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For more than thirty years, the Gallup Organization has investigated the nature of human talents and strengths. By interviewing the approximately 2 million people in a wide range of roles and industries, Gallup has discovered that our talents--defined as our naturally recurring patterns of thought, feeling, or behavior, that can be productively applied--are our greatest opportunities for success. Further, by refining our dominant talents with skill and knowledge, we can create strength--the ability to provide consistent, near-perfect performance in a given activity.

During the 1950s, the Nebraska School Study Council, supported a statewide research project to identify the relative value of different methods for teaching rapid reading (the methods were: tachistoscope, film, and determined effort). About 6,000 tenth-graders participated. The results showed no statistically significant differences between the methods; the differences were between teachers (Glock, 1955). While analyzing the data, researchers were puzzled by the observation that the students who read the fastest at the study's outset made the greatest gains during the study -- from approximately 300 to 2,900 words per minute. The students who read slower at the outset also made gains, but small in comparison.

These data stirred the hypothesizing. Could it be that the greatest gains in human development are based on investment in what people do best naturally -- in their areas of talent? Although there may have been many observations of the greater return from investing in talents and developing strengths, this particular event encouraged thoughts about a "strengths" approach to teaching and management, and has led to this hypothesis: individuals gain more when they build on their talents, than when they make comparable efforts to improve their areas of weakness.

Although it may be necessary for a company to correct behavior that is producing counterproductive outcomes (such as a rude customer service representative causing sales to decline), developing the strengths (such as helping the top salesperson double his or her sales) should also be considered. The strengths-based organization does not ignore weaknesses, but rather achieves optimization, where talents are focused and built upon and weaknesses are understood and managed. It is the practice of taking behavior or a process from the +10 to +40 rather than working from -10 to -4 with about the same amount of effort. Weaknesses may diminish with training, but the efficiency is less than when one focuses on talents.

Organizations are more than the sum of the individuals that compose them, but the most basic, and perhaps the most important, form of strengths investment lies with the individual. When more individuals within organizations have their talents identified, understood, and

integrated into their lives, the organization has greater potential (as will be illustrated later in this chapter). There may very well be a critical mass that serves as a boiling point for organizational success. Analytically, we can study both individuals and organizations from a strengths perspective.

An opportunity to test the "strengths" approach to management, organizationally, occurred in the United Kingdom. A major brewery in the 1980s managed some 7,200 public houses. Historically, when a "pub" was declining in sales (decreasing turnover), the management would install new carpets, repaint, and generally renovate the premises. As a result, there was usually an increase in productivity on average of about 15 percent. Management believed that the increase validated the investment in the low-producing pubs, even though the pub might again be performing at the lower pre-renovation sales level within a year.

The researchers' question to management was: "Why not refurbish the high-productivity pubs when they get a bit worn?" To the British, this was an "American" idea that would not work in the United Kingdom. However, one area manager thought the question had merit and agreed to refurbish eight high-volume and eight low-volume pubs. The outcomes were that the eight high-volume pubs had the greatest percentage increases and profitability, even when the percentages were computed on a much larger base. The eight high-volume pubs, on average, were seven times more profitable with the same amount of cost and effort than the average refurbished low-volume pub. Investing in the strongest pubs resulted in the greater improvement. Practical wisdom seemed to support the investment in strengths, even though the more likely (conventional) approach was to try to fix the deficits.

We then had to ask why the profitable pubs became more profitable. After considering differences in location, local competition, and other factors, it became clear that the talents of the individuals working within the pubs drove their profitability.

THE STRENGTHS APPROACH AND POSITIVE PSYCHOLOGY

Our world seems naturally predisposed to tell us in which areas we are weak. It is easy for us to notice how people are different from us and then to focus on what they lack. For instance, someone who is highly organized can easily notice that another person is disorganized and completely overlook his or her talent for relating to others. Or someone who is highly analytical may easily identify the lack of analytical talent in a coworker and ignore his or her strong focus or vision. We are keen at finding fault. A short-term solution may involve shoring up the deficits we find in others. However, another alternative may be to understand the differences and position people so they use more of who they are (their talents). Measurement of talent provides an organizing framework around positive psychological potential. When people become aware of their talents, through measurement and feedback, they have a strong position from which to view their potential. They can then begin to integrate their awareness of their talents with knowledge and skills to develop strengths.

