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## **What Effect Does a Career Intervention Have on At-Risk Middle School Students' Career Maturity Levels, Self-Esteem, and Academic Achievement?**

Legum, H., & Hoare, C. (2004). Impact of a career intervention on at-risk middle school students' career maturity levels, academic achievement, and self-esteem. *Professional School Counseling, 8*(2), 148-155.

### *Introduction*

Within the current accountability-driven educational landscape, academic achievement has become a prime factor in evaluating any school counseling activity. Even career development interventions, the historic foundation of school counseling, must now be able to demonstrate their impact on student achievement. In a recent research study, Legum and Hoare (2004) explore the effects of one such career intervention.

Summarizing recent literature, Legum and Hoare hypothesize that students who receive career interventions at the middle school level are more likely to build an effective academic plan for high school. The researchers also purport that career interventions help increase student career maturity levels and, as a result, positively affect academic performance, discipline, and career readiness.

### *Methods*

**Research Design:** Legum and Hoare employed a pre/post-test design using both a control group and experimental group to test their primary questions. The researchers used a series of measurement tools to collect scaled information pertaining to career maturity, competence, self-esteem, and academic success. Data were coded numerically and analyzed using inferential t-tests and analyses of covariance. The analysis also included perceptual data from teachers regarding the self-esteem and academic achievement of 5 randomly selected students (2 teachers per student).

**Participants:** After screening 164 "at-risk" sixth and seventh graders from a suburban middle school, 32 students were randomly assigned to participate in the experimental group, and 30 were randomly assigned to participate in the control group. Of the original 32 members of the control group, five withdrew due to absenteeism, suspension and academic concerns. The researchers note that they wanted sample sizes of at least 40 students in each group, but due to unavailability of space and student withdrawals there were only a total of 57 participants between the two groups.

**Instruments:** To evaluate participants in their study, Legum and Hoare used three measurement tools:

- 1) The Crites Career Maturity Inventory (Crites & Savickas, 1995) which uses two 25-question scales (with a high score of 25 on each) to measure both attitude and competence.
- 2) The Coopersmith Self-Esteem Inventory (Coopersmith, 1989) which measures self-esteem through 58 "like me" and "not like me" questions. The survey is

divided into four subscales: general self; social self/peers; home/parents; and school/academic.

3) An analysis of participants' quarterly grades, based on a 4.0 scale.

**Intervention:** The main intervention in this research study was *Career Targets* (Durgin, 1998), a career exploration tool that allows students to align possible career choices with high school academic planning. The program is split into three phases: 1) *Career Exploration*, during which students use an inventory to help determine their interests and then list those interests in career clusters, 2) *Career Clarification*, which teaches students more about various career clusters and related occupations, and 3) *Career Education*, in which participants are taught what skills, training, and education are needed for their selected occupations. The intervention also included training in interviewing strategies and resume writing (Baltimore County Board of Ed., Department of Student Services, 1996), and a presentation by a local college professor pertaining to connections between college and career.

### *Results*

An independent t-test between the experimental and control groups showed no statistically significant pre-intervention demographic differences between the experimental and control groups. The experimental group showed a slight increase in pre- and post-test career maturity attitude scores (post-test:  $M=15.37$ ,  $SD=3.41$ , pre-test:  $M=14.52$ ,  $SD=3.34$ ). The control group's career maturity attitude score on the post-test ( $M=14.83$ ,  $SD=3.43$ ) was lower than the pre-test ( $M=15.33$ ,  $SD=3.21$ ). Similarly, post-test scores on the career maturity competency test rose slightly (pre-test  $M=14.22$ , post-test  $M=15.26$ ) for the experimental group while the control group scored slightly lower (pre-test  $M=14.93$ , post-test  $M=14.27$ ). Self-esteem scores for the experimental group showed a slight increase (pre-test:  $M=69.26$ ,  $SD=13.01$ , post-test:  $M=69.63$ ,  $SD=17.30$ ); the control group scores, however, climbed 4 points between pre- and post-test. Grades for the experimental group rose very slightly between pre- and post-test (pre-test:  $M=1.72$ ,  $SD=.51$ , post-test:  $M=1.83$ ,  $SD=.56$ ) while grades for the control group were slightly lower (pre-test:  $M=1.62$ ,  $SD=.597$ , post-test:  $M=1.58$ ,  $SD=.700$ ). No statistically significant differences were found for career maturity attitude, competency, or self-esteem in the experimental group. However, in the control group a statistically significant gain was found for self-esteem ( $t(27) = -.144$ ,  $p = .887$ ). In the qualitative findings, 8 out of 10 teachers participating in the survey noted that participants in the experimental group improved their grades and 7 out of 10 teachers described a heightened degree of self-confidence in the experimental group students.

### *Implications*

Legum and Hoare assert that the *Career Targets* intervention leads to increased levels of student achievement, improved career maturity, and possibly higher self-esteem. However, these statements are based almost entirely on perceptual data received from teachers; the empirical data in their study does not support Legum and Hoare's claims and instead seems to indicate that this career intervention does not have a significant

impact on students. For instance, while self-esteem scores of students in the experimental group increased .3%, students who did not receive the *Career Targets* intervention showed a much stronger increase (4%) on the post-test self-esteem measure. These findings illustrate the need for further research on the effects of this career interventions for students.

### *Critical Analysis*

Legum and Hoare use a strong research design and relevant and well-designed instruments to evaluate this career intervention. The empirically supported implications of this study and those claimed by Legum and Hoare differ considerably. While the authors state that students who participated in the *Career Targets* intervention showed increases in career maturity, self-esteem and academic achievement, no statistical significance was found on these measures. Legum and Hoare's assertions are based solely on interviews with eight teachers and on a small (.1 on a 4.0 scale) rise in GPA. The authors do cite specific weaknesses in the study, including a small experimental group, a short intervention period of only nine weeks, a small qualitative sample group that only included teachers, and a lack of guest speakers in the intervention. The authors suggest that students in the experimental group did not score in a manner that would be expected for several reasons: 1) lack of economic resources, 2) single parent families, and 3) the expectation of discrimination. Legum and Hoare seem confident that given a different group of students, this intervention would work as they expected. Perhaps, as suggested by the data, the intervention in question simply doesn't work.