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The New Science of Wise Psychological Interventions

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Gregory M. Walton
Stanford University

Abstract

Citizens complete a survey the day before a major election; a change in the survey items' grammatical structure increases turnout by 11 percentage points. People answer a single question; their romantic relationships improve over several weeks. At-risk students complete a 1-hour reading-and-writing exercise; their grades rise and their health improves for the next 3 years. Each statement may sound outlandish—more science fiction than science. Yet each represents the results of a recent study in psychological science (respectively, Bryan, Walton, Rogers, & Dweck, 2011; Marigold, Holmes, & Ross, 2007, 2010; Walton & Cohen, 2011). These studies have shown, more than one might have thought, that specific psychological processes contribute to major social problems. These processes act as levers in complex systems that give rise to social problems. Precise interventions that alter them—what I call "wise interventions"—can produce significant benefits and do so over time. What are wise interventions? How do they work? And how can they help solve social problems?

Keywords

intervention, health, education, close relationships, prejudice

When you imagine a "psychological intervention," you might think of something dramatic (like a family challenging an alcoholic to stop drinking) or multifaceted and expensive (like an after-school program for at-risk youth). One of the most exciting developments in psychological science in recent years, however, is the emergence of a new class of interventions, which are more ordinary, briefer, and more precise. These interventions are much like everyday experiences. They aim, simply, to alter a specific way in which people think or feel in the normal course of their lives to help them flourish. We do this every day. Whenever a person tries to hold his or her temper in a fight or to encourage a child to work harder in school, they are trying to change how a person thinks or feels to produce a positive end. Intervention studies formalize strategies, rooted in laboratory research and social-psychological theory, and subject them to rigorous, field-experimental tests (see Tables 1–5 for samples of intervention studies on civic behavior, close relationships, education, health, and intergroup relationships).

I call these *wise interventions*; they are *wise to* specific underlying psychological processes that contribute to social problems or prevent people from flourishing. In a wise intervention, the most important question is What is the psychological process at hand? Many other interventions, even if they involve psychology, do not take as their primary target a change in a specific psychological process. The term *wise* comes from gay culture in the 1950s, in which it described straight people who understood the full humanity of gay people despite the overwhelming homophobia of the time (Goffman, 1963). Steele (1997) adopted the term to advocate for "wise schooling"—schooling that is sensitive to the experiences of diverse students and that defuses processes such as stereotype threat. Drawing on this tradition, a wise intervention depends on a precise understanding of people's psychological reality—what it is like to be them and how they construe themselves and their social world. In creating a wise intervention, researchers identify an aspect of people's psychology that harms their outcomes and aim to change this process.

Wise interventions draw on a long tradition of research (e.g., Dimidjian et al., 2006; Lewin, 1952; McCord, 1978).

Corresponding Author:
Gregory M. Walton, Department of Psychology, Stanford University, Jordan Hall, Building 420, 450 Serra Mall, Stanford, CA 94305
E-mail: gwalton@stanford.edu

Table 1. A Sample of Wise Interventions: Civic Behavior

Intervention	Intervention condition	Control condition	Psychological process	Major outcome
Noun/Verb (Bryan, Walton, Rogers, & Dweck, 2011)	The day before elections, eligible voters responded to survey items framed using nouns (e.g., "How important is it to you to be a voter in tomorrow's election?").	Survey items were framed using verbs (e.g., "How important is it to you to vote . . . ?").	Noun wording represents voting as an opportunity to become a valued kind of person—a "voter." —not an errand to be accomplished.	An increase in voter turnout of 11 percentage points as assessed by official records.
Social norms (Braga & Bond, 2008; see also Goldstein, Cialdini, & Griskevicius, 2008)	Randomly assigned crime hot spots were cleaned up (e.g., vacant lots secured, street lighting improved) and social disorder was reduced (e.g., more public drinkers arrested).	Other crime hot spots had routine policing (areas unidentified to police captains).	Signs of disorder communicate that rule breaking is acceptable, which increases criminality.	Treated hot spots had 20% fewer citizen 911 calls during the next 6 months (e.g., 34% fewer assaults and 11% fewer larcenies/thefts) and fewer observations of disorder, with no increase in crime in adjacent areas.

