	11.7
	5th choice	6	10.0
	6th choice	5	8.3
Specialty area of your current unit	Med-surgery	6	10.0
	Critical care	2	3.3
	Maternal-Child	9	15.0
	Mental Health	4	6.7
	Primary Health Care	24	40.0
	Other	15	25.0
Did you receive any kind of orientation?	Yes	48	80.0
	No	12	20.0
Did your orientation meet your needs?	Completely	8	13.3
	Somewhat	32	53.3
	Not at all	20	33.3
My immediate supervisor is	A registered nurse	56	93.3
	Other	4	6.7
In the last month, how often has short staffing affected your ability to meet your patients'/clients' needs?	Never	6	10.0
	Once or twice a month	12	20.0
	Weekly	8	13.3
	Several times a week	9	15.0
	Daily	25	41.7
Average hours worked per week?	Less than 20	1	1.7
	20–39	12	20.0
	Over 40	47	78.3
Descriptive data	**n**	**Mean**	**SD**
How many weeks did your orientation last?	60	1.65	2.64
How many mentors did you have during orientation?	60	2.13	2.52
How many patients were assigned to you?	60	31.35	18.13
As a result of my education I am well prepared to manage my work as a nurse. (Scale of 1–10).	60	4.23	1.33

3.4. Data analysis

Data were analysed using the computer software program SPSS Version 23 (SPSS Inc., 2016). Demographics (Table 1) and the results for the various scales (Table 2) were presented using descriptive statistics (means, frequencies, percentages and standard deviations). The relationships between the main study variables were tested using Spearman's rank-order correlations (Table 3), while associations between the personal and situational demographics and the main study variables were tested using Spearman's rank-order correlations, t-tests, analysis of variance (ANOVA) and effect sizes.

3.5. Ethical considerations

Ethical clearance was granted by the Health Research Ethics Committee of North-West University (NWU-00081-16-S1) and the North West Department of Health. The researchers sought to comply with sound ethical principles in all aspects of the study, and these included respect, scientific merit and integrity, distributive justice, and beneficence (Department of Health, 2015, p. 2).

Table 2
Descriptive statistics on the practice environment, subjective well-being, compassion practice, and psychological capital scales (n = 60).

Variable	Score range	Mean	SD
Staffing and Resource Adequacy	1–4	2.23	0.72
Collegial Nurse-Physician Relations	1–4	2.84	0.57
Nurse Ability, Leadership and Support of nurses	1–4	2.60	0.80
Nurse Foundations of Quality of Care	1–4	2.79	0.57
Nurse Participation in Hospital Affairs	1–4	2.54	0.60
Practice Environment (entire scale)	1–4	2.60	0.65
Satisfaction with Life	5–35	24.89	5.68
Positive Affect	10–50	39.13	7.97
Negative Affect	10–50	21.02	7.54
Compassion Satisfaction	1–6	5.44	0.71
Compassion Fatigue	1–6	2.38	0.72
Efficacy	1–6	5.75	1.17
Hope	1–6	5.83	0.95
Resiliency	1–6	5.96	0.81
Optimism	1–6	5.15	0.87
Psychological Capital (entire scale)	1–6	5.67	0.95

4. Results

4.1. Personal and situational demographics

Table 1 presents selected demographic information on the participants.

Thirty-seven of the participants were female (61.7%), with an average age of 23 years (SD = 5.42). These demographic characteristics are representative of the target population from which the sample was drawn. CSNs indicated that nursing was their career of first choice (77%).

Regarding situational demographics, almost half (43.3%) of the CSNs were not located in their first choice of placement for their community service year, with the largest proportion (40%) working in the primary health care setting. With regard to the orientation programme, 80% of CSNs received orientation, but 86.6% of these perceived it as not fully meeting their needs. Orientation lasted 1.65 weeks (SD = 2.64) on average, with an average of 2.13 mentors (SD = 2.52) assigned to CSNs during the process. A few CSNs (6.7%) did not report to a Registered Nurse as their immediate supervisor. Short-staffing affected the CSNs every day in terms of their ability to meet patient needs (41.7%). The CSNs were responsible for an average of 31.35 (SD = 18.13) patients per day, and 78.3% of them reported working more than 40 h per week. Most participants indicated that their education only somewhat prepared them for their career as a nurse (M = 4.23; SD = 1.33).

4.2. Descriptive statistics on practice environment, subjective well-being, compassion practice, and psychological capital scales

Table 2 presents descriptive statistics for each subscale of the variables examined in the study.