Seligman and Csikszentmihalyi (2000) have proposed that the major psychological theories need to change to become more focused on virtues, as opposed to focusing exclusively on deficits. According to these authors, psychology since World War II has become a science largely about healing. It concentrates on repairing damage within a disease model of human functioning. This almost exclusive attention to pathology neglects the fulfilled individual and the thriving community. Several major psychological theories have in fact changed to undergird a new science of strength and resilience. No longer do the dominant theories view the individual as a passive vessel responding to stimuli; rather, "individuals are now seen as decision makers, with choices, preferences, and the possibility of becoming masterful, efficacious" (pp. 5-8).

Seligman (1998, 1999) highlighted three domains that are in need of further exploration and that form an organizing framework for positive psychology: positive, personal and interpersonal traits, positive subjective experience, and positive institutions and communities. The "strengths" approach relates to all three domains, but more specifically can be seen as identification of positive personal and interpersonal traits (talents) in order to position and develop individuals to increase the frequency of positive subjective experience. A critical mass of individuals having positive subjective experience explains one important domain in positive institutions and communities.

At the individual level, the "strengths" approach, at its optimum, involves identification of talent, integration into one's view of self, and changed behavior. Consider the following representative quotes from self-reflection interviews following a strengths approach to development:

Identification: "When my [talent] is kicking in, I take notice of it and recognize it. Before learning about [my talent], I didn't even realize that it was [a talent]." "Knowing [my talent] gives me more confidence and hope for myself." "Where 'over-analytical' was a bad thing, now it is great."

Integration: "Learning about [my talent] has definitely helped me to understand the reasoning behind some of my actions." "[Learning about my talent] has started a habit of self-reflection." "I think about [my talent] all of the time. In certain situations I think about how I can apply it to be more effective."

Changed Behavior: "I am using [my talents] in order to learn better. For example, one of my [talents] is 'relator'; and I have formed study groups in my classes." "My [talent] of 'command' helps me to take control and initiate things in my life." "Actively using [my talent] causes further engagement that act like a cycle, causing me to invest more of [my talent]."

People and organizations can develop strengths by refining their talents with knowledge and skills. A strength is the ability to provide consistent, near-perfect performance in a given

activity. An individual strength might be the person's ability to manage several activities at the same time flawlessly, or an organizational strength might be its capacity for constant innovation.

In terms of the individual, talents are the basis for approaching the person's full potential. Once dominant talents are identified, a person can thoughtfully appeal to them and determine how often they will be expressed. Once dominant talents are refined with knowledge and skills, they can become strengths. The more a strength is exercised, the more integrated and stronger it becomes. Identified talents can be used the way a composer chooses the available notes of music to create a beautiful song. Teachers, mentors, and parents may accelerate the development of individuals by basing their expectations for a person on his or her talents. We relate this to the enduring nature of positive emotions (see Chapter 11), which served to broaden and build the individual's thoughts and actions and produce enduring resources for the future.

Clausen (1998) and Aldwin, Sutton, and Lachman (1996) have studied self-perceived psychological growth and change (psychological turning points) and found that positive events can trigger many enduring turning points in individual lives. Identifying and understanding talents, for many individuals, can become positive turning points, triggering changes on how people view themselves in the context of the world around them.

RESEARCH ON STRENGTHS DEVELOPMENT

Over the course of the last thirty years, Gallup researchers have conducted hundreds of studies related to some aspect of strengths development. The Gallup researchers have collected data from many sources: hospitality, food service, financial organizations, schools, higher education, and health units. The data signal the advantages of building on the strengths of individuals and organizations. Underlying much of this research was a focus on the study of excellence, or high performance. Gallup workplace research includes studies of successful managers, teachers, and employees in a wide range of industries. Gallup's database on workplace opinions includes 2.24 million employees and 198,476 work units in 221 organizations from 1999 to 2001. Given this large database, researchers have conducted studies to assess the characteristics of successful managers and work teams.