But they are novel in that they are psychologically precise, often brief, and often aim to alter self-reinforcing processes that unfold over time and, thus, to improve people's outcomes in diverse circumstances and long into the future. Wise interventions are special remedies for social problems and afford important implications for theory. How do wise interventions work? The research presented here reviews their foundations and the lessons and opportunities they provide for research and application.

Wise Interventions Are Psychologically Precise

A wise intervention begins with a specific, well-founded psychological theory. This theoretical precision allows researchers to create a precise tool, often instantiated in a brief exercise, to change a specific psychological process in a real-world setting. This psychological precision reflects the same values psychologists cultivate in laboratory research—keen insight into basic processes and methodological precision to isolate these processes. Wise interventions export this precision in theory and methodology to field settings. Consistent with the Lewinian mantra, "There is nothing so practical as a good theory," a precise psychological theory allows researchers to construct strikingly "small" interventions that simultaneously test this theory and seek to bring about positive change. The interventions reviewed in Tables 1 through 5 are diverse. But each articulates and targets a specific psychological process.

Consider Bryan, Walton, Rogers, and Dweck's (2011) intervention to increase voter turnout. Relying on research that showed that people treat noun wording (e.g., *I am a chocolate eater* vs. *I eat chocolate a lot*) as conveying abstract meaning about a person, Bryan et al. hypothesized that nouns represent a potential future behavior as an opportunity to become a certain kind of person. Would a grammatical structure that portrays voting as an opportunity to become "a voter" motivate higher turnout? To test this hypothesis, Bryan et al. (p. 12655) manipulated 10 survey items completed by potential voters the day before two major elections. In one condition, items used nouns to refer to voting (e.g., "How important is it to you to be a voter in tomorrow's election?"). In the other condition, items used verbs to refer to voting (e.g., "How important is it to you to vote in tomorrow's election?"). Results showed that the intervention led to one of the largest increases in turnout ever observed in a randomized experiment—an increase of 11 percentage points for participants in the noun condition compared with participants in the verb condition, as assessed by state records.

Can precise interventions improve outcomes in arguably more complex contexts, such as relationships? Marigold, Holmes, and Ross (2007, 2010) theorized that people with low self-esteem, who tend to question their worth, often dismiss compliments from romantic partners as not having important meaning. To induce people with low self-esteem to truly accept a compliment, Marigold et al. (2007) asked participants to think of a compliment from their romantic partner and to "explain why your partner admired you. Describe what it meant to you and its significance for your relationship" (p. 235). This stimulus prompt, compared with a stimulus prompt that asked participants to describe the circumstances of the compliment, led participants with low self-esteem to feel more

