Results suggest that providing procedural instruction that is congruent with a student's self-perceived learning style does not appear to improve outcomes when instructing students on IV catheter placement" Papanagnou et al (2016).

Abstract:

BACKGROUND: Students may have different learning styles. It is unclear, however, whether tailoring instructional methods for a student's preferred learning style improves educational outcomes when teaching procedures. The authors sought to examine whether teaching to a student's self-perceived learning style improved the acquisition of intravenous (IV) catheter placement skills. The authors hypothesized that matching a medical student's preferred learning style with the instructor's teaching style would increase the success of placing an IV catheter.

METHODS: Using the VARK model (i.e., visual , auditory , read/write and kinesthetic), third-year medical students reported their self-perceived learning style and were subsequently randomized to instructors who were trained to teach according to a specific learning format (i.e., visual, auditory). Success was gauged by: 1) the placement of an IV on the first attempt and 2) the number of attempts made until an IV line was successfully placed.

RESULTS: The average number of attempts in the matched learning style group was 1.53, compared to 1.64 in the unmatched learning style group; however, results were not statistically significant. Both matched and unmatched groups achieved a similar success rate (57 and 58 %, respectively). Additionally, a comparison of success between the unmatched and matched students within each learning style modality yielded no statistical significance.

CONCLUSIONS: Results suggest that providing procedural instruction that is congruent

with a student's self-perceived learning style does not appear to improve outcomes when instructing students on IV catheter placement.

Reference:

Papanagnou, D., Serrano, A., Barkley, K., Chandra, S., Governatori, N., Piela, N., Wanner, G.K. and Shin, R. (2016) Does tailoring instructional style to a medical student's self-perceived learning style improve performance when teaching intravenous catheter placement? A randomized controlled study. BMC Medical Education. 16(1), p.205.

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