Barsriers to Learning? Age, Experience, Beliefs, and Reasoning in Physics Education

ALLISON SHAFFER, BRIAN PYPER, BYU-Idaho Dept. of Physics — There exists the possibility that cognitive ability in science reasoning may limit potential conceptual understanding in physical science. Current and ongoing research conducted through the BYU-I RISE (Research in Science Education) group is looking at the impact that age and experience might have on these domains. Although some confounding variables may affect the outcome, preliminary data suggest a correlation between year in school and both reasoning ability and conceptual understanding, although the correlation between reasoning ability and conceptual understanding is stronger.

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