The Association Between Religiosity and Psychological Well-Being of Medical Students: A One-Year Analysis

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Abstract

Presented at Research Day, Liberty University College of Osteopathic Medicine, January, 2021.

Abstract

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Background: Training to become a physician is stressful and impacts a student's well-being. Religious/spiritual factors have been reported to have a positive impact on a person's mental and physical health. Thus, the purpose of this study was to assess the relationship, if any, of religiosity on a measure of psychological well-being of medical students over the course of the preclinical years.

Method: This IRB approved exploratory, longitudinal study used survey data to assess both wellness (RYFF) and religiosity (DUREL) of the incoming class of 2024. A total of 64 first year students participated in the study and 44 students completed all 3 data points which included a wellness survey and a measure of religiosity. Method of analysis included repeated measure MANOVA (Multivariate Analysis of Variance) and Pearson product moment correlation. Statistical significance was defined as $p < .05$.

Results: Step 1 of the analysis included results from the multivariate tests and showed significant differences in mean vectors among three time points (IV) across the four measures (DVs), $\Lambda = .008$, $F (4, 44) = 1380.305$, $p < .001$, $\eta_p^2 = .992$. Step 2 of the analysis found these results from the univariate test ANOVA:

Significant differences were found in ORA across times, $F (1.902, 89.406) = 9.512$, $p < .001$, $\eta_p^2 = .168$;

significant differences were found in NORA across times, $F (1.819, 85.515) = 4.586$, $p = .015$, $\eta_p^2 = .089$;

significant differences were found in WB across times, $F (1.197, 56.278) = 134.876$, $p < .001$, $\eta_p^2 = .742$. Step 3 included a post-hoc pairwise comparison analysis in which adjustment for multiple comparisons was done by using Bonferroni, showed these findings: ORA was significantly lower in the time 2 when compared to the time 1, $t (47) = 3.688$, $p = .002$; ORA was significantly lower in the time 3 when compared to the time 1, $t (47) = 3.538$, $p = .003$; NORA was significantly lower in the time 3 when compared to the time 1, $t (47) = 2.678$, $p = .030$; Well-Being (WB) was significantly higher in the time 2 when compared to the time 1, $t (47) = -12.427$, $p < .001$; WB was significantly higher in the time 3 when compared to the time 1, $t (47) = -11.607$, $p < .001$. No other significant mean differences were found in NORA and IR. Finally, using a Pearson product moment correlation analysis, there was a significant relationship between ORA and WB at time 2, $r (58) = .266$, $p = .040$; a significant relationship between ORA and WB at time 3, $r (61) = .247$, $p = .051$ and a significant relationship between IR and WB at time 3, $r (61) = .246$, $p < .052$.

Conclusions: Overall, there was a low positive association between one measure of religiosity and student wellness during the first semester. However, the sample size was small and self-selected, representing a little over a third of the students in the class of 2024. Over time, public and private religious activities decreased. Intrinsic religiosity maintained but decreased during the COVID semester. Surprisingly, student wellness increased and stayed high during the semester that involved COVID-19. It is possible that being back home with previous support, controlling schedules, eating and exercise could have been factors that kept student wellness intact.