CSNs perceive the characteristics of the practice environment to be positive, as all subscales have a mean above 2.5, except for staffing and resource adequacy (M = 2.23; SD = 0.72). CSNs stated that they are satisfied with life (M = 24.89; SD = 5.68), with higher levels of positive affect (M = 39.13; SD = 7.97) than negative affect (M = 21.02; SD = 7.54). CSNs experience high levels of compassion satisfaction (M = 5.44; SD = 0.71), and compassion stress (M = 2.38; SD = 0.72). CSNs reported high levels of psychological capital (M = 5.67; SD = 0.95).

Table 3
Spearman's rank correlations between the practice environment, subjective well-being, compassion practice, and psychological capital (n = 60).

			Practice Environment					Subjective Well-being			Compassion Practice	
			Staffing and resource adequacy	Collegial nurse–physician relations	Nurse ability, leadership and support of nurses	Nurse foundations of quality of care	Nurse participation in hospital affairs	Satisfaction with life	Positive affect	Negative affect	Compassion satisfaction	Compassion fatigue
Subjective well-being	Satisfaction with life	Correlation coefficient	0.107	-0.112	-0.188	-0.067	-0.048					
		p-value	0.479	0.458	0.210	0.656	0.750					
	Positive affect	Correlation coefficient	0.144	0.085	-0.044	**0.427****	**0.341***	0.203				
		p-value	0.341	0.573	0.772	**0.003**	**0.021**	0.175				
	Negative affect	Correlation coefficient	-0.187	0.086	-0.071	-0.054	-0.076	-0.239	-0.157			
		p-value	0.212	0.569	0.638	0.722	0.617	0.110	0.297			
Compassion Practice	Compassion satisfaction	Correlation coefficient	-0.071	0.077	-0.079	**0.392****	0.169	0.154	**0.485****	0.011		
		p-value	0.626	0.601	0.591	**0.005**	0.245	0.307	**0.001**	0.940		
	Compassion fatigue	Correlation coefficient	0.020	0.032	0.127	-0.189	-0.028	-0.109	**-0.310***	0.289	**-0.495****	
		p-value	0.890	0.825	0.386	0.194	0.849	0.472	**0.036**	0.052	**0.000**	
Psychological Capital	Efficacy	Correlation coefficient	0.121	0.007	-0.043	0.151	0.109	0.234	**0.437****	-0.138	**0.425****	-0.088
		p-value	0,434	0.962	0.781	0.329	0.480	0.126	**0.003**	0.372	**0.004**	0.571
	Hope	Correlation coefficient	0.255	0.070	0.105	**0.319***	**0.385****	**0.441***	**0.619****	-0.288	**0.495****	-0.228
		p-value	0.094	0.651	0.499	**0.035**	**0.010**	**0.003**	**0.000**	0.058	**0.001**	0.136
	Resiliency	Correlation coefficient	-0.144	0.241	-0.030	-0.200	-0.124	0.020	0.109	-0.131	-0.015	0.056
		p-value	0.350	0.115	0.848	0.193	0.423	0.896	0.482	0.398	0.923	0.720
	Optimism	Correlation Coefficient	0.170	-0.020	0.065	0.241	0.121	0.201	0.243	-0.202	**.417****	-0.202
		p-value	0.270	0.895	0.675	0.116	0.433	0.191	0.111	0.188	**0.005**	0.188

** Correlation is significant at the 0.01 level (2-tailed)* Correlation is significant at the 0.05 level (2-tailed)

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

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

4.3. Correlations between practice environment and SWB, compassion practice, and psychological capital

Spearman rank order correlations are the non-parametric statistical analyses used when the associations between two or more continuous (or ordinal) variables are examined. In these analyses, only findings that have statistical significance (at the 0.05 and 0.01 level) will be reported on. According to Cohen (1988) the following guidelines for the interpretation of correlations can be used: (a) small effect: d = 0.1, (b) medium effect: d = 0.3, and (c) large effect: d = 0.5.

Table 3 presents the Spearman's rank order correlations between the practice environment, SWB, compassion practice, and psychological capital.

The following significant correlations between practice environment and subjective well-being are observed. There is a medium to large positive correlation between nurse foundations of quality of care and positive affect (r = 0.427; p = 0.003), as well as a medium positive correlation between nurse participation in hospital affairs and positive affect (r = 0.341; p = 0.021).

The only significant correlation between practice environment and compassion practice is between nurse foundations of quality of care and compassion satisfaction (r = 0.392; p = 0.005).

The following significant correlations between practice environment and psychological capital are observed. There is a medium positive correlation between nurse foundations of quality of care and hope (r = 0.319; p = 0.035), as well as a medium positive correlation between nurse participation in hospital affairs and hope (r = 0.385; p = 0.010).

