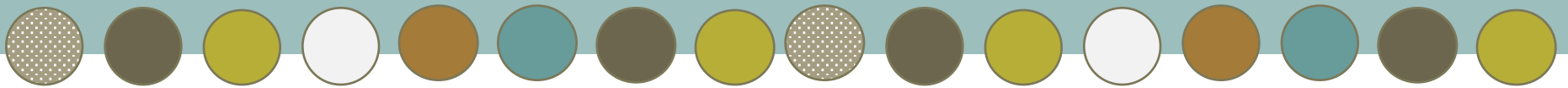


MESSAGE FRAMING & STUDENT OUTCOMES

USING RESEARCH TO SHAPE COMMUNICATION WITH STUDENTS



Rebecca Covarrubias, Ph.D.
Academic Advising Inservice Training

June 2016

THE POWER OF MESSAGING

UNIVERSITY SCHOLARS PROGRAM

- First-generation and/or low-income students conditionally accepted to the university
- Summer and academic year component
- "Tough love" messaging

(Covarrubias, Gallimore, & Okagaki, 2016)

[The messaging] was kind of like breaking us down and trying to build us up, but they belittled us.... it was a constant reminder that made me feel as if I'm really not supposed to be here.

THE EFFECTS OF PROGRAM MESSAGING

LATINA

I actually feel like crap about myself right now.
That kind of thing sticks with me and I think about
it a lot....

THE EFFECTS OF PROGRAM MESSAGING

WHITE FEMALE

TOUGH MESSAGING

- Why would the Scholars be more likely to recall negative versus positive feedback after a semester in college?
- When put in a stressful situation, stigmatized students, e.g., women in math domains, pay more attention to negative information and, in recall tasks, recall negative information better than positive information (Forbes, Duran, Leitner, & Magerman, 2015)

When, how, how often, and by whom should more difficult messages be conveyed, particularly if the aim is to simultaneously prepare students for the potential harsh realities of the university context and to encourage them in the transition process?



MESSAGES THAT WORK

1. Highlight diverse cultural backgrounds
2. Convey a context that is supportive of and committed to serving diverse students
3. Represent difficulties as both normal and temporary
4. Emphasize growth processes (e.g., failure is part of the learning process)
5. Reduce stigmatization

WISE INTERVENTIONS

1. Changing students' subjective experience in school — how they feel about themselves and what school feels like for them;
2. Delivering *psychologically wise* treatment messages effectively without generating problematic side effects like stigmatizing recipients; and
3. Tapping into self-reinforcing or *recursive processes* that sustain the effects of early interventions.

(Garcia & Cohen, 2012; Yeager & Walton, 2011; Walton, 2014)

HIGHLIGHT DIVERSE CULTURAL BACKGROUNDS

(STEPHENS, FRYBERG, MARKUS, JOHNSON, &
COVARRUBIAS, 2012)

STRATEGY ONE



“....mark the one option that most closely reflects your institution’s expectations for college students.”

(N=248; 70% Deans, 9% Program Directors, 13% Provost Office)

Independent Expectations	Interdependent Expectations
A. Being independently motivated	B. Being motivated by others' high expectations
A. Working independently	B. Working collaboratively
A. Paving their own innovative paths	B. Following in the footsteps of accomplished others
A. Challenging norms & rules	B. Considering the norms & rules
A. Conducting independent research	B. Conducting collaborative research
A. Developing personal opinions	B. Appreciating the opinions of others

(Stephens, Fryberg, Markus, Johnson, & Covarrubias, 2012, Study 1)



“....mark the one option that most closely reflects your institution’s expectations for college students.”

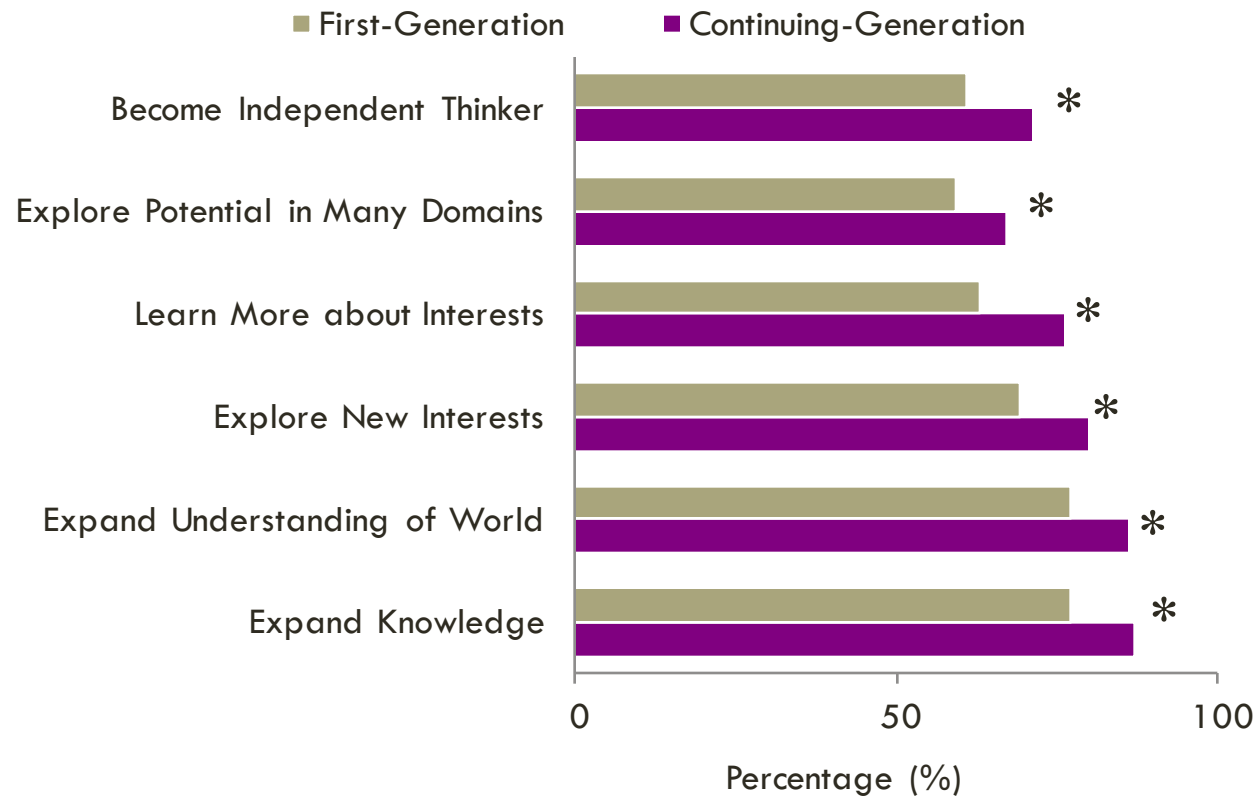
(N=248; 70% Deans, 9% Program Directors, 13% Provost Office)

