

# Promoting Self-Awareness and Goal-Setting Skills in Students with Learning Disabilities: Can We Foster Future Success?

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## STUDY FRAMEWORK

- Based on a 20-year longitudinal study that examined lives of successful versus unsuccessful adults with LD
  - Six variables (Success Attributes) were identified to account for success in these adults:
    - Self-awareness
    - Goal-setting
    - Perseverance
    - Proactivity
    - Emotional stability
    - Use of social support systems
- The study tested two of these Success Attributes: self-awareness and goal setting

## CONSTRUCTS OF INVESTIGATION

- Self-awareness
  - Self-awareness is viewed as a general awareness of one's needs, strengths, and weaknesses
- Goal-setting
  - The Success Attribute of goal-setting refers to how individuals interpret, respond, and find solutions in a given situation or circumstance
  - Goal-setting entails allocation of certain skills and direction of effort within a problem or situation, as well as focusing attention on the knowledge and expertise needed to efficiently accomplish the task at hand

## PROGRAM TOPICS AND SEQUENCE

### Self-awareness

- Define/understand what self-awareness is and its importance
- Develop self-awareness of strength outside school
- Develop self-awareness of strength inside school
- Develop self-awareness of weaknesses
- Understanding of LD
- Develop self-awareness of successful coping strategies to compensate for ID
- Develop the capacity to compartmentalize LD
- Develop self-awareness of one's own feelings, opinions, and personal values
- Develop self-awareness of one's acceptance of LD
- Awareness and understanding of success and meaning of life

### Goal-setting

- What is a goal?
- Advantages/disadvantages of goal-setting and planning
- Types of goals (short/long-term; realistic/unrealistic; academic/nonacademic)
- General vs. Specific goals
- Set realistic goals and evaluate goals; work with others
- Develop steps/plans/strategies to reach goals
- Prioritize goals - predict outcomes
- Monitor progress of goals
- Evaluate progress by personal standards
- Accept responsibility for success/failure in goal attainment

## ABSTRACT

The purpose of this study was to examine whether 10 weeks of training in self-awareness and goal-setting skills would enhance these skills in students with learning disabilities (LD). Seventy-three students were randomly assigned to either the treatment or the control group. Post-test performance indicated that students in the treatment condition outperformed those in the control on tasks related to setting goals and solving problems. No differences between the groups emerged on measures related to self-awareness. The results support the notion that direct teaching of goal-setting skills results in positive improvements in problem-solving and students' ability to transfer acquired skills to novel situations.

## STUDY PURPOSE

The purpose of this study was to investigate the extent to which the Success Attributes of self-awareness and goal-setting skills could be improved and taught to students with learning disabilities. It was hypothesized that systematically and explicitly teaching students with LD planning strategies would result in enhancing these skills and would promote solving real life problems more efficiently. In addition, it was hypothesized that students with overly-high and very low general self-concept levels would develop more realistic self-awareness skills and their scores would regress toward the sample mean.

## RESULTS

- Pre-test: No group differences between the two groups for all measures
- Post-test: group differences on measures related to goal-setting and planning
  - $t(72)=2.39, p<.05$

## TREATMENT PROCEDURE

- 4 times a week for about 30 minutes per session
- Duration: 10 weeks
- Training techniques: discussions, role-play, modeling, coaching, reinforcement, and self-reflection
- Treatment fidelity - 78%