How Great Managers Manage

One angle from which to view the strength approach to management is to ask successful managers how they manage employees. Manager "success" is often difficult to consistently assess across organizations that value and measure outcomes differentially. As such, definitions of performance vary, but typically include indices such as productivity (revenue in business), profitability, employee retention, customer loyalty, and safety. Substantial predictive validities have been established between structured interview measures of manager "talents" and future manager performance (Schmidt & Rader, 1999). In a recent study of more than 2,000 managers in the Gallup database, Gallup researchers studied the responses of managers to open-ended questions related to management of individual talents versus weaknesses. In comparison

to poor-performing managers, top-performing managers (based on composite performance) were more likely to indicate that they spend time with high producers, match talents to tasks, and emphasize individual strengths versus seniority in making personnel decisions. Probability of success (above median performance) was 86 percent (1.9 times) greater for managers with a "strengths versus non-strengths" approach (Gallup Organization, 2002). Managers with a strengths-based approach nearly double their likelihood of success.

Employee Engagement

In our workplace research on employee engagement (Harter, Schmidt, & Hayes, 2002), we have repeatedly asked employees whether they "have the opportunity to do what they do best every day." While one in five employees strongly agree with this statement, those work units scoring higher on this one perception have substantially higher performance. In a study of 10,885 work units (308,798 employees) in 51 companies, work units scoring above the median on this statement "At work, I have the opportunity to do what I do best every day" have 44 percent (1.4 times) higher probability of success on customer loyalty and employee retention, and 38 percent (1.4 times) higher probability of success on productivity measures (Harter & Schmidt, 2002). "Success" is defined as exceeding the median performance within one's own company, across work units. The differences in probability of success can amount of millions of dollars to large organizations (Harter, Schmidt, & Hayes, 2002). Managers who create environments in which employees have a chance to use their talents have more productive work units with less employee turnover.

Pre-Post Studies with Control Groups

Recently, Gallup researchers began experimental and quasi-experimental studies of talent identification, feedback, and strengths development activities within select organizations. For instance, in a large automobile manufacturer, two teams were assigned to a "study group" and a "control group" (one team considered high performing and another team considered low performing) in which individuals were administered the "StrengthsFinder" assessment (Buckingham & Clifton, 2001) and given feedback, both individually and in group sessions, with follow-up developmental activities related to each individual's dominant talents (Connelly, 2002). Postintervention measurements of employee engagement (via Gallup's "Q12" instrument; Harter, Schmidt, & Hayes, 2002) in productivity were conducted six months later. Results indicated that the study group ($n = 48$) grew in engagement by significantly more ($d = 0.72$) standard score units than the control group ($n = 297$). Additionally, the study group grew in productivity by 50 percent more than the control group did.

A second study was completed in a healthcare organization (Black, 2001), in which 9 hospitals were assigned various strengths-based interventions over a three-year period, and then compared to a control group of the remaining 151 hospitals. Hospitals using the talent identification and strengths developmental interventions grew significantly (from the first year to the third year) in employee engagement in comparison to a control group ($d = 0.86$).

Accumulating multiple-year employee engagement studies across sixty-five companies, Table 8.1 compares the standard score units in growth in employee engagement for four companies (manufacturing, retail, healthcare, and technology industries) using talent identification and strengths development interventions for two consecutive years, and comparison to the remaining sixty-one companies in the database over the same time span. The comparison sample used other types of employee engagement interventions (such as survey feedback and action planning groups), but not direct strengths-based interventions. From the first to the second year, change in the study group exceeded that in the control group ($d = 0.65$) on employee engagement, and was substantially greater over the first to the third year ($d = 1.15$).

The differences observed at the company level are substantial and measured over substantial time periods. Translating these results into practical terms through standard utility analysis techniques (Schmidt, Hunter, McKenzie, & Muldrow, 1979; Schmidt and Rauschenberger, 1986), the differences in employee engagement amount to differences in dollar value of productivity of more than \$1,000 per person. For companies of 1,000 employees, this relates to more than \$1 million. The size of companies given the interventions in this study averages approximately 5,400 employees. As such, the utility for these companies translates into more than \$5.4 million.