- 71% characterized their university as independent.
- 20% characterized their university as equally independent and interdependent.
- 9% characterized their university as interdependent.

(Stephens, Fryberg, Markus, Johnson, & Covarrubias, 2012)

SELF DEVELOPMENT

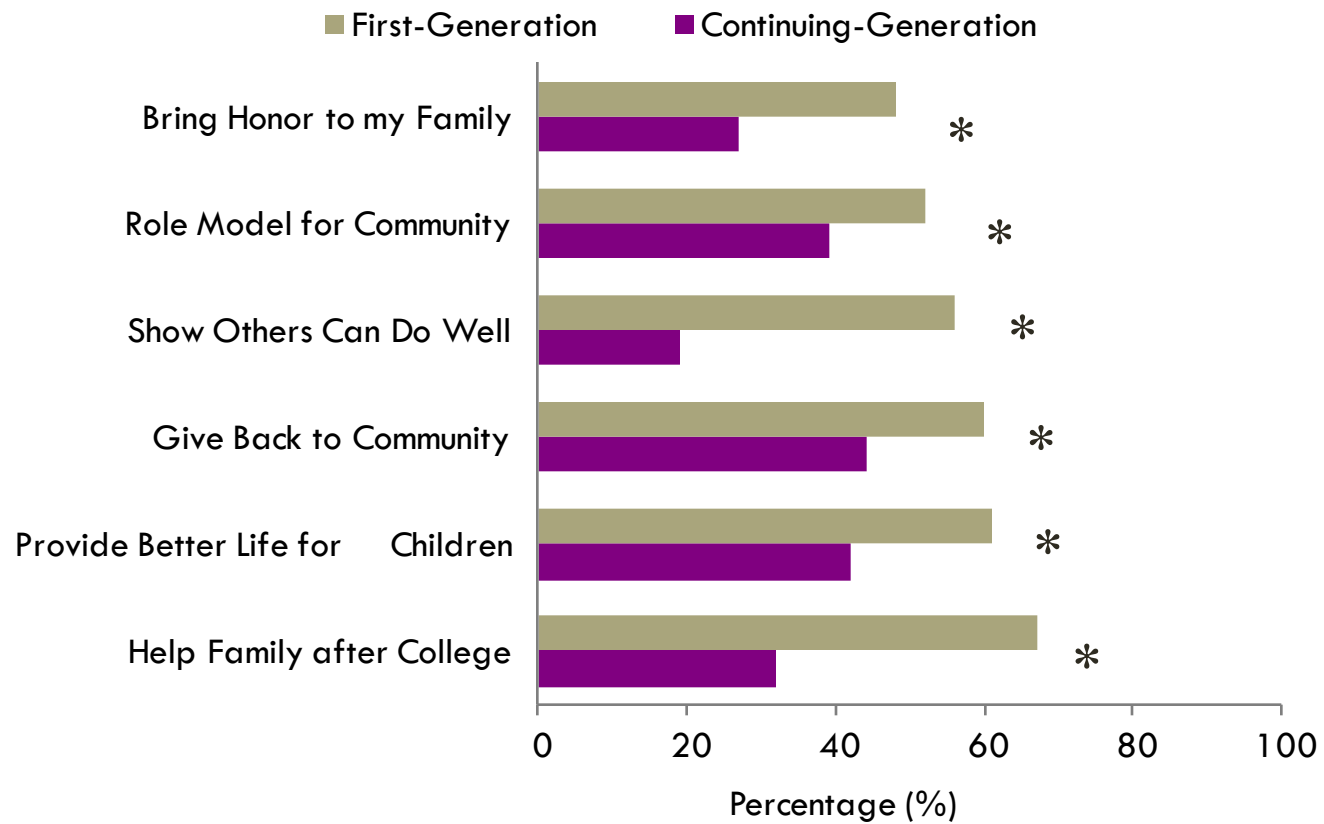
(Stephens, Fryberg, Markus, Johnson, & Covarrubias, 2012, Study 2)



n = 1530; all *p*s < .05

HELP OTHERS

(Stephens, Fryberg, Markus, Johnson, & Covarrubias, 2012, Study 2)



From the University of Arizona's President



Welcome to the University of Arizona

I am delighted that you have decided to attend the University of Arizona and that you think the University of Arizona is the right place for you. For the next few years, you will have many opportunities to explore new areas of interest, to learn from our superb faculty and from your own self-exploration and individual experiences.

As the University of Arizona's 109th president, I encourage you to make the most of your time here, and I offer you a few suggestions to get you started.

The University of Arizona has an accomplished faculty. These teachers and researchers are here because of you and your desire to develop your extraordinary talents and unique interests. From your first days on campus, I urge you to get to know our faculty. Stop by during office hours to continue a class discussion, to share your ideas, or to simply tell the professor what you think about the course. Your thoughts and opinions are important.

The University of Arizona presents you with many opportunities not available at other institutions. The university's breadth—from the arts to the environment to athletics to the sciences—provides you with individual freedom to cross departmental boundaries and to discover your intellectual passions.

