

## Cross-sectional study

# Student nurses' gender role is a predictor of caring behaviours and critical thinking

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Joanna Harrison

Faculty of Health and Wellbeing, University of Central Lancashire, Preston, UK

Correspondence to: Joanna Harrison, University of Central Lancashire, Preston PR1 2HE, UK; jharrison12@uclan.ac.uk

**Commentary on:** Liu N-Y, Hsu W-Y, Hung C-A, *et al.* The effect of gender role orientation on student nurses' caring behaviour and critical thinking. *Int J Nurs Stud* 2019;89:18–23.

## Implications for practice and research

- ▶ Gender role orientation (masculine or feminine traits) rather than sex is a predictor for determining caring behaviour and critical thinking skills among student nurses.
- ▶ Student nurses' caring behaviour should be emphasised to cultivate students' critical thinking skills.

## Context

Previous research on the relationship between nurses' gender and perceptions of caring behaviours or critical thinking is inconsistent. Research has shown that gender does not significantly influence caring behaviour<sup>1</sup> or critical thinking.<sup>2</sup> However, earlier research did show a correlation between caring traits and gender.<sup>3</sup> Furthermore, presentation of caring behaviour has been shown to predict critical thinking.<sup>4 5</sup>

The aim of the study<sup>6</sup> was to clarify the relationship between gender role orientation (perceptions of masculinity or femininity), caring behaviour and critical thinking in nursing students. Understanding gender roles could help nurse educators to have more effective teaching methods and contribute to future definitions of caring.

## Methods

The nursing departments of four universities in Taiwan were approached by the investigators via email. Subsequently, the investigators visited student nurse classrooms and described the purpose of the research. Students were invited to take part in the research which included completion of a questionnaire. Three instruments were used in the questionnaire to assess perceptions of critical thinking and skills (The Taiwan Critical Thinking Disposition Inventory), caring behaviour (caring assessment report evaluation Q-sort scale) and sex role orientation (Bem Sex Role Inventory).

Independent t tests were used to determine reported caring behaviour, critical thinking and gender role orientation per sex. Relationships among all variables were tested as were the interaction effects of age and femininity on critical thinking.

Out of a sample of 460 nursing students, 449 nursing students were recruited into the study (response rate 97.61%) following informed consent. Data were collected from the period August 2016 to July 2017.

## Findings

The average age of participants was 21 years (19–29) and over half were female (69%). Participants had at least 1 month of clinical practice experience.

There were no significant differences between sexes for caring behaviour, critical thinking skills or gender role orientation.

Students who reported higher masculinity and femininity presented greater caring behaviour ( $p < 0.01$ ). Students who reported higher masculinity and caring behaviour presented greater critical thinking ( $p < 0.01$ ). Sex, age or clinical practice were not significantly associated with either outcome.

There was no significant correlation between femininity and critical thinking. However, the interactive effect of age and femininity was significant ( $p < 0.05$ ).

## Commentary

The results of this study are consistent with previous research indicating that sex did not influence nursing students' critical skills or perceptions of caring behaviour.<sup>1–3</sup> However, nurses (among both sexes) who reported higher femininity or masculinity, also presented higher caring behaviours. Masculinity was also a positive predictor for critical thinking. Therefore, the students' gender role (rather than sex) is the predictor of caring behaviour or critical thinking.

Age did not appear to have an impact on critical thinking or caring behaviour which is inconsistent with previous research findings<sup>1</sup>; however, the older students who reported feminine traits did present elevated critical thinking skills.

The study also showed that caring behaviour was a positive predictor for critical thinking, consistent with previous research.<sup>4 5</sup> This suggests that caring behaviour should be fostered to develop students' critical thinking abilities.

The importance of this study is the potential implication for nursing education. The results show the significance of gender role orientation for nursing care behaviour. Consideration should be given to developing and fostering masculine and feminine traits in nursing students. Development of caring behaviour should also be considered when implementing strategies to promote nursing students' critical thinking skills.

The study authors acknowledge the limitations within the study, namely that a cross-sectional design was used and recruitment was via a convenience sample. Future studies should use a longitudinal sample from a different nursing population.

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