Table 2. A Sample of Wise Interventions: Close Relationships

Intervention	Intervention condition	Control condition	Psychological process	Major outcome
Abstract reframing of a compliment (Marigold, Holmes, & Ross, 2007, 2010)	People with low self-esteem wrote about a compliment their romantic partner had recently given them and "why your partner admired you . . . [and] what it meant to you and its significance for your relationship."	People described the context in which their partner had complimented them or "whether your partner admired you. . . ."	People with low self-esteem tend to question their worth and, thus, dismiss compliments; the intervention leads people to see a compliment as having an important meaning.	People with low self-esteem valued their relationships more and felt more secure in them immediately and several weeks later. They also behaved more positively toward their partners (partner reported) and saw their partners as behaving more positively toward them.
Cognitive retraining of problems in parenting (Bugental et al., 2002)	In up to 20 visits during the child's 1st year, interviewers asked at-risk mothers about problems with their child and possible causes of problems until the mother gave a non-self-blaming and non-child-blaming reason. They then asked mothers for possible solutions.	No visits or similar visits but without the cognitive-retraining component.	Questions prompt mothers to explain and resolve problems without blaming the self or child, and, thus, to feel more empowered as parents.	The treatment reduced the percentage of infants abused during the 1st year from approximately 25% to 4%; effects were largest among high-risk (e.g., premature) infants. The treatment also improved child health and reduced mother depression.
Third-person perspective on marital conflicts (Finkel, Slotter, Luchies, Walton, & Gross, 2013)	Every 4 months for 1 year, couples wrote about how "a neutral third party who wants the best for all" would view a conflict in their marriage and how they could take this perspective.	Couples reported on conflicts but did not complete the third-person writing exercise.	A third-person perspective may prevent reciprocal patterns of negative affect between couples, making conflicts less distressing.	Control-condition couples continued to decline in marital quality (e.g., satisfaction, love, intimacy, trust, passion). Treatment-condition couples maintained their marital quality during the year.

secure in their relationship immediately and several weeks thereafter. This feeling of security is essential in close relationships; it mitigates the fears of rejection that can cause people to withdraw from relationships and behave negatively toward their partner (Murray, Holmes, & Collins, 2006). Consistent with this theorizing, during this several-week period, reports from participants indicated that they valued their relationship more, behaved more positively toward their partners (as reported by partners), and saw their partners as behaving more positively toward them. The intervention changed the interplay of feelings and behavior between couples to improve their relationships.

The significance of a precise psychological understanding means that an inaccurate psychological understanding can lead would-be interveners astray. An important insight in the Marigold et al. (2007) intervention is that people with low self-esteem tend to default to negative views of the self. As a consequence, in this intervention, the researchers invited participants to articulate why a compliment has an important meaning; they did not ask participants whether the compliment has this meaning. When Marigold et al. tested this prompt instead—"Explain whether you think what your partner said indicated that he/she admired you. Consider whether it was meaningful to you and significant for your relationship," (p. 242)—people with low self-esteem essentially wrote that the compliment did not have a larger meaning and the experience produced no benefits. Or consider a growth mind-set of intelligence intervention. This intervention conveys that intelligence is not fixed but can expand with effort and help from others; it can help struggling students perform better in school for months after the intervention (Blackwell, Trzesniewski, & Dweck, 2007). But if misunderstood, a growth-mind-set message could be confused with the lay belief that students should be praised for their

Table 3. A Sample of Wise Interventions: Education

Intervention	Intervention condition	Control condition	Psychological process	Major outcome
Expectancy value (Hulleman & Harackiewicz, 2009; see also Harackiewicz, Rozek, Hulleman, & Hyde, 2012)	Ninth graders wrote brief essays every 3 to 4 weeks that described the relevance of their science coursework to their lives.	Students summarized the week's science topic.	Making science personally relevant increases students' engagement with course material, especially among students who expect to perform poorly and who otherwise may not have a reason to work hard.	The intervention raised science grades among students who expected to perform poorly.
Growth mind-set of intelligence (Blackwell, Trzesniewski, & Dweck, 2007; see also J. Aronson, Fried, & Good, 2002; Good, Aronson, & Inzlicht, 2003; Yeager, Trzesniewski, & Dweck, 2013)	Eighth-grade students learned in eight classroom workshops that intelligence is malleable and can grow like a muscle with hard work and help from others.	Students learned about the relationship between brain regions and brain functions.	Students with a growth mind-set interpret academic challenges as opportunities to learn, not as evidence of fixed inability, and respond by trying harder, not by giving up.	The control group continued to show a decline in math grades, whereas the treatment group showed a rebound.
Social belonging (Walton & Cohen, 2011; see also Walton, Logel, Peach, Spencer, & Zanna, 2013; Wilson, Damiani, & Shelton, 2002; Yeager et al., in press)	First-year college students learned that all students worry at first about their belonging in college but that, over time, everyone comes to feel at home.	Students learned about unrelated aspects of the transition to college.	The treatment leads students to attribute daily struggles to the normal difficulties of the transition to college, not to evidence they do not belong in school in general.	African American students earned higher grades during the next 3 years, halving the racial-achievement gap, and reported better health 3 years later.
Value affirmation (Cohen, Garcia, Purdie-Vaughns, Apfel, & Brzustoski, 2009; see also Miyake et al., 2010; Sherman et al., 2013)	Seventh graders completed several in-class exercises in which they wrote about why their most important values (e.g., relationships with friends and family) were important to them.	Students wrote about why values unimportant to them might matter to someone else.	Writing about important values bolsters students' sense of self-integrity in the face of threat and prevents threat and poor performance from recurring in a negative recursive cycle.	Initially low-performing African American students earned higher core academic grades during the next 2 years.