From your first days on campus, you will have the chance to work with distinguished faculty in small classes. If you are interested in research, the University of Arizona offers you numerous avenues for pursuing student-initiated research or independent studies.

The University of Arizona is an intellectually vibrant place and you are a critical part of creating your own journey. Some of your most valuable experiences might involve working independently to understand a

difficult concept or influencing others by expressing your ideas and by sharing your intellectual passions.

The University of Arizona has a tradition of independence: of bold students who go against the grain and assert their own ideas, interests, and opinions. I hope you do the same while you are here. This is your time to become your own person and to explore your own personal interests—whether it is in the classroom, in a laboratory, in a theater, or on an athletic field.

Above all, I urge you to be your own person, enjoy your intellectual journey, and to pursue it with enthusiasm.

A handwritten signature in black ink, reading "Robert N. Shelton". The signature is written in a cursive, flowing style.

Robert N. Shelton
President



INDEPENDENT FRAME

“I am delighted that you have decided to attend the University of Arizona and that **you think Arizona is the right place for you.**”

“For the next few years **you** will have many opportunities to explore new areas and to learn from our superb faculty and from your own personal exploration and individual experiences as a student.”

From the University of Arizona's President



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Above all, I urge you to be your own person, enjoy your intellectual journey, and to pursue it with enthusiasm.



Robert N. Shelton
President




INTERDEPENDENT FRAME

“I am delighted that you and your family have decided that you should attend University of Arizona and that Arizona is the right place for you.”

“For the next few years, together with the University of Arizona community, you will have many opportunities to explore new areas and to learn from your experiences and interactions with your peers.”

From the University of Arizona's President



Welcome to the University of Arizona

I am delighted that you have decided to attend the University of Arizona and that you think the place is right for you. For the next few years, you will have many opportunities to explore new areas of interest, to learn from our superb faculty and from your own self-exploration and individual experiences.

As the University of Arizona's 109th president, I encourage you to make the most of your time here, and I offer you a few suggestions to get you started.

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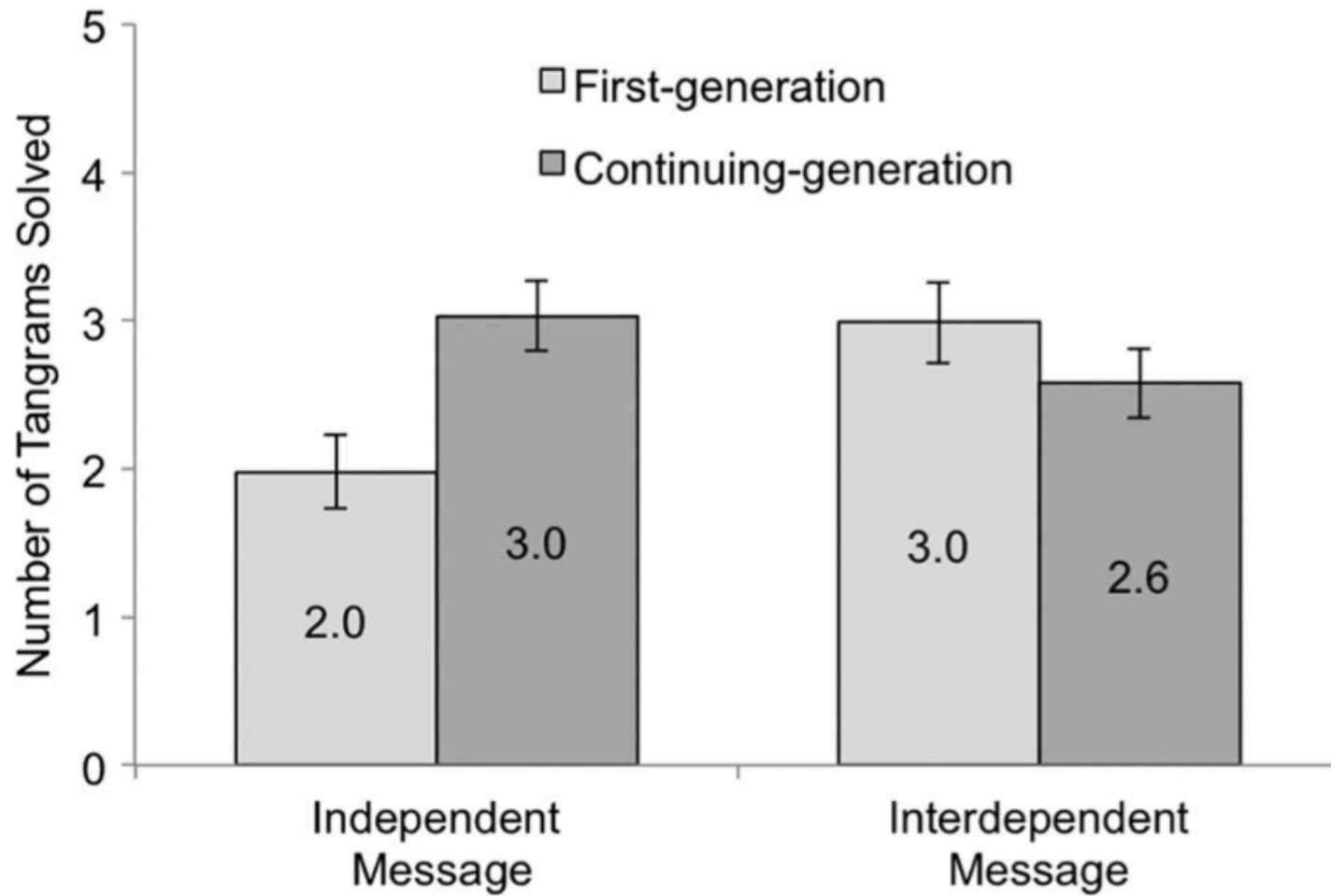
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Robert N. Shelton
President





(Stephens, Fryberg, Markus, Johnson, & Covarrubias, 2012, Study 4)

CREATE A SUPPORTIVE ENVIRONMENT

(BROWMAN & DESTIN, 2016)

STRATEGY TWO

**IMAGINE THAT YOU ARE A LOW-
INCOME STUDENT ENTERING YOUR
FIRST YEAR OF COLLEGE...**

“The cost of attendance for the 2011--12 academic year was \$58,429, which over half of UCSC families managed without any financial aid. In 2011, parents of UCSC students and alumni gave more than \$1.8 million to bolster the school’s endowment through the Parents’ Fund, with gifts ranging up to \$250,000. With their help, UCSC has maintained the 9th largest endowment in the nation, surpassing \$7 billion in 2010-2011.”