The positive components of subjective well-being (satisfaction with life and positive affect), compassion satisfaction and psychological capital (hope, efficacy and optimism) were highly correlated, e.g. between satisfaction with life and hope (r = 0.441; p = 0.003); between positive affect and compassion satisfaction (r = 0.485; p = 0.001), efficacy (r = 0.437; p = 0.003) and hope (r = 0.619; p = 0.000), and between compassion satisfaction and efficacy (r = 0.425; p = 0.004), hope (r = 0.495; p = 0.001), and optimism (r = 0.417; p = 0.005).

4.4. Associations between selected personal and situational demographic factors and the main study variables (practice environment and SWB, compassion practice, and psychological capital)

When the association between a continuous (or ordered) variable and a grouping variable (e.g. gender or race) is examined, t-tests or ANOVAs are used, while Spearman's rank order correlations are used when the associations between two or more continuous (or ordinal) variables are examined. T-tests were used in the analyses of gender, nursing as first career choice, receiving orientation, immediate supervisor and the main study variables. ANOVAs were used in the analyses of community service year placement, specialty area of current practice, orientation having met the CSNs' expectations, short staffing affecting ability to meet patient needs, average hours worked per week, and the main study variables. Effect sizes (d) are used to indicate if differences in means are important in practice. Ellis and Steyn (2003: 51) give the following guidelines for this interpretation: (a) small d = 0.2, (b) medium d = 0.5 and (c) large d = 0.8. Spearman's rank order correlations were used to analyse age, duration of the orientation (in weeks), number of mentors, patient assignment, educational preparation and the association with the main study variables.

In these analyses, only findings that have practical and statistical significance (at the 0.05 and 0.01 level) will be reported on. The only personal and situational demographic factors that had a statistically significant association with the study variables were the orientation programme, community service year placement and short staffing.

The *t*-test indicate that there was a large practical and statistical significant association between receiving orientation and perceptions of management with leadership and support of nurses (d = 1.05; p = 0.002), a medium practical and statistical significant association with quality of care (d = 0.57; p = 0.038) and nurse participation in hospital affairs (d = 0.51; p = 0.040).

There was a medium positive statistical significant correlation between the duration of the orientation (in weeks) and quality of care (r = 0.351; p = 0.009), nurse participation in hospital affairs (r = 0.367; p = 0.006) and management, leadership and support of nurses (r = 0.332; p = 0.013). There was a medium to large negative statistical significant correlation between orientation not having met the CSNs expectations and quality of care (r = −0.444; p = 0.001), and a medium negative statistical significant negative correlation with management, leadership and support of nurses (r = −0.318; p = 0.018) and nurses' participation in hospital affairs (r = −0.302; p = 0.025).

There was a medium positive statistical significant relationship between the number of mentors a CSN had and compassion satisfaction (r = 0.289; p = 0.04). There was a medium negative statistical significant negative correlation between the choice of community service year placement and satisfaction with life (r = −0.395; p = 0.007).

There was a large negative statistical significant correlation between the frequency of staff shortage affecting CSNs' ability to meet patients' needs, and staffing and resource adequacy (r = −0.529; p = 0.000), and a medium negative statistical significant correlation between nurse ability, leadership and support of nurses (r = −0.368; p = 0.006), quality of care (r = −0.305; p = 0.023) and nurse participation in hospital affairs (r = −0.307; p = 0.023).

5. Discussion

The practice environment with regard to nurse foundations of quality of care and nurse participation in hospital affairs had the greatest impact on SWB (positive affect), compassion satisfaction and psychological capital (hope), indicating that nurses had better outcomes if the healthcare facility was driven by a nursing philosophy and nurses were afforded the opportunity to be involved in both hospital and nursing affairs. This is a unique finding among CSNs, as a systematic review found that the characteristics of the practice environment with the most significant bearing on nurse outcomes were the manager's ability, leadership and support of nurses, and nurse participation in hospital affairs (Lambrou et al., 2014). These results point to the fact that CSNs seek greater levels of empowerment and engagement in practice, which research has shown to improve nurse outcomes, and improve ratings of quality of care and patient safety (Kutney-Lee et al., 2016).

Subjective well-being (satisfaction with life and positive affect), compassion satisfaction and psychological capital (hope, efficacy and optimism) was highly correlated. It is well established that compassion satisfaction and empathy are associated with well-being (Linley & Joseph, 2007) and that psychological capital is related to well-being (Laschinger & Fida, 2014; Laschinger & Grau, 2012), compassion practice (Bao & Taliaferro, 2015) and a myriad of other nurse outcomes. The focus should therefore be on intentionally developing and purposefully shaping these intrapersonal resources among CSNs (Luthans & Youssef, 2007; Lyubomirsky, 2008), through mentorship, good leadership practices, positive workplace relationships and adequate resources (Luthans & Youssef-Morgan, 2017).