existing intelligence ("You're so smart!"). It is ironic that this can induce a fixed mind-set about intelligence, which undermines motivation when students struggle (Mueller & Dweck, 1998). Wise interventions depend on wise theories of psychological processes. With a precise, well-founded theory, even brief exercises can produce significant benefits.

Wise Interventions Target Recursive Processes to Cause Lasting Change

Wise interventions can improve outcomes for years. Finkel, Slotter, Luchies, Walton, and Gross (2013) showed that three 7-minute perspective-taking exercises improved couples' marriages over the course of a year. Several studies have shown that brief exercises, lasting an hour or less, can raise ethnic-minority students' school achievement for as long as 3 years later (Cohen, Garcia, Purdie-Vaughns, Apfel, & Brzustoski, 2009; Sherman et al., 2013; Walton & Cohen, 2011).

These interventions can seem magical (Yeager & Walton, 2011). To understand them, it is essential that one consider how interventions change not a moment in time ("a snapshot") but a process that unfolds over time ("a movie"; Kenthirarajah & Walton, 2013). In a relationship, every interaction builds on the previous interaction. By targeting psychological processes that contribute to recursive dynamics that compound with time, wise interventions can improve downstream consequences (Garcia & Cohen, 2013). Consider two examples.

Table 4. A Sample of Wise Interventions: Health

Intervention	Intervention condition	Control condition	Psychological process	Major outcome
Sense of control (Langer & Rodin, 1976; Rodin & Langer, 1977; see also Schulz, 1976; Schulz & Hanusa, 1978)	Nursing home residents were reminded of their many responsibilities and choices, chose a plant to take care of, were encouraged to choose when to go to movies, and so forth.	Residents were reminded of the staff's responsibility for them, received a plant and were told a nurse would take care of it, were assigned a night to go to movies, and so forth.	In institutionalized settings, people lose a sense of control over their daily lives; reintroducing a sense of control promotes health and well-being.	Three weeks later, residents reported being happier and more active, were judged more alert by interviewers and more improved by nurses, and spent more time visiting patients and talking with staff; 18 months later they were rated more active by nurses and healthier by doctors and suffered a lower mortality rate (15% vs. 30%).
Social connection (Carter, Clover, Whyte, Dawson, & D'Este, 2013; see also Motto & Bostrom, 2001)	People admitted to hospitals for self-poisoning received eight postcards during the following year expressing the hospital's concern and care.	Treatment as usual (i.e., no postcards).	Postcards communicate the hospital's ongoing concern and care for the patient.	During the 5 years after discharge, patients had nearly 50% fewer readmissions for self-poisoning.
Value affirmation (Logel & Cohen, 2012; see also Sherman, Bunyah, Creswell, & Jaremka, 2009)	Undergraduate women, half of whom were overweight, wrote about why their most important values were important to them.	Women wrote about why values unimportant to them might matter to someone else.	Writing about important values bolsters people's sense of self-integrity, reduces stress (a major cause of weight gain), and helps people sustain self-control in the face of temptations.	Two-and-a-half months later, treatment-condition women weighed approximately 6 pounds less, had smaller waist circumferences, and ate fewer cookies after having previously exerted self-control.
Writing about trauma (Pennebaker, Kiecolt-Glaser, & Glaser, 1988)	Undergraduates wrote about "the most traumatic and upsetting experiences of your entire life" for 20 minutes per day for 4 days.	Students wrote about neutral topics (e.g., daily plans).	Writing encourages people to confront traumatic experiences, which reduces inhibition and helps people find meaning in the trauma.	The treatment improved immune system function and reduced doctor visits during the next 6 weeks.