“Dedicated to assisting students in earning money to meet their educational costs, UCSC is strongly involved with the Federal Work–Study program. UCSC will pay over \$2.8 million to its Work– Study students this year. UCSC has an extremely far-reaching financial aid program, with 60% percent of all UCSC undergraduates receiving financial aid.”

**WHAT THOUGHTS DO YOU HAVE AS A
LOW-INCOME STUDENT AT THE
UNIVERSITY?**

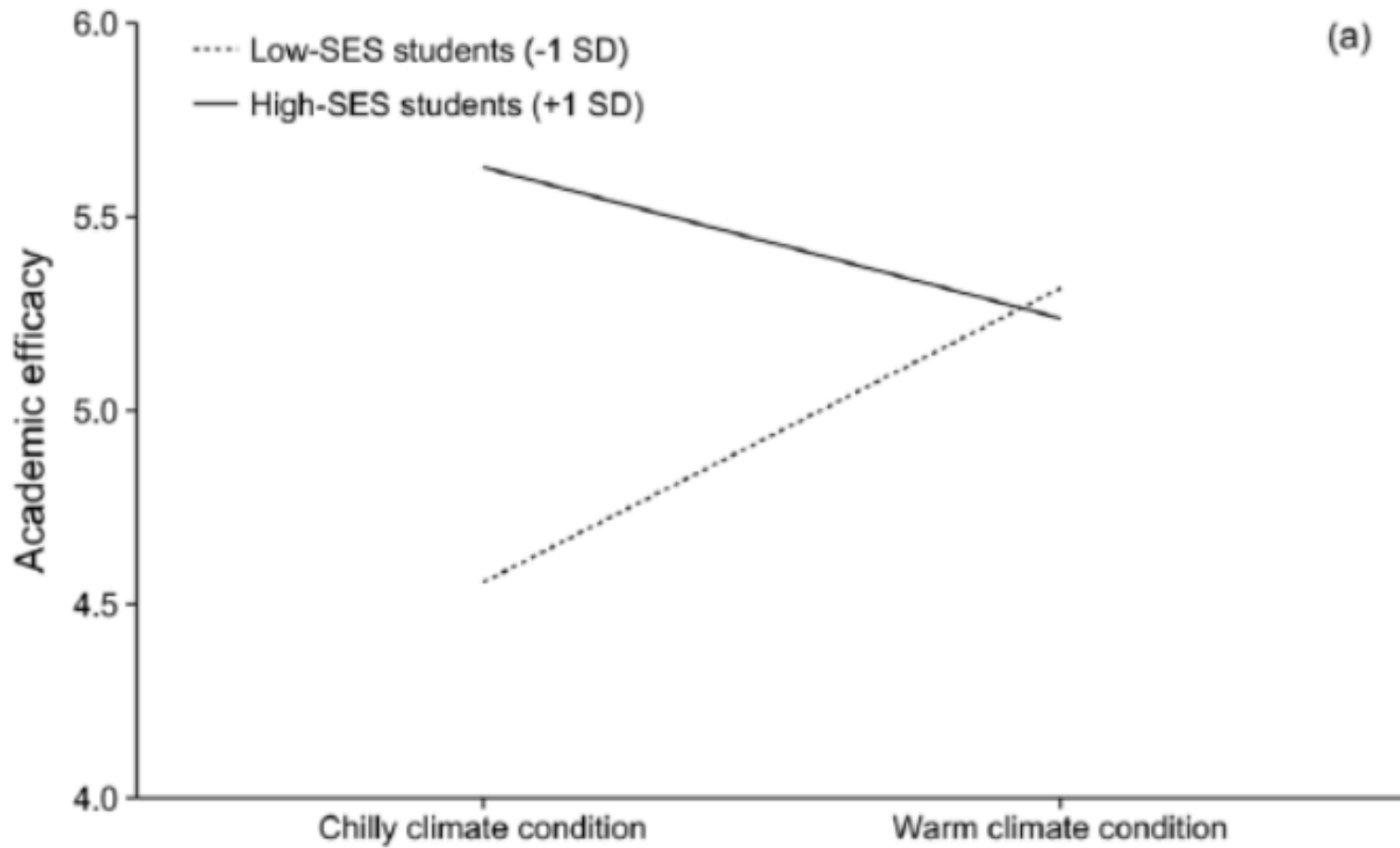
CHILLY CLIMATE CONDITION

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WARM CLIMATE CONDITION

“Dedicated to assisting students in earning money to meet their educational costs, UCSC is strongly involved with the Federal Work–Study program. UCSC will pay over \$2.8 million to its Work–Study students this year. UCSC has an extremely far-reaching financial aid program, with 60% percent of all UCSC undergraduates receiving financial aid.”

