

ONE YEAR FOLLOW-UP OF STUDY ON COPING STRATEGIES AND GENERAL HEALTH LEVEL IN NURSES STUDENTS

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Introduction According to the literature, nursing students use a wide range of positive and negative coping strategies to reduce their stress or to overcome the emotionally heavy experiences they are facing [1]. Emotional problems such as anxiety/depression can compromise academic performance and have repercussions on future professional practice [2]. Specifically, the most frequent coping behaviours included problem-solving ability, self-confident approaches and search of support from family and friends [3,4].

Aims The aim of the present longitudinal study was to investigate whether the general health levels and the coping strategies adopted by nursing students changed at the beginning and at the end of the academic year of a triennial degree course.

Methods A cross-sectional study was carry out. A STROBE statement was followed to perform the research [4]. All nursing students of a triennial course of the Teaching Hospital in Rome were invited to participate to the study. The students were followed for one year and invited to fill in the same questionnaire twice: at the beginning (September 2021: T0) and at the end (June 2022: T1) of the academic year.

The questionnaire included sociodemographic variables and two validated questionnaires.

The first validated questionnaire was used to estimate psychological distress: the General Health Questionnaire-12 (GHQ-12). The GHQ-12 score ranged from 0 to 36: the cut-off score of the GHQ12 with Likert scoring was set at ≥ 12 (classified at risk), as literature recommended [5,6].

The second one to investigate the coping strategies adopted by nursing students: the Italian version of the Coping Orientation to Problem Experienced (COPE-NVI). Five different coping strategies were considered: social support (SS); avoidance strategies (AS); positive attitude (PA); problem orientation (PO); transcendent orientation (TO).

Statistical analyses. A preliminary analysis was performed to investigate whether scores in the GHQ-12 questionnaire differed as a function of time and year of course. A mixed ANOVA was performed, considering "Time" (T0 vs T1) as a within-subjects factor and "Year-of-course" (I, II and III year) as a between-subjects factor. The post-hoc comparisons were conducted with the Bonferroni adjustment. With the same approach it was determine whether the five dimensions of the COPE-NVI differed as a function of Time and Year-of-course. Finally, it was assessed whether the use of specific coping strategies was associated with stress levels, by computing Pearson's correlations (separate analyses were performed at T0 and T1). The statistical significance was set at $p < 0.05$.

Results Overall, the original sample included 199 students. The response rate at T1 was 91%: the students that completed both questionnaires were $N = 181$. One hundred fifty-four of the participants were female. 43.6% of the students were in the first year, 27.6% in the second year and 28.7% in the third year. The percentages of participants who reached the GHQ12 cut-off at T0 and T1 were 55.2% and 65.2%, respectively.

The results obtained on the GHQ12 revealed significant main effects for both time [$F(1, 178) = 29.69, p < 0.001, \eta^2 = 0.14$] and year of course [$F(2, 178) = 4.43, p = 0.013, \eta^2 = 0.05$], suggesting that stress levels increased from the beginning to the end of the academic year (from $M = 12.94$ to $M = 15.07$) and were higher during the I than the II year of course (post-hoc Bonferroni-adjusted comparisons: $M = 15.58$ vs $M = 12.79, p = 0.016$; all other $p > 0.15$).

Concerning the COPE-NVI, significant results were obtained only for the SS strategy. Specifically, we found a marginal main effect of Year-of-course [$F(2, 178) = 2.49, p = 0.085, \eta^2 = 0.03$] and a significant Time \times Year-of-course interaction [$F(2, 178) = 3.27, p = 0.040, \eta^2 = 0.04$]. The follow-up analysis of simple effects showed that SS scores decreased from T0 to T1 for students of the II year of course [$F(1, 178) = 4.61, p = 0.033, \eta^2 = 0.03$], but not for students of the I and III years [$F(1, 178) = 0.16, p = 0.68, \eta^2 < 0.01$ and $F(1, 178) = 2.14, p = 0.15, \eta^2 = 0.01$, respectively].

The analysis of the correlations between the GHQ-12 and COPE-NVI questionnaires revealed that, at T0, a more frequent use of AS was associated with higher levels of distress [$r(179) = 0.15, p = 0.043$], whereas a more frequent use of PA strategies was associated with lower levels of distress [$r(179) = -0.17, p = 0.022$]. In addition, there was a marginal negative association between the use of PO strategies and distress levels [$r(179) = -0.14, p = 0.068$].

Conclusion The correlation and regression analyses confirmed that nursing students who used positive attitude and problem orientation strategies experienced lower levels of distress, whereas students who used avoidant strategies experienced higher distress. It would be therefore useful to include in the curriculum of nursing students early interventions aimed at increasing the use of positive attitude and problem orientation strategies, and simultaneously decreasing the use of avoidant coping strategies.

Bibliografia

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