Finkel et al. (2013) surveyed couples every 4 months for 2 years about their marriages. During the 2nd year, couples randomized to the perspective-taking intervention were asked, in addition, how "a neutral third party who wants the best for all" would view a conflict in their marriage and how they could adopt this perspective in future conflicts (Finkel et al., 2013, p. 1597). This exercise was designed to forestall the reverberation of negative affect that can occur between couples in conflicts, in which each person gets angry in turn. During the intervention year, the marital quality of couples in the control condition continued to decline—these couples' levels of love, satisfaction, intimacy, trust, and passion fell. But these indices stabilized among couples in the perspective-taking condition.

What would this experience be like for a couple? Suppose you and your spouse complete the perspective-taking exercise. This may help you step back in a

Table 5. A Sample of Wise Interventions: Intergroup Relationships

Intervention	Intervention condition	Control condition	Psychological process	Major outcome
Enacting cultural interests (Brannon & Walton, 2013)	Asian and White students were led to feel socially connected to a Mexican American peer with whom they freely took part in a Mexican cultural activity.	Students were either not led to feel socially connected to the Mexican American peer, thought the activity was unrelated to Mexican culture, or thought they had to do the Mexican cultural activity.	A social connection can spark interest in another person's culture. Freely enacting this cultural interest feels inconsistent with prejudice, thereby motivating prejudice reduction.	Participants showed reduced implicit prejudice against Latinos immediately. Six months later, they reported greater interest in interacting with Mexican Americans, including about racially sensitive topics (e.g., undocumented Mexican immigrants).
Fast friends (Page-Gould, Mendoza-Denton, & Tropp, 2008)	During three sessions, Latino/White dyads exchanged increasingly self-disclosing questions (e.g., "Who is the most important person in your life?") and completed cooperative activities.	Same-race dyads completed the same exercises.	A close cross-group friendship can disconfirm negative expectations about intergroup interactions.	Participants, especially those high in prejudice or sensitivity to race-based rejection, showed reduced stress (cortisol) during the three sessions and initiated more daily intergroup interactions.
Jigsaw classroom (E. Aronson & Osherow, 1980)	Individual grade-school children were each given a portion of a topic to study, taught this part to peers in a jigsaw group, and were later tested on the whole topic.	Students studied alone and participated in class on their own.	Jigsaw groups reduce competition and facilitate cooperative, equal-status intergroup contact.	Students liked each other more within and across group lines and had higher self-esteem, and ethnic-minority students learned more over several weeks.
Social network (Paluck, 2011; see also Bond et al., 2012)	High school students took a weekly antiprejudice class that encouraged students to intervene with peers when needed.	Wait list control.	Antiprejudice attitudes can spread through social networks to affect friends and peers.	Five months later, participants were more likely to be nominated as standing up for others; their friends and acquaintances were more likely to sign a gay rights petition.
Value confrontation (Rokeach, 1971)	Students ranked 18 values, typically ranking "freedom" higher than "equality." They were told this meant they "care a great deal about their own freedom but are indifferent to other people's freedom."	Students only completed the attitude and value scales.	Making people aware of inconsistency in their values creates self-dissatisfaction, which drives personal change.	Students were more likely to respond to a solicitation from the National Association for the Advancement of Colored People and to enroll in an ethnic studies program 3 to 5 months later and expressed greater support for "equal rights for Negroes" through 15 to 17 months later.

subsequent conflict—you see the conflict from a broader perspective, so you get less angry. Now each of you is dealing with a better-disposed spouse. If the interaction goes better and you problem solve more effectively, you may be better prepared for the next conflict. You still have a conflict, but it is less distressing. When an intervention changes a recursive process, it effectively puts people in a new situation. Indeed, the intervention did not reduce conflicts. But it did reduce the distress couples reported in conflicts, and this result mediated the stabilization in marital quality.