(Browman & Destin, 2016)



(Browman & Destin, 2016, Study 1)

REPRESENT DIFFICULTIES AS NORMAL AND TEMPORARY

(WALTON & COHEN, 2007; 2011)

STRATEGY THREE

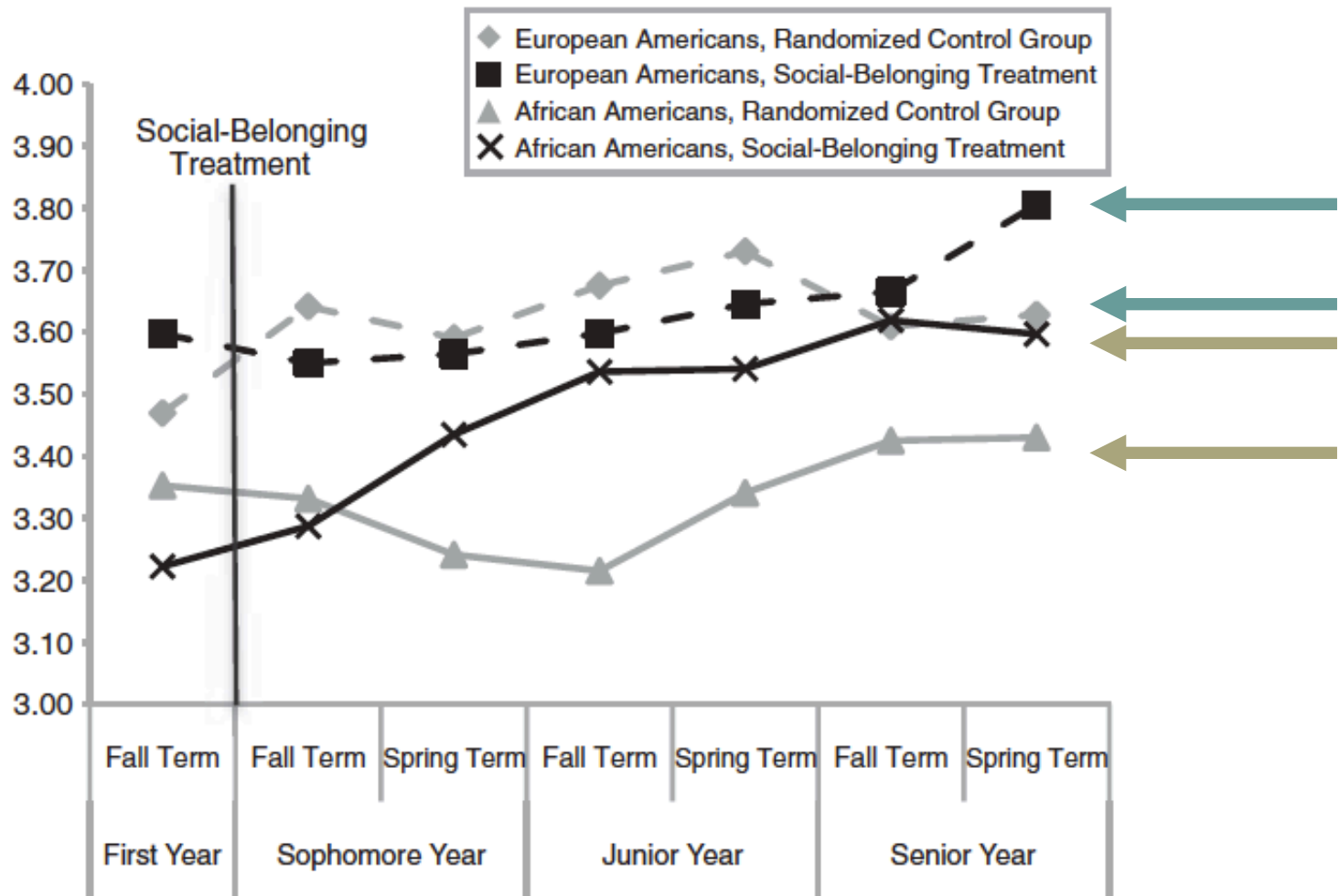
TREATMENT CONDITION

Most students, regardless of race, worry during their first year of college about whether they belong on campus, and that these worries lessen with time.

CONTROL CONDITION

Generic message... that students' social–political views grow more sophisticated with time

(Walton & Cohen, 2007; 2011)



SOCIAL BELONGING INTERVENTION

What's the message being conveyed?

1. if you feel like you don't belong in a new school, you (and other people like you) are not alone; and
2. your experience will improve over time.

... help students understand adversities they experience early in school as **normal and temporary**. The primary message is a message of **growth**...

EMPHASIZE MESSAGES OF GROWTH

(ARONSON, FRIED, & GOOD, 2002)

STRATEGY FOUR

MALLEABLE PEN-PAL CONDITION

“Because **intelligence is malleable**, humans are capable of learning and mastering new things at any time in their lives. This message is especially important to get across to young, struggling students. If these students view intelligence as a fixed quantity, they may feel that they are incapable of learning if they encounter difficulty with their school work. If, however, **students can be convinced that intelligence expands with hard work**, they may be more likely to remain in school and put effort into learning.”

CONTROL PEN-PAL CONDITION

“Intelligence is not a single entity, but rather composed of many different talents.... it is a potentially devastating mistake to view intelligence as a single attribute; it may lead young students to give up entirely on education if they are struggling in one subject, because the students can see themselves as failures at a global level. But if struggling students can be convinced that there are many different types of intelligence, they may be more likely to continue to learn in an attempt to find and develop areas of strength.”

(Aronson, Fried, & Good, 2002)

Measure	Experimental condition			
	Malleable pen pal		Control pen pal	
	Blacks (<i>n</i> = 16)	Whites (<i>n</i> = 12)	Blacks (<i>n</i> = 12)	Whites (<i>n</i> = 11)
Short-term malleability beliefs	5.04 ^a	4.81 ^{ac}	4.40 ^{ab}	4.07 ^{ab}
Long-term malleability beliefs	5.42 ^a	4.70 ^{ab}	4.31 ^{bc}	3.79 ^{cd}
Enjoy academics	4.38 ^b	5.43 ^{ad}	3.47 ^c	4.89 ^{ab}
Academics are important	4.77 ^b	5.61 ^a	3.89 ^c	5.67 ^{ab}
Perceived stereotype threat	5.22 ^a	1.62 ^b	4.70 ^a	1.42 ^b
Spring quarter GPA	3.32 ^a	3.55 ^a	3.05 ^b	3.34 ^{ac}