## MULTILEVEL ANALYSIS

	Parameter	Model A Unconditional Means	Conditional Model B	Conditional Model C	Conditional Model D	
Fixed effects	Intercept	Y <sub>00</sub> 13.06 <sup>***</sup> (.59)	17.95 <sup>***</sup> (1.89)	18.07 <sup>***</sup> (1.59)	11.07 <sup>***</sup> (.79)	
	Group	Y <sub>01</sub>	3.20 <sup>*</sup> (1.19)	3.41 <sup>*</sup> (1.00)	3.51 <sup>*</sup> (1.11)	
	HS pretest	Y <sub>10</sub>	.94 (2.45)	0.12 (1.12)	.28 (1.20)	
	Group* HS pretest	Y <sub>12</sub>	.47 (1.58)	0.40 (1.52)	.05 (1.66)	
	Age	Y <sub>20</sub>		0.83 (0.51)	1.16 (.82)	
Random effects	Age*group	Y <sub>21</sub>			-.56 (1.09)	
	Age*HS pretest	Y <sub>22</sub>			-.47 (.79)	
	Residual	Y <sub>ij</sub>	15.31 <sup>***</sup> (2.70)	10.49 <sup>***</sup> (2.12)	10.89 <sup>***</sup> (2.25)	10.93 <sup>***</sup> (2.26)
Goodness-of-fit statistics	Pretest score	U <sub>0i</sub>	1.37 (1.57)	1.56 (1.98)	0.48 (1.56)	0.77 (1.85)
	-2ln(L)		409.5	363.1	360.6	356.9
	AIC		413.5	371.1	368.6	364.9
	BIC		414.1	372.3	369.8	366.1

Note. \*\*\*  $p<.001$ ; \*\*  $p<.01$ ; \*  $p<.05$ ; HS - hypothetical open-goal situation (total score)

## REFERENCES

- Goldberg, R. J., Higgins, E. L., Raskind, M. H., & Herman, K. L. (2003). Predictors of success in individuals with learning disabilities: A qualitative analysis of a 20-year longitudinal study. *Learning Disabilities Research & Practice, 18*, 222-236.
- Raskind, M. R., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (1999). Patterns of change and predictors of success in individuals with learning disabilities: Results from a twenty-year longitudinal study. *Learning Disabilities Research & Practice, 14*, 35-49.

## PARTICIPANTS

- 73 students (in 10 classes)
  - Mean age 13.8 years (range 2nd-12th grade)
  - 29 girls and 44 boys
  - 42% private and 58% publicly-funded
  - 82% Caucasian, 11% Hispanic, 7% Asian
- 39 students in the control group (5 random classes) and 34 students in the treatment group (5 classes)
  - Both groups matched on age, SES, ethnicity, reading, math, and language arts scores

## TASKS AND MATERIALS

- 73 students (in 10 classes)
  - Mean age 13.8 years (range 2nd-12th grade)
- Self-Awareness:
  - The Social Skills Rating System (SSRS, Gresham & Elliot, 1990)
    - Chronbach's alpha .88 (elementary) and .86 (secondary form)
  - Self-Efficacy Questionnaire for Children, adapted from Muris (SEQ-C, Muris, 2001)
    - Chronbach's alpha .90
- Goal-setting:
  - Two hypothetical situations
    - Reliabilities .93 and .85
  - Three situational problems, adapted from The Arc's Self-Determination Scale (Wehmeyer, 1995)

## GOAL-SETTING AND ACADEMIC ACHIEVEMENT

Weak, but significant correlations between post-test and achievement scores emerged for the treatment group. This suggests that goal-setting skills might be predictive of students' academic achievement, which implies clear benefits of teaching planning and problem-solving skills to positively influence students' academic progress.

	Pre-test (total Sample)	Post-test (total Sample)	Post-test (treatment)	Post-test (control)
Math	.14 ( $p=.25$ )	.22 ( $p=.07$ )	.35 ( $p=.05$ )	.09 ( $p=.61$ )
Reading	.16 ( $p=.19$ )	.21 ( $p=.09$ )	.36 ( $p=.04$ )	-.02 ( $p=.93$ )
Language Arts	.22 ( $p=.08$ )	.26 ( $p=.03$ )	.43 ( $p=.01$ )	-.03 ( $p=.87$ )

## STUDY LIMITATIONS

- Prior familiarity with Success Attributes
  - Students were exposed
  - Teachers were familiar
  - Influence of transition program
- Assessment of self-awareness
  - LD not addressed directly
- Too intense for some students

## CONCLUSION

The results of this study suggest that interventions on improving planning, goal-setting, and problem-solving skills in students with LD can be highly effective. In a relatively brief period of time, the students were able to increase their ability to problem-solve and plan. It is important that these skills can be strengthened through structured explicit instruction in the classroom, and it has a direct implication for the educational practice, as well as to parenting.

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