Gist-based Learning in Adolescents

Project(s): Promoting healthy decision-making in adolescence using gist-based curricula (Reyna; 2012 – 2015).

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Need: Adolescents take more risks than other age groups, often resulting in preventable and sometimes tragic consequences. To reduce unhealthy or unsafe behaviors, a new approach to intervention that recognizes how adolescents learn, reason, and make decisions is needed. Traditional educational programs tend to rely on quantitative information, such as statistics and probabilities, and have had limited success in reducing risky teenage behavior. Reyna and her team propose the addition of gist-based information, which provides an essential, bottom line message and is more qualitative and intuitive than a strictly verbatim approach.

Approach: This project tested and refined gist-based interventions designed to reduce obesity, pregnancy, and sexually transmitted infections (STIs). In preliminary studies, both of the existing obesity and pregnancy/STI curricula were shown to produce positive behavioral changes in participants. Reyna and her team made key changes to the programs, adding gist-based information in an effort to improve learning and retention by fostering an intuitive, rather than a calculative approach to decision-making. They tested these “gist-enhanced” courses against a control curriculum to confirm the effectiveness of the modifications.

Results and Impact: Results based on the over 300 students who completed instructional coursework and post-testing indicated that the gist-enhanced curriculum was effective in increasing subject knowledge compared to a traditional curriculum. Findings further suggested that emphasizing bottom-line meaning, rather than detailed facts, has a stronger likelihood of reducing risk-taking behaviors. The team was able to identify specific health messages of nutrition and fitness knowledge that are most predictive of healthy eating and exercise habits. Reyna’s group has extended their results to a larger audience by developing the enhanced EatFit curriculum into a web-based tutorial called GistFit. These encouraging results mean that updating traditional curricula with gist-based lessons can help youth develop healthier strategies for approaching risky decisions and could be used to strengthen the impacts and outcomes of other programs around the country.

Related Information: Risky Decision Making in Adolescents