CREATE NON-STIGMATIZING MESSAGES

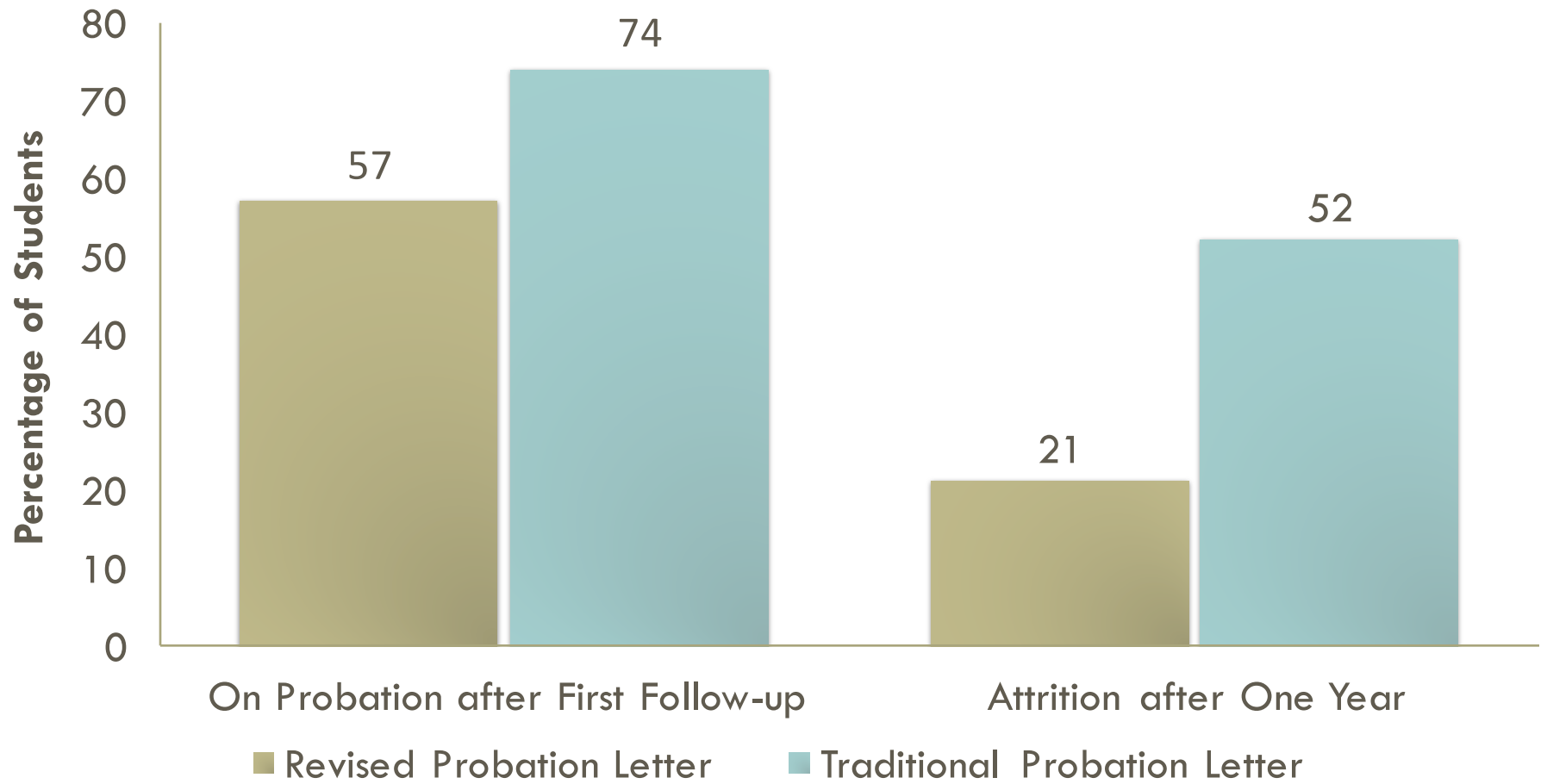
(BRADY, GOMEZ, FOTUHI, COHEN, & WALTON, UNPUBLISHED)

STRATEGY FIVE

REDUCING STIGMA THROUGH LETTERS

1. Probation as a process (e.g., “you are entering the process of probation”) rather than a label (e.g., you are on probation)
2. Acknowledge contextual factors that lead people to get on probation (e.g., stress at home, health issues)
3. Convey that students are not alone in the process (e.g., other students get on and get off probation)

(Brady, Gomez, Fotuhi, Cohen, & Walton, unpublished)



(Brady, Gomez, Fotuhi, Cohen, & Walton, unpublished)

SOME IMPORTANT TIPS

- Don't raise negative content without resolving it
- Balance positive and negative (i.e., the message should be one of growth, not just of struggle)
- Avoid fixed ability references (e.g., "if something doesn't work, just means it wasn't for you")
- Treat students as strong, not weak – as helpers, not recipients of help
- **CONTEXT MATTERS!**

(Walton, 2014, *Social-Belonging Intervention: Getting the Message Right*)

FAMILY ADVISING GUIDE

AN EXAMPLE

OAKES COLLEGE FALL FAMILY ADVISING GUIDE¹

Academic Advising

Contact information and appointment scheduling:

<http://oakes.ucsc.edu/advising/index.html>

Email: oakesadviser@ucsc.edu

Phone: (831) 459-2558



Goals for the First-Year Students:

- Meet quarterly with a college adviser
- Research majors
- Explore interests using GE and elective classes
- Connect with faculty and students
- Understand and use support services and resources
- Find a mentor
- Form study groups with peers
- Develop responsibility and sense of identity
- Attend skills/development workshops
- Challenge expectations – try a new class, sport, service program, activity, internship, more...

Student Goals for fall:

- Think about academic disciplines
- Understand degree requirements
- Learn about Oakes College
- Finalize class schedule
- Meet, greet, orient, and have fun!