Table 8.1
Growth in Employee Engagement (Standard Score Units—Company Level)

	Change Year 1-2 $d = 0.65$	Change Year 1-3 $d = 1.15$
Study Group*	1.15	2.10
Control Group**	0.50	0.95

*Companies using strengths identification and development interventions. Strengths were identified by administering StrengthsFinder (Buckingham & Clifton, 2001). Strengths development was conducted through individual and group sessions integrating strengths into one's daily work life. Year 1-2 and Year 1-3: 4 companies, 21,783 employees.
**Companies using various employee engagement interventions. Year 1-2: 61 companies, 423,868 employees. Year 1-3: 20 companies, 221,543 employees.

Studies in Education

The work of Chip Anderson at the University of California--Los Angeles involved measuring students' talents, giving them feedback on their talents, and helping them integrate their talents into their lives, over the course of a semester. In reviewing presemester and postsemester self-reflection surveys ($n = 212$), Rath (2002) found significant growth among students on self-

confidence, direction, desire to develop the strengths of themselves and others, and desire to learn more about their own strengths. Dependent t-tests revealed significant differences on all of the above factors. On the overall self-reflection scale, the group grew by 0.39 standard score units ($t = 7.25, p < 0.01$).

Several studies of pre-post strength intervention have been conducted in educational institutions. From 1994 to 1997, Gallup researchers studied students in an urban school in Chicago (Harter, 1998). In each year, a randomly selected group of teachers were taught a talent identification structured interview, and then administered the interview to incoming freshmen and gave them feedback on their talents (study group of 807 students). A control group of approximately half the students ($n = 841$) were not given the interview or feedback. The student were tracked to the end of their first semester on grades, tardiness, and absenteeism. Weighted average effect size comparisons across the four years indicated 0.31 standard score units less tardiness for the study group (0.78 fewer times tardy per student) and 0.33 standard score units fewer days absent for the study group (3.8 fewer days absent per student). Additionally, the study group received an average of 0.15 standard score units higher GPAs in comparison to the control group.

Recently, Williamson (2002) tested a study group of thirty-three students and a control group of forty students. The study group received feedback on their talents, both individually and in group form, and the control group did not. At the end of the semester, the study group achieved GPAs of 0.47 standard score units higher than those in the control group. The high school GPAs of the two groups were not significantly different. The retention rate for the study group was 97 percent, compared to 87 percent for the control group ($z = 1.43$).

In another recent study of 150 University of Nebraska business students (Hodges, 2002) over the course of a semester, intervention was varied across three groups of students. Group 1 was administered a StrengthsFinder assessment and given written feedback (talent identification). Group 2 was given the same intervention as Group 1, and in addition was given access to an "e-learning" program to learn more about their talents. Group 3 was given the same intervention as Group 2, with an additional thirty-minute consulting call from a trained strengths consultant. Each group was given pre- and postadministration of a "state hope" scale (Snyder et al., 1996). The pre-post change scores were 0.03 standard score units for Group 1, 0.17 for Group 2, and 0.36 for Group 3. Group 3, which received strengths identification, plus the most substantial level of developmental intervention, grew in "state hope" by 0.33 more standard score units than Group 1, which received only the talent identification intervention ($p < 0.05$).

Summary of Research to Date

Findings in business indicate that top-performing managers have an approach to management that focuses on developing the strengths of the individuals they manage. In a sense, top high-performing managers have been ahead of their time in doing what is psychologically most efficient: they affect engagement and productivity by understanding and positioning individual differences in their employees. Work places with a higher proportion of employees indicating

they "have the opportunity to do what they do best every day" are more productive, have higher customer loyalty, and have lower turnover. Businesses studied that have adopted a strengths-based approach to individual development have seen the greatest gains in employee engagement, and hence productivity. The effect sizes at the organizational level are substantial (d values above 0.5).