Wise interventions can also change recursive dynamics that begin with the psychology of individuals. Walton and Cohen's (2011) social-belonging intervention aimed to forestall minority students' worries that experiences such as being left out or criticized mean, in general, that they do not belong in school. The intervention gives students an alternative narrative for understanding negative experiences—namely that worries about belonging are normal in the transition to a new school but dissipate with time. Learning and reflecting on this information in a 1-hour exercise improved African American college students' grades over a 3-year period, halving the racial-achievement gap, and led them to report being happier and healthier at the end of college.

How could this work? Imagine you are a freshman worried about whether you belong in college. Learning that such worries are common and improve with time may take the edge off negative experiences. Indeed, in the Walton and Cohen (2011) study, daily-diary measures showed that minority students in the intervention condition no longer saw daily slights as if they portended a global lack of belonging; this change in social construal mediated the 3-year improvement in grades. If everyday encounters feel less threatening, perhaps students can interact with others in more positive ways and build better relationships. Indeed, one social-belonging intervention helped women in male-dominated engineering majors form more friendships with male engineers (Walton, Logel, Peach, Spencer, & Zanna, 2013). These women are now in a different situation—they are embedded in a social network in engineering. As these psychological and social processes build over time, they position students to thrive.

Wise interventions can change how people interact with one another in ways that improve their circumstances and propel effects forward in time. In these interventions, real-world factors, such as friendships in school, do not function only as "noise" that causes effects to decay. They also serve as proximal outcomes that facilitate longer-term effects. An important implication is that wise interventions are most likely to cause long-term gains in inherently recursive contexts—such as relationships and school, contexts in which positive experiences facilitate later positive outcomes. Another implication is that wise interventions can amplify their effects over time if a recursive process "snowballs." Indeed, the perspective-taking and social-belonging interventions both generated the largest benefits at the most distal time point assessed.

These interventions used reading-and-writing exercises to change people's psychology directly. They encouraged people to respond to ongoing experiences in more adaptive ways to remake their worlds. Many other interventions, however, introduce a new experience to people's lives (e.g., a tutoring program). Such experiences change people's psychology only indirectly; they can thus be less effective (even when they provide substantive resources; McCord, 1978). Moreover, relying on a new experience to change psychology can make an intervention vulnerable if that experience changes. Schulz (1976) tested whether being able to control or predict visits from a friendly college student would bolster a sense of control among elderly nursing home residents and, thus, improve their health and well-being. During a 2-month period, residents received visits they could control or predict, yoked random visits, or no visits. At the end of this period, residents in the conditions in which they could control or predict visits used fewer medications, were rated as healthier and as having more "zest for life," and reported being happier. However, tragically, during the course of the next 42 months, these residents showed a precipitous decline in their health and well-being and even had marginally higher mortality rates than did "random-visit" and "no-visit" residents (Schulz & Hanusa, 1978). The ability to control or predict visits from college students presumably bolstered a sense of control while the visits lasted. However, this change in psychology was identified entirely with the visits. When the visits ended, this may have confirmed the very lack of control residents had in their lives, thereby undermining their outcomes. A more robust strategy is to encourage people to construe their lives broadly as full of control, not just with a specific experience. One such intervention improved nursing home residents' health and well-being during an 18-month period, which reduced mortality rates by 50% (Rodin & Langer, 1977).