The First Ten Weeks

How to support your student

Welcome Week & Week One — Give your students space & reassurance. Encourage attendance at social activities & ask about classes. Encourage advising...

Week Two — Ask about classes: Does your student have a system for tracking assignments and due dates? Is tutoring available, and does your student think it's a good idea to try?

OAKES COLLEGE FALL FAMILY ADVISING GUIDE¹

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Reduce jargon

Student Goals for fall:

- Think about academic disciplines
- Understand degree requirements
- Learn about Oakes College
- Finalize class schedule
- Meet, greet, orient, and have fun!

Too many goals

How?

Balance independence with interdependence

The First Ten Weeks

How to support your student

Welcome Week & Week One — Give your students space & reassurance. Encourage attendance at social activities & ask about classes. Encourage advising...

Week Two — Ask about classes: Does your student have a system for tracking assignments and due dates? Is tutoring available, and does your student think it's a good idea to try?

No context for questions

UCSC | OAKES COLLEGE FAMILY ADVISING GUIDE¹

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Email: oakesadvising@ucsc.edu, Phone: (831) 459-2558

Web Site: <http://oakes.ucsc.edu/advising/index.html>

OAKES COLLEGE'S GOALS FOR FIRST-YEAR STUDENTS:

- Meet quarterly with a college adviser
 - Research options for a major, explore interests through courses, and understand degree requirements
 - Connect with faculty by attending office hours
 - Form study groups with peers for at least one class
 - Use campus resources (e.g., writing center, cultural centers, leadership workshops, counseling services)
 - Try something out of their comfort zone (i.e., try a new class, sport, activity, etc.).
 - Meet new friends and have fun!
-
-

SUPPORTING YOUR STUDENT IN THE FIRST TEN WEEKS

Week	What Students Might Be Experiencing	How to Support Students
1	Students are adjusting to a new environment with new people, and may feel excited and nervous.	Reassure students, and encourage them to attend classes, social activities, and advising.
2	Students are receiving assignments from all classes and learning how to create and manage their own schedules.	Ask students if they have a system for tracking assignments and due dates. Remind students that tutoring is an option, especially early on!

3	The quarter is busy and time management is important. Some students may worry about their work, about making friends, or feel homesick.	Ask students if they are putting 10 hours of work a week per class. Remind your student that their concerns are normal and to seek help. They are not alone!
4-5	Students have midterm exams, which require a good amount of preparation. Students may feel tired, stressed, or overwhelmed.	Ask students if they need help with studying, managing their time, or relaxing. Encourage students to visit tutoring, study sessions, and office hours.
6-7	Students are enrolling (selecting classes) for Winter Quarter and starting to consider options for a major.	Remind students to seek advising well before their enrollment time to get feedback about their courses and potential majors.
8	Students will continue to have assignments and need to study, even during the holidays.	Allow students to complete their work, particularly if they are home (or visiting) and need or want to work.
9-10	The end of the quarter and final exams are approaching. Students have to figure out a plan for finals (e.g., sleep, study time, tutoring, etc.).	Encourage attendance at tutoring sessions. Talk with students to see how they are doing. Give reassurance, support, and encouragement!

College is an exciting time with many changes for the entire family. Use these strategies and create your own for your family. If your student is struggling and you are not sure how to help, contact Oakes College for help!

OTHER RELEVANT RESEARCH

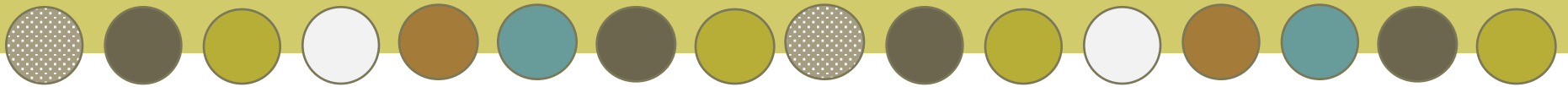
- Values Affirmation Interventions – having students reflect on personally important values (Harackiewicz et al., 2014)
- Difference Education Interventions – tying students cultural differences to their transition experiences (Stephens, Hamedani, & Destin, 2014)

(Walton, 2014, *Social-Belonging Intervention: Getting the Message Right*)

RESOURCES

- Aronson, J., Fried, C., & Good, C. (2002). Reducing the effects of stereotype threat on African American college students by shaping theories of intelligence. *Journal of Experimental Social Psychology*, 38(2), 113-125.
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- Browman, A. S., & Destin, M. (2016). The Effects of a Warm or Chilly Climate Toward Socioeconomic Diversity on Academic Motivation and Self-Concept. *Personality and Social Psychology Bulletin*, 42(2), 172-187.
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MORE DISCUSSION?



THANK YOU!

REBECCAC@UCSC.EDU

TABLE 1
Summary of Selected Social-Psychological Interventions to Improve Student Achievement

Study	Student sample	Theoretical approach	Summary of randomized treatment and control group(s)	Summary of results	Effect on achievement
Attributions and implicit theories of intelligence					
Wilson and Linville (1982, 1985)	First-year college students struggling academically	Leading students to attribute academic setbacks to unstable factors rather than stable factors can motivate students to work harder and not give up after setbacks in school.	In one laboratory session, ostensibly as a part of a survey, students watched videos of upper-year students describing how their grades in college were low at first but improved over time. In a control group, students saw videos of the same upper-year students talking about their social and academic interests.	One week later, students in the treatment condition performed better on a GRE exam. A year later, these students had earned higher college GPAs and were 80% less likely to have dropped out of college. The treatment effect on GPA appeared to gain strength over time.	.27 grade points one year later
Blackwell, Trzesniewski, and Dweck (2007)	Low-income, Black and Hispanic or Latino 7th-grade students at an urban school	Teaching students that people's core intelligence is malleable and grows with effort and challenge can motivate students to work hard and not give up after setbacks in school.	In 8 sessions over 8 weeks, students took part in workshops on study skills and the function of the brain and how the brain can get stronger when a person works on challenging tasks. Students in a control group learned only study skills.	At the end of the academic year, the normative decline in math grades exhibited by students in the control group was reversed such that students in the treatment condition had earned significantly higher math grades.	.30 grade points at the end of the school year

