Type D Personality, Self-Resilience, and Health-Promoting Behaviors in Nursing Students

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Abstract. The purpose of this study was to examine the relationships among Type D personality, self-resilience, and health promoting behaviors in nursing students. Grade, self-esteem, Type D personality, and self-resilience were significant predictors of health promoting behaviors, accounting for 34.8% of its variance \( (F = 25.714, P < 0.001) \). Of these four variables, self-resilience was the most significant contributor to health promoting behaviors in nursing students. Health promotion programs for nursing students should be designed and developed with consideration of interventions for psychological variables such as Type D personality and self-resilience.

Keywords: Health promotion, nursing students, personality, resilience

1. Introduction

As future professional nurses who will assume the role of a healthcare provider in the community, college nursing students should prepare themselves to exhibit exemplary health promoting behaviors in their daily lives [1][2]. Thus, it is worthwhile to measure their level of health promoting behaviors and to identify the factors affecting it. The purposes of this study were to examine comprehensively the relationship among nursing students’ Type D personality, self-resilience, and health promoting behaviors, and ultimately to provide some basic knowledge about materials for the physical and psychological healthcare of nursing students, who will play key roles as healthcare providers in the future.
2. Methods

2.1 Data collection and participants

To ensure the reliability of this study, data were collected across the country with consideration of regional similarities and differences. The selected regions ranged from metropolitan areas to small and medium-sized cities. Nursing students from universities of three different cities were randomly selected to participate in the survey. The data were collected from March to June 2013, and 538 nursing students participated in this study. After excluding 21 incomplete questionnaires (valid response rate: 96.1%), data from 517 nursing students were analyzed.

2.2 Measurements

Type D personality. Type D personality was measured using the questionnaire developed by Denollet [3]; the Korean version was translated by Lim et al. [4]. We used this questionnaire with the Korean version and the original author’s permission. This questionnaire consists of 14 items: 7 items on the domain of negative affectivity, indicating the tendency to experience negative affect, depending on the time and situation; and 7 items on the domain of social inhibition, indicating the tendency to inhibit the expression of emotion or behavior in social interactions in order to avoid rebuke. Each question was answered on a 5-point Likert scale ranging from 0 (No) to 4 (Yes); if the score of each domain was 10 or higher, the respondent was classified as having Type D personality. The Cronbach’s α for this tool was .88 for negative affectivity and .86 for social inhibition during its development, and it was .82 and .85, respectively, for the present study.

Self-resilience. Self-resilience refers to a tendency to respond flexibly to situational demands or stressful situations [5]. In this study, self-resilience was measured using the questionnaire developed by Wagnild and Young [5], for which we paid a copyright royalty to use; the Korean version was translated by Shin [6]. This questionnaire consists of 25 items: 17 items on personal self-resilience and 8 on the respondent’s acceptance of his/her own life. Each item was answered on a 7-point Likert scale ranging from 1 (Not at all) to 7 (Absolutely yes) and the total score ranged from 25 to 175. A high score indicates a high level of self-resilience. The Cronbach’s α for this tool was .91 during its development and .88 in this study.

Health promoting behaviors. Health promoting behaviors was measured using the Health Promotion Lifestyle Profile (HPLP) developed by Walker, Sechrist, and Pender [7] and translated into Korean and revised by Seo [8] with the original author’s permission. This questionnaire consists of 47 items in 6 domains, including 11 items on spiritual growth, 10 on health responsibility, 5 on physical activity, 7 on nutrition, 7 on interpersonal relations, and 7 on stress management. Each item is answered on a 4-point scale, and the total score ranges from 47 to 188. A high score indicates a high level of health promoting behaviors. The Cronbach’s α of this tool was .90 in Seo’s
[8] study and .90 in this study.

2.3. Data analysis

Data analysis was conducted using SPSS for Windows version 18.0 (SPSS Inc., Chicago, IL, USA). Multiple regression analysis by the concurrent input method was used to derive factors affecting health promoting behaviors.

3. Results

3.1 The relationships among Type D Personality, Self-Resilience, and Health-Promoting Behaviors

There were statistically significant negative correlations between type D personality and resilience ($r=-0.410$, $p<.001$), health promoting behavior ($r=-0.377$, $p<.001$). There was statistically significant positive correlations between resilience and health promoting behavior ($r=0.536$, $p<.001$).

3.2 Factors Affecting Health Promoting Behaviors

Grade ($\beta = 0.103$, $t = 2.307$, $P = 0.021$), self-esteem ($\beta = 0.115$, $t = 2.519$, $P = 0.012$), Type D personality ($\beta = -0.128$, $t = -2.932$, $P = 0.004$), and self-resilience ($\beta = 0.393$, $t = 8.617$, $P < 0.001$) significantly accounted for 34.8% of the variance in health promoting behaviors ($F = 25.714$, $P < 0.001$) (Table 1). Of these four variables, self-resilience was the most significant contributor to health promoting behaviors in nursing students.

4. Limitations

A limitation of this study is the inability to generalize the results to all nursing students. This is because the participants of this study do not reflect the diversity of school systems and all of them were students at 4-year colleges. Furthermore, given its cross-sectional design, this study could not examine changes in the observations that might have occurred over the students’ 4-year course of education. Finally, we cannot exclude the possibility that psychological variables such as depression might affect Type D personality and the health-related behaviors that were observed.
### Table 1. Factors Affecting Health Promoting Behaviors (N = 517)

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Health promoting behaviors</th>
<th>Unstandardized coefficient</th>
<th>Standardized coefficient</th>
<th>t</th>
<th>p</th>
</tr>
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<tr>
<td></td>
<td></td>
<td>B</td>
<td>Standard error</td>
<td>β</td>
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<tr>
<td>Constant</td>
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<td>9.124</td>
<td>6.536</td>
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<tr>
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<td>Student satisfaction levels with their courses</td>
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<td>Self-resilience</td>
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<td>0.045</td>
<td>0.393</td>
<td>8.617</td>
</tr>
</tbody>
</table>

F (p) = 25.714 (<.001)  \( R^2 = .348 \), adj. \( R^2 = .334 \)

### References


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