Specifically, CSNs rated the practice environment as having inadequate staffing and resources, which was also highlighted as a major problem in other studies among CSNs (Ndaba, 2013; Kgole et al., 2013). In this study staffing and resource inadequacy affected the ability to meet patient needs, as well as perceptions of nurse foundations of quality of care, nurse participation in hospital affairs and nurse ability, leadership and support of nurses. Research has linked staff shortages or increased staff-to-patient ratios with negative nurse outcomes (Aiken et al., 2013; Coetzee et al., 2013), adverse patient outcomes (Aiken et al., 2014), and decreased patient satisfaction (Ausserhofer et al.,

2013).

Although most CSNs indicated that they received some form of orientation upon entering their community service year, the vast majority specified that it had not met their needs. This is similar to the findings of other South African studies (Govender et al., 2015; Kgole et al., 2013). In this study the results further showed that the existence of an orientation programme, duration of the orientation programme, and whether or not the orientation programme had met the CSNs' needs were each correlated with respondents' perceptions of quality of care; nurse ability, leadership and support of nurses, and nurse participation in hospital affairs. In fact, Ankers et al. (2018) state that inappropriate orientation of CSNs not only affects graduates' competence and confidence, but also their engagement and adjustment within the practice environment. CSNs also indicated that there was a direct relationship between the number of mentors they had access to and their compassion satisfaction. This exemplifies that mentorship encourages and supports CSNs at the point of care in their roles as clinicians and patient advocates.

Interestingly, most CSNs were not placed in their first choice of healthcare facility, and this had a significant impact on their satisfaction with life. Although it is understandable that not all CSNs can be placed in their first choice of healthcare facility, in order to ensure equitable distribution, the process could possibly be adjusted to give CSNs a more realistic idea of the placement options and procedures.

Most CSNs indicated that their education only somewhat prepared them for their career as a nurse. In light of previous research, this may be interpreted as CSNs feeling competent to provide basic nursing care. However, they are struggling to adapt in specialty units which require specialised skills (Snell & Daniels, 2014), while experiencing reality shock as they transition to the role of professional nurse (Ndaba, 2013), and encounter numerous complex and ambiguous situations for which they must take responsibility (Du Plessis & Seekoe, 2013), with little support and mentorship (Ndaba, 2013) and poor acceptance by other nurses (Govender et al., 2015).

These findings add to the growing research evidence that the practice environment and orientation programmes play a pivotal role in protecting CSNs' intrapersonal resources, and enable them to transition successfully to professional practice (Laschinger et al., 2018).

Healthcare facilities should provide CSNs with a positive practice environment that includes a structured orientation programme tailored to their needs. In fact, it would be advisable for the Department of Health to develop a national structured orientation programme for all CSNs in SA. The Department of Health should also provide fourth-year nursing students with a placement list that indicates exactly how many CSNs must be placed in that year, together with the number of placements available at each healthcare facility, so that the CSNs have a realistic idea of the placement process.

Staffing and resource adequacy at the healthcare facilities and nursing units should be addressed, and CSNs should have the opportunity to be involved in patient, nursing and organisation affairs, as this improves both nurse and patient outcomes. In practice this can be applied if hospitals provide formal organisational and supervision structures, where CSNs receive greater professional status and influence within the organisation, as well as mentoring and transition support (Simpson, 2008). Thus, managers and nurse leaders have a responsibility to orientate and mentor CSNs, allowing them to master skills and experience success, developing and empowering them to reach their goals, and providing positive feedback in a well-resourced or positive practice environment (Luthans & Youssef-Morgan, 2017).

The chief limitation of this study was a poor response rate (21.1%), although it meets the minimum sample size and is above the required 10% of the parent population (Alreck & Settle, 1995).

6. Conclusion

The results of the study provide an overview of CSNs' perceptions of the practice environment and their experiences of SWB, compassion practice and psychological capital in North West Province. These findings show that CSNs perceive the practice environment as favourable, except for staffing and resource adequacy. CSNs are satisfied with life, and have high levels of positive affect, compassion satisfaction and psychological capital, with moderate levels of negative affect and compassion stress. The associations between the main study variables and personal and situational demographics highlight that improving the practice environment with regard to staffing and resource adequacy, ensuring the health facility is driven by a nursing philosophy, and empowering nurses to participate in hospital affairs, have the most impact on nurse outcomes. Therefore improving the engagement, empowerment and resources within the practice environment will automatically strengthen intrapersonal resources. Furthermore, the inclusion of an orientation programme with formal organisational and supervision structures will not only strengthen CSNs' intrapersonal resources, but improve their perception of the practice environment, ultimately improving nurse and patient outcomes.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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