TABLE 1 (continued)

Study	Student sample	Theoretical approach	Summary of randomized treatment and control group(s)	Summary of results	Effect on achievement
Implicit theories of intelligence and stereotype threat					
J. Aronson, Fried, and Good (2002)	Black and White college students	Teaching students that people's core intelligence is malleable will buffer students from the threat of being targeted by negative stereotypes in school.	In a laboratory session, ostensibly as a part of a "pen pal" program to support younger students, students wrote letters to middle school students endorsing the belief that intelligence is malleable. In a control group, students wrote "pen pal" letters advocating a theory of multiple intelligences. A second control group did not write letters.	At the end of the academic year, both Black and White students' GPAs rose significantly in the treatment condition as compared to both control groups. Black students (but not White students) reported increased engagement and identification with school.	.23 grade points at the end of the next term
Good, Aronson, and Inzlicht (2003)	Low- and middle-income Black and Hispanic or Latino 7th-grade students at a rural school	One treatment group received an attributional retraining intervention similar to Wilson and Linville (1982). A second treatment group received an implicit theories of intelligence intervention. A third treatment group received both interventions.	Students met with college student mentors twice and exchanged occasional emails throughout the school year. Mentors were taught to endorse the relevant treatment message. A control group received an antidrug message from mentors.	At the end of the academic year, in all three treatment groups girls' math scores on a state-wide standardized test rose relative to the control group, eliminating the gender difference in math performance present in the control condition. In addition, both boys' and girls' reading scores increased in all three treatment groups relative to the control group.	See note ^a

TABLE 1 (continued)

Study	Student sample	Theoretical approach	Summary of randomized treatment and control group(s)	Summary of results	Effect on achievement
Stereotype threat					
Cohen, Garcia, Apfel, and Master (2006); Cohen, Garcia, Purdie-Vaughns, Apfel, and Brzustoski (2009)	Low- and middle-income Black and White 7th-grade students at a suburban school	Affirming important values can buffer people from the effects of stereotype threat.	In one or several 15- to 20-minute classroom sessions beginning at the beginning of the school year, students wrote about values that were personally important to them as an in-class writing exercise. In a control group, students wrote about values that were not important to them but might matter to someone else.	At the end of the first semester, the value-affirmation intervention increased Black students' class grades, reducing the gap between Black and White students by 40%. Further, among initially low-performing Black students, the treatment raised GPA in all core academic classes two years posttreatment.	.30 grade points among Black students at the end of the first term; .46 grade points among low-performing Black students after two years.
Miyake et al. (2010)	Men and women in a college physics class	Same as above.	Same as above.	At the end of the 15-week course, the value-affirmation intervention eliminated a substantial gender gap in physics grades and on scores on a nationally normed physics test that was present in the control condition. The effect was strongest for women who endorsed gender stereotypes.	.33 grade points among women at the end of the term ^b

TABLE 1 (continued)

Study	Student sample	Theoretical approach	Summary of randomized treatment and control group(s)	Summary of results	Effect on achievement
Walton and Cohen (2007, 2011)	First-year Black and White college students	Leading students to attribute worries about belonging to the difficulty of the transition to college rather than to students' personal or racial identity can buttress ethnic minority students' sense of social belonging in school and increase motivation and performance.	In a 1-hour laboratory session, students read the results of a survey indicating that many students feel they do not belong in college at first but that such worries dissipate with time. Students then wrote an essay and gave a speech ostensibly for the next year's freshmen about how their worries about belonging had changed over time in college. In control groups, students were exposed to information irrelevant to issues of belonging.	Relative to students in multiple control groups, Black students in the social-belonging treatment condition earned higher GPAs from sophomore through senior year, reducing the racial achievement gap by 52%, were more likely to be in the top 25% of their college class, and 3 years posttreatment reported being happier and healthier.	.24 grade points among Black students from sophomore through senior year of college
Possible selves					
Oyserman, Bybee, and Terry (2006)	Low-income Black and Hispanic or Latino 8th-grade students	Leading ethnic minority students to see that their academic future selves are close (and not far), consistent (not inconsistent) with their racial identity, and attainable even when facing challenges will increase students' motivation.	In 10 workshop sessions, students wrote about how their future selves might be academically successful, and completed exercises to make those future selves seem more attainable, to make challenges seem normal and expected, and to make academic success not seem like "acting White." A control group took standard elective classes.	Two years later, students in the treatment group had higher GPAs, fewer absences, fewer nominations for disruptive behavior, and fewer depressive symptoms and were 60% less likely to repeat 8th grade.	.28 grade points two years later

TABLE 1 (continued)

Study	Student sample	Theoretical approach	Summary of randomized treatment and control group(s)	Summary of results	Effect on achievement
Expectancy-value theory					
Hulleman and Harackiewicz (2009)	Middle-income, ethnically diverse 9th-grade students	Making science classes personally relevant will increase interest in science, engagement with the learning process, and improved performance especially among students who do not expect to succeed in science.	Every 3 or 4 weeks starting at the beginning of the semester students wrote a brief essay describing how the material studied in their high school science class that week could be applied in their lives. Control students summarized the week's science class topic.	At the end of the semester treated students who expected to perform poorly in science had earned higher science grades; no effects were found among students with high expectations for success in science.	.80 grade points among students with low expectations for success in science at the end of the semester

a. Good et al.'s (2003) attributional retraining, implicit theories, and combined interventions produced effects on girls' math test scores of the following magnitudes: Cohen's $d = 1.13, 1.30, \text{ and } 1.50$, respectively.

b. Miyake et al. (2010) reported grades on a 100-point scale, so these numbers were converted to grade points for inclusion in this table.