Wise Interventions Are Context Dependent—Not Silver Bullets

Because wise interventions target specific psychological processes and recursive dynamics, they will not always produce the same effects. They must be wise to the population and context in at least three ways. First, a wise intervention will be effective only if the process it targets matters in the setting at hand. If people with high self-esteem readily accept compliments (as they do), interventions that address self-esteem will not improve their relationships.

Second, wise interventions will be effective only if they change the targeted psychological process. To be maximally effective in different contexts, interventions may need to be adapted, for instance, to illustrate the message in the local setting. In addition, rather than a passive exposure, many interventions use active exercises to drive home key ideas. For example, recipients may describe themselves or aspects of their lives in a specific way (Bryan et al., 2011; Cohen et al., 2009; Finkel et al., 2013; Marigold et al., 2007, 2010). Or they may complete "saying-is-believing" exercises in which they use their own experience to advocate for the idea conveyed in the intervention to other people (Walton & Cohen, 2011). This technique is powerful and persuasive: It encourages recipients to author the intervention message and to view their experience through its lens without feeling controlling or stigmatizing.

Third, wise interventions will affect long-term outcomes only if they alter critical recursive processes. For instance, brief value-affirmation interventions delivered early in the school year can prevent downward cycles of psychological threat and poor performance among ethnic-minority adolescents for years; if delivered after such cycles are established, the same intervention is less effective (Cook, Purdie-Vaughns, Garcia, & Cohen, 2012). Relatedly, interventions will affect long-term outcomes only if the context provides appropriate affordances. If a social-belonging intervention generates lasting gains by helping students to form better relationships, its effectiveness will depend on the possibility of forming these ties. In addition, psychological interventions can be necessary but insufficient. Removing psychological barriers to learning will benefit only those students with access to adequate learning opportunities.

Conclusion

Wise interventions provide psychologists an enormous opportunity. They allow us to test how specific psychological processes contribute to specific social problems, how to change these processes in field settings, and how a change in psychology unfolds over time in interaction with the context. Addressing these questions will help us create distinctly psychological theories of and solutions to social problems. The far-reaching effects of wise interventions suggest that psychological processes often act as key levers in complex systems that give rise to social problems. The development of precise theories of how psychological processes contribute to these systems provides psychologists opportunities to collaborate with practitioners in local settings, with other social scientists, and with policymakers. It will also push us to "scale up" psychological interventions to large samples (e.g., using the Internet, see http://www.perts.net) and, in doing so, to contribute to large-scale social change.

Social problems are complex and multicaused. But nearly every problem involves psychology. As psychologists, it is our job to identify those elements of a social problem—whether global warming, conflict, crime, poverty, racism, or low achievement—that are psychological and develop ways to address them.

Recommended Reading

Dweck, C. S. (2006). *Mindset: The new psychology of success*. New York, NY: Random House. A comprehensive overview of people's implicit theories about the malleability of human qualities, such as intelligence, with applications to interventions in diverse areas.

Paluck, E. L., & Cialdini, R. B. (in press). Field research methods. In H. Reis & C. Judd (Eds.), *Handbook of research methods in social and personality psychology* (2nd ed.). New York, NY: Cambridge University Press. A compelling discussion of the advantages and disadvantages of field research, including intervention field experiments, for the development of psychological theory.

Rokeach, M. (1971). (See References). A little-known historical classic; one of the first papers to develop a brief psychological intervention and to test its effects over an extended period of time.

Wilson, T. D. (2011). *Redirect: The surprising new science of psychological change*. New York, NY: Little Brown. A comprehensive review of psychological interventions in diverse areas, from behavior problems to racial prejudice to school achievement, with a focus on interventions that change people's implicit stories about who they are and where they are going.

Yeager, D. S. & Walton, G. M. (2011). (See References). An accessible review of brief social-psychological interventions in education, especially growth-mind-set, attributional-retraining, value-affirmation, and social-belonging interventions, including the psychological process each targets, how they cause change over time, and how they may be scaled to more students.

Author Contributions

G. M. Walton is the sole author of this article and is responsible for its content.

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