In education, there is initial evidence that talent identification and strengths development for students relates to gains in GPA, state hope, and self-confidence, and declines in absenteeism and tardiness. Most of the observed effect sizes are substantial (d values from 0.2 to 0.4) at the individual level.

INDIVIDUAL DIFFERENCES--THE WHY

Numerous studies of personality, behavior genetics, intelligence, interests, and values have documented high variability across individuals. Genetic research suggests a substantial trait component in personality and intelligence constructs (Bouchard et al., Tellegen, 1990; Bouchard, 1997), among other constructs. However, such research should not be misinterpreted into suggesting that people are fatalistically static. Rather, the findings of high genetic composition may hint that how people most efficiently grow and develop is dynamically related to who they are to begin with. Other "attitudinal" constructs, such as job satisfaction, have a weaker genetic component (Arvey, Bouchard, Segal & Abraham, 1989). This, we believe, is highly related to the success of a strengths approach to teaching and management. People can change on the "changeables" (satisfaction, subjective well-being, engagement, performance, etc.), but most efficiently through who they are to begin with (their inherent talents).

There are contemporary approaches to individual development (reviewed in Shippmann et al., 2000), many of which do not clearly differentiate between constructs on the basis of possible predisposition. Such approaches attempt to measure many constructs and development programs are generally mapped to the following course:

Measure many constructs.

Identify strengths and weaknesses.

Fix the weaknesses.

If the psychologist or practitioner does not differentiate between the constructs that have high genetic makeup (personality and intelligence) and those that are more "changeable" (job satisfaction, attitudes, and skills), the development program is likely inefficient, or of unknown efficiency. A development program designed to develop strengths would be mapped to the following course:

Measure constructs most likely to be predisposed.

Identify talents and weaknesses.

Focus maximum learning on talents.

Integrate activities of one's life around talents, and manage around weaknesses (finding complementary partners, etc.).

Focus change on constructs that are changeable (Seligman, 1994), rather than the missing "traits."

The strengths approach to organizational development is a likely antecedent to many constructs explored in the field of positive psychology, including subjective well-being (Diener, 2000), optimism (Peterson, 2002), positive emotions (Fredrickson, 2000), physical health (Salovey, Rothman, Detweiler, & Steward, 2000), and creativity (Cassandro & Simonton, 2002). More empirical research is needed to study these linkages.

DISCUSSION AND NEEDED RESEARCH

To date, evidence of various types suggests that a strengths-based focus on development relates to gains in the form of outcomes such as employee engagement, school achievement, attendance, productivity, and hope. Many, although not all, of these studies measured short-term gain scores. Continuing to stretch these studies and interventions out to longitudinal designs is important. As well, it is important to continue to understand the lasting effect of strengths-based interventions, the number and frequency of such interventions, and their relation to long-term upward spirals.

Examples of some research questions include: How enduring are various strengths interventions? At what point does consistently applying one's strengths reach a threshold at which one has an integrated, fulfilling life? What are the long-term organizational outcomes of a strengths-based approach to education and management? To what extent does self-awareness prior to talent identification interact with the relationship between strengths approaches and various outcomes? To what extent does a Pygmalion effect explain short-term changes?

There is need for more research designs that specifically test the impact of "focus on weakness" versus "focus on strength and manage weakness"; however, we would caution that the investigators clearly differentiate between constructs with high "trait" composition and those with less documented "trait" composition. There is also an ongoing need for more controlled experimental studies, in which the intervention steps are clearly identified, applied, and studied in an organizational context where most people have a chance to apply their strengths. The interventions that lead to desired positive outcomes may be individually specific (that is, it is possible that an interaction between the individual and intervention type explains unique variance in desired outcomes).

In a recent poll (Gallup Organization, 2002), we found that employees' perceptions of their organizational leaders and the future of the organization was significantly more positive if the employees felt "the leadership of the organization focuses on the strengths of each person." Developing sustainable positive momentum in an organization is, in part, a function of developing systems that increase the opportunity for talent identification and strengths development for each individual.

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