Nursing students' personal qualities: A descriptive study ☆

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SUMMARY

Background: Reports of a lack of compassionate care from nurses have resulted in calls to integrate the assessment of personal qualities into nursing student selection, with the intent to recruit individuals whose attributes reflect those desired in the practising nurse. Whilst nursing programmes are able to determine students' academic abilities on enrolment limited attention has been given to other qualities. Although there is an understanding of the qualities desired in the practising nurse, to date there has been limited exploration of nursing students' personal qualities as they enter nursing programmes and whether these change over time.
Aims: To describe the personal qualities of newly enrolled Bachelor of Nursing students, and to determine if these qualities are age and gender specific and whether they change over time.
Methods: The Personal Qualities Assessment (PQA; www.pqa.net.au) was completed by 138 nursing students on enrolment and repeated after three years.
Results: Twenty four percent of students had PQA scores at the extreme ends (± 2 SD) of the continuum of one or more sub-scale distributions. Significant positive correlations were found between age and the PQA measured traits: self-control, resilience, narcissism, empathy and moral orientation. Females were significantly more conscientious, community orientated and involved; males had significantly higher narcissism and aloofness scores and lower empathy. For those students (n = 28) who completed the follow-up PQA, their personal qualities scores did not change.
Conclusion: Most of the study sample possessed mid-range personal quality trait scores, but approximately a quarter of the nursing students recorded extreme scores. Older students were found to have a higher measure of self-control, resilience, empathy and narcissism and more communitarian in attitude. Significant differences were found between males' and females' scores. That personal qualities were unchanged after three years suggests the importance of incorporating the assessment of these qualities into selection and recruitment of nursing students.

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Introduction

The Mid-Staffordshire NHS Foundation Trust Inquiry was undertaken to investigate "appalling" care provided in a major hospital in Stafford, England (Francis, 2013, p. 3). Two hundred and ninety recommendations were made as a result of this inquiry. One strategy proposed to engender compassionate care in Stafford was to recruit nurses with values, attitudes and behaviours that reflect a compassionate approach to care (Francis, 2013). Poor care is not exclusive to Stafford, with reports of poor care in other areas of the United Kingdom (UK) (Fielding et al., 2010) and Australia (Egan, 2013). Along with this, literature continues to identify the presence of nursing students who demonstrate unprofessional attitudes and behaviours (Duffy, 2003; Luhanga et al., 2008). Many consider that selection criteria could be modified so as to recruit students who possess the personal qualities desired in a registered nurse and improve students' academic and clinical performance (Perkins et al., 2013; Pitt et al., 2014; Wolf, 2012).

Background

It is acknowledged that nurses require academic knowledge, the cognitive skills with which to apply that knowledge and a range of non-academic personal qualities (Catlett and Lovan, 2011; Wolf, 2012). Deficiencies in the latter may contribute substantially to unprofessional and unethical behaviours that have the potential to harm patients (Francis, 2013; Wolf, 2012). Unprofessional behaviours include a lack of empathy and compassion (Karlsson et al., 2004) and extend to sexual abuse (Bachmann et al., 2000) and even murder (Field and Pearson, 2010). Whilst schools of nursing are able to determine students' academic ability before enrolment limited attention has been given to students' non-academic personal qualities (Pitt et al., 2012).

Current research exploring the qualities desired in nursing has focused on measuring students' perception of nursing (Bolan and Grainger, 2009; Grainger and Bolan, 2006; Johnson and Cowin, 2013; Watson et al., 2003) and qualitative explorations of attributes of "good and bad" nursing practice (Catlett and Lovan, 2011; Miller, 2006; Smith and Godfrey, 2002; Sumner, 2004; Wolf, 2012). The desirable qualities of a nurse include compassion, honesty, empathy, accountability, conscientiousness, ethics, as well as communication and teamwork skills. Admission interviews have been used to assess the personal qualities of potential students and although strategies such as multiple-mini-interviews have improved reliability and validity (Perkins et al., 2013), concerns regarding potential for interviewer bias, subjectivity and poor predictive ability remain (Ehrenfeld and Tabak, 2000). Even so interviews are unable to provide clear description of the qualities of student nurses.

A challenge facing researchers in describing students' personal qualities is the lack of quantitative tools available. Current quantitative measures used to assess nursing students' personal qualities are limited to personality measures, yet these have been predictive in design rather than describing the personal qualities of nursing students (Deary et al., 2003; McLaughlin et al., 2008; Warbah et al., 2007). Further research is required on students entering nursing pre-registration education using a tool that explores the range of personal qualities desired in the practising nurse to provide quantitative evidence that we are recruiting nursing students who possess these qualities.

