The Relative Effects of Meditation and Prayer on Test Performance

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BACKGROUND
• Past research shows that individual religiosity is positively correlated with academic achievement.
• Research also shows that meditation increases focus and decreases test anxiety, which is negatively correlated with test performance.
• Therefore, we were curious to see how meditation and prayer would affect test scores.
• First we wanted to determine whether our results would be consistent with these findings.
• In addition, we wanted to examine whether meditation or prayer was more effective in improving test performance.

RESULTS
• A One-Way ANOVA showed no effect of condition on test performance ($F(2,70) = 0.373, p = 0.690, \eta^2 = 0.11$).
• A Repeated Measures ANOVA revealed no significant interaction effect between condition and pre-test versus post-test score ($F(2, 70) = 0.307, p = 0.737, \eta^2 = 0.009$).
• Additionally, there was no main effect for condition ($F(2, 70) = 0.337, p = 0.715, \eta^2 = 0.010$).
• Finally, there was no main effect for pre-test versus post-test performance ($F(2, 70) = 2.711, p = 0.104, \eta^2 = 0.037$).

METHOD
• Participants included 73 undergraduate students at John Carroll University.
• Participants were made up of 46 females and 27 males, whose religions included 53 Catholic/Christian, 1 Muslim, 2 Jewish, 2 Atheist, 3 Hindu, 1 Buddhist, 5 Agnostic, and 5 Other.
• Participants began by completing a brief demographic survey. After this, participants took a pre-test, then entered into their condition (prayer, meditation, or control). They finished by completing a post-test.
• Participants were given scores based on the number of items they answered correctly on both the pre-test and post-test.

CONCLUSION
• We concluded that neither meditation nor prayer has a significant effect on test performance.
• Our findings support the literature about meditation (Linden, 1973), but not about the relationship between test anxiety and test scores (Cassady & Johnson, 2001).
• This contradicts assumptions about prayer, as discussed by Walker & Dixon (2002), Montgomery & Francis (1996), and Jeynes (2009). This suggests that religiosity is more important than the act of prayer itself in promoting academic achievement.
• Further studies should employ a within-groups design, or consider using a longitudinal scope. They should also distinguish between academic achievement and test performance.

REFERENCES