

Building a Foundation for Positive Psychology in Schools

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Abstract

Teachers in a large, non-urban school system completed one or more positive psychology questionnaires assessing strengths of character; happiness; orientation toward pleasure, engagement, and meaning as three different paths to happiness; explanatory style; orientation toward teaching as a job, a career, or a calling; and job satisfaction. These results of these 170 participants are compared with those obtained from an Internet sample of 2,538 teachers on four of the same instruments. Correlations between the results for each of the two samples are examined. The resulting profiles of the two samples are compared, and suggestions are made as to possible uses of such data to guide improvement in large school systems.

Building a Foundation for Positive Psychology in Schools

Benefits of Positive Psychology

“Positive psychology” is a term coined in 1998 by Martin E. P. Seligman during his tenure as president of the American Psychological Association. Dr. Seligman used this opportunity as president of that organization to promote an increase of psychology’s focus from minimizing mental illness to promoting full, rich lives (Seligman and Csikszentmihalyi, 2000). Park and Peterson (2006) contend that positive psychology research must take place in natural “homes” where “virtuosity is recognized, celebrated and encouraged” (Peterson and Seligman, 2003). What better place is there to take positive psychology than to school?

Today, the field of positive psychology encompasses the work of a wide array of notable researchers in not only psychology, but also in sociology, health, medicine, organizational studies, business management, and other disciplines. PsychInfo, the research database maintained by the American Psychological Association, lists over 650 works by more than 500 different scholars with “positive psychology” as a keyword. A 2006 undergraduate course on positive psychology had by far the largest enrollment of any course ever at Harvard University (over 800 students), and the University of Pennsylvania now offers a Masters Degree program in Applied Positive Psychology. Dr. Seligman has even been recruited to bring positive psychology to British schools.

The field has become the subject of numerous articles in widely read publications such as *The Wall Street Journal*, *Time*, *Scientific American*, *Psychology Today* and others. The BBC has ongoing programs on radio, TV and the internet devoted to following the study of happiness and the good life. In addition, a number of books aimed

at popular audiences have appeared since positive psychology has become a named field of scholarly endeavor:

- ◆ *Mindset*, Dweck (2006)
- ◆ *The Happiness Hypothesis: Finding Modern Truth in Ancient Wisdom*, Haidt (2005)
- ◆ *On Becoming an Artist: Reinventing Yourself Through Mindful Creativity*, Langer (2005)
- ◆ *How Full Is Your Bucket?*, Rath and Clifton (2004)
- ◆ *Flourishing: Positive Psychology and the Life Well-Lived*, Keyes and Haidt, ed. (2003)
- ◆ *Authentic Happiness*, Seligman (2002)
- ◆ *The Resilience Factor: 7 Essential Skills for Overcoming Life's Inevitable Obstacles*, Shatté and Reivich, (2002)
- ◆ *Now, Discover Your Strengths*, Buckingham and Clifton (2001)
- ◆ *Learned Optimism*, Seligman (1998)

As suggested by these titles, positive psychology covers subjects ranging from more recently identified states such as “flow” (Csikszentmihalyi, 1990) to age-old virtues such as wisdom, courage, love, justice, temperance, and transcendence. It includes hope and optimism, mindfulness, and “grit.” It even delves into the nature and basis of how we reach moral judgments (Haidt, 2006).

These are neither trivial nor purely academic topics, and work in the field of positive psychology has economic consequences significant enough to have already garnered one Nobel Prize in economics (Kahneman, 2002). Organizations as diverse as

Best Buy and David's Bridal (the largest bridal store chain in the United States) are implementing positive psychology-based programs. Again this year, the Gallup Organization will host researchers, business persons, and students from around the world at its International Positive Psychology Summit in Washington, DC. Other positive psychology conferences are held in Europe and Australia.

Although positive psychology research has applications to those suffering from depression, anxieties, and other emotional conditions, its focus is on helping all people lead richer, fuller lives through the study of positive subjective experience, positive individual strengths and virtues, and positive institutions and communities (Gable and Haidt, 2005).

Some findings with practical applications include:

- ◆ Happy individuals live longer. One study correlated writings of young women looking toward their futures with their health and longevity many years later and found that the more positive, hopeful individuals lived longer and suffered less illness (Danner, et al., 2001).
- ◆ Happy individuals have better marriages. Women's marital satisfaction was correlated with the genuineness of smiles in college yearbooks (Harker and Kelter, 2001).
- ◆ A 3:1 or better ratio of positive to negative expressions identifies individuals, business teams, and marriages that are more likely to thrive than their less positive counterparts (Fredrickson and Losada, 2005).
- ◆ Depressed individuals participating in on-line happiness exercises experienced decreases in depression of greater scope and duration than would have been

expected after the administration of anti-depressant pharmaceuticals (Seligman, et al., 2005).

- ◆ Athletes with optimistic explanatory styles in sports as diverse as swimming, baseball, and basketball outperformed their less positive peers when responding to adverse situations (Seligman, 1991).
- ◆ The character strengths of hope, zest, curiosity, love, and gratitude are significantly related to life satisfaction (Park, et al., 2004).
- ◆ A meta-analysis of over 200 studies reporting on almost 300 samples totaling 275,000 individuals shows that it is likely that happiness causes success, rather than vice versa. (Lyubomirsky, et al., 2005).

Among other things, experiments have demonstrated the efficacy of positive psychology insights to:

- ◆ increase the likelihood that patients will return for follow-up after painful medical procedures (Redelmeier, et al., 2003),
- ◆ increase sales of both tangible and intangible products in retail and personal sales venues (Seligman, 1991)
- ◆ inoculate both elementary- and college-age students against depression (Reivich, et al., 2005; Seligman, et al., 1999).
- ◆ increase happiness among people who have learned to use their signature strengths in new ways (Seligman, et al., 2005).