Personal Qualities Assessment (PQA)

A tool designed to explore a broad range of personal qualities in health care professionals is the Personal Qualities Assessment (PQA, www.pqa.net.au) (Powis et al., 2005). Originally designed for medical students, the PQA also reflects those qualities desired in the practising nurse (Pitt et al., 2013). The PQA consists of a battery of three tests:

The Narcissism, Aloofness, Confidence, Empathy (NACE) scale consists of 100 multiple choice statements which provides a total personality measure of INVOLVEMENT. Based on a continuum of involvement versus detachment, an appropriate balance is considered necessary for the development of productive relationships (Munro et al., 2005). The measure comprises four subscales for the traits of *narcissism*, *aloofness*, *confidence*, *empathy*. The NACE is reliable (Cronbach's alpha 0.9) and has established construct/concurrent validity obtained through correlations with five independent personality measures (Munro et al., 2005).

The Interpersonal Values Questionnaire (IVQ) consists of four hypothetical moral dilemmas with 49 multiple choice responses; providing a measure of moral orientation, which may predict a student's decision making when confronted with a moral dilemma (Bore et al., 2005). The IVQ produces a Lib-Com score on the continuum of libertarian (favouring the individual's needs) versus communitarian (favouring the rules of society). The IVQ has reported Cronbach's alpha of 0.83–0.92 and demonstrated construct validity through correlations with objective moral reasoning measures (Bore et al., 2005).

The Self-Appraisal Inventory (SAI) consists of 100 statements that require multiple choice responses. It produces two scores: (self) CONTROL (reflecting *conscientiousness*) calculated from scores on traits – *orderly*, *industrious*, *self-controlled*, (not) *permissive* and (not) *anti-social* and RESILIENCE (reflecting emotional stability) calculated from scores on traits – *volatility*, *withdrawn*, *moody*, *anxious* and *unreality* (having strange or troublesome thoughts) (Bore et al., 2005). The CONTROL and RESILIENCE measures have reported Cronbach's coefficients of 0.6 and 0.7 respectively (Munro et al., 2008).

A predictive validity study of the PQA on UK medical students (n = 146) has demonstrated significant relationships between PQA measures and tutor-rated student behaviours in tutorials, and in clinical examination and academic exam performance (Adam et al., 2012). The study found that the PQA was able to differentiate the top 20% examination scorers from the bottom 20%.

Aim

The aim of this study was to provide a description of the personal qualities of a sample of Australian nursing students commencing a three year Bachelor of Nursing (BN) programme; identify significant differences in personal qualities in relation to age and gender and investigate the stability of these personal qualities over time.

Method

This descriptive study forms part of a larger longitudinal descriptive correlational study using convenience sampling which examined the factors impacting on nursing students' clinical and academic performance and progression. This study used a descriptive design to explore the personal qualities of a sample of BN students from one Australian university where selection was based solely on prior academic performance. Following ethics approval from the University's Human Research Ethics Committee (HREC) all students enrolled in the first year of a three year BN programme at a multi-campus university in Australia in 2009 were invited to participate. Both demographic (age, gender) and PQA data were collected on commencement of the study and the PQA was repeated three years later.

Data were analysed using IBM SSPS version 20 (SPSS, Inc., Chicago, IL, USA). Preliminary tests of normal distribution were conducted. The distribution of PQA scores was identified by transforming raw data to *z scores*. Extreme scores were defined as *z scores* that were 2 standard deviations above and below the mean Spearman's correlation was used to describe the correlation between age and *narcissism*, *aloofness* and, RESILIENCE; Pearson's correlation was used for the remaining variables, which were normally distributed. A Mann–Whitney U-test was used to describe differences between the PQA sub-scores for *narcissism*, *aloofness and* RESILIENCE of males and females; an independent t-test was used for remaining variables. To determine the stability of PQA scores over time, comparisons were made between PQA scores at entry and exit (three years later) using a paired-sample t-test. One sample t-tests were used to compare entry PQA scores with PQA nursing norm scores (available for Australian nursing students generated from unpublished data collected by the authors of the PQA: MR Bore, D Munro & DA Powis). The alpha was set at 0.05 for all statistical analyses.

Results

From a population of 517 students entering their first year of the BN, 139 consented to participate. Although only one quarter (26.8%) of the population of students was recruited the sample reflected the gender and age distribution of the BN population as a whole. Of the 139 participants most were female (86%), with a mean age of 27 years (range 18–53); the 517 students enrolled in year 1 of the BN in 2009 had similar age (mean 27.8 years) and gender (87.6% female) distribution.

Of the 139 participants, 138 completed the PQA. A small number of students did not complete a sufficient number of test items (i.e. more than 10 out of 249) and their data were removed from the final analysis. This resulted in the removal of data for six students from the NACE; one student from the IVQ, and four students from the SAI. Final analyses included the following data; 133 NACE, 132 IVQ and 135 SAI results. Means and standard deviations for the PQA are presented in Table 1.