Benefits of Broadening and Building Positive Emotion

Nearly thirty years ago Fordyce (1977) found that people can become happier if they develop optimistic thinking patterns, try new activities, become more social, develop a more extroverted personality, and reduce negative thought patterns. Participants in Fordyce's studies (1977, 1983) reported a greater appreciation for and understanding of their own happiness and of its importance as an achievable goal by being made more aware of specific activities and thought patterns which support the development of happiness.

Barbara Fredrickson's work has established that positive emotions such as joy, interest, contentment, pride and love:

- ◆ broaden an individual's attention, creativity, cognition, and scope of possible action (Fredrickson, 2001),
- ◆ may undo the effects of the negative emotions thus protecting health (Fredrickson, 1998),
- ◆ increase resilience and resistance to physical illnesses ranging from colds to cardiovascular events (Fredrickson, 1998),
- ◆ predict longer life (Fredrickson and Losada, 2005), and
- ◆ can spread to others as people share feelings of competence, achievement, involvement, significance, and social connection (Fredrickson, 2003).

Positive Psychology and Education

Strenuous efforts to fix schools and school systems over the last three decades have focused on increasing accountability, "beefing up" curricula, heavily testing student performance, rewarding schools that improve according to standards, and sanctioning—

even punishing—schools that do not meet standards. This approach has focused schools and school leaders (including teachers) on external deficit-remedying approaches and made it difficult to build on the existing strengths of schools. As a result, the passion, purpose and sense of spirit that make work in a particular school both engaging and meaningful may go unidentified (Deal and Peterson, 2002).

Faced with external demands on what to teach, how to teach, and how to work with diverse stakeholders, (Morrison, 2005) professional development in educational settings typically focuses on fixing perceived deficits, and rarely focuses on strengths or how to prioritize change efforts. The growing field of positive psychology has great potential to address this concern by employing an alternative to the “fix the blame/fix the problem” approach of the deficit model of school change.

Positive psychology research in the workplace has included the value of goalsetting and its effect on employee motivation (Locke and Latham, 1990). Positive relationships among employees can result from high-quality connections, which have been found to increase energy, the sense of workers’ joint participation and responsiveness, and overall physical health (Heaphy and Dutton, 2004). In addition to numerous positive individual effects including heightening the capacity to learn and building resilience, high-quality connections in the workplace strengthen employee attachment, quality of service, and adaptability (Dutton, et al., 2004).

Positive psychology research in the field of education is relatively new. One area of promise is in collective efficacy, the belief of teachers that faculty as a group can execute the positive courses of action required to successfully educate students (Goddard, et al., 2004). Collective efficacy represents a level of confidence in the ability of a group

to reach a shared goal and might be thought of as an outcome of high quality connections.

It influences common expectations for action, supports creative problem-solving, and results in resilient goal attainment by influencing the effort and persistence necessary for academic achievement. Perceived collective efficacy facilitates collaboration and the willingness to accept challenges to teaching in the face of difficulty. (Goddard, et al., 2004).

More importantly, educator collective efficacy is significantly related to both math and reading achievement at the elementary level, and to cross-curricular achievement at the high school level, even when controlling for school context measures such as socioeconomic status, minority enrollment, urban/suburban/rural location, size, and prior student achievement (Goddard, et al., 2004). Faculty collective efficacy significantly influences not only the ways in which teachers approach their work; it also has a direct impact on high school students' verbal, math, and science achievement (Goddard, et al, 2004).

Positive psychology's study of positive emotions, positive traits, and positive institutions (Seligman, 2002) focuses on human flourishing rather than human "measuring up." It can help identify strengths in schools and the people in them, based on empirical research rather than political whim, on assets rather than deficits, and without requiring wholesale commitment to costly curriculum or credentialing change. Positive professional cultures foster productivity, collegiality, support for hard work, and high expectation for student achievement. Such cultures acknowledge that the feelings and motivations which drive educator behavior cannot be ignored when seeking to enhance student learning (Deal and Peterson, 1999).

Teachers and Positive Psychology

Why did we choose to introduce a school district to positive psychology?

Teachers represent a large proportion of employees, accounting for about 4% of the American workforce. There are twice as many K-12 teachers as registered nurses, and five times as many teachers as lawyers or university professors (Ingersoll, 2004). During the 12 months of the 1999-2000 school year, over one million teachers transitioned into, between, or out of schools, a revolving door of nearly one third of the total instructional workforce. In fact, 546,200 teachers left or moved from their schools compared to 534,861 who entered schools. (Ingersoll, 2004).

While it is inevitable and perhaps even good to have some transition in any occupation, the teacher turnover rate is a particular concern. Because teaching requires specialized knowledge and skills that take time to acquire and hone, experienced teachers are more effective at raising student test scores, on average, than teachers in their first year or two of teaching. However, occupational regret, the tendency for a worker to wish they had chosen a different vocation, is high and pervasive among teachers. Moracco, et al., (1983) surveyed 691 teachers to investigate whether they regretted their career choice; 52 percent indicated they would not select teaching again.

Opportunity costs, what we perceive we give up when we make a choice or decision, seem to feed regret. Teachers may feel they have given up work offering more respect, a higher salary, or more family flexibility. Importantly, teachers who felt occupational regret were absent from work more often and reported stress as a factor in their absences (Moracco et al., 1983) compared to those who were content.

Teaching as a Calling

Wrzesniewski, et al., (1997) found that orientations toward work can be divided into whether the individual considers it a job, a career or a calling. Those who considered their work a calling found their work more rewarding, felt their work made the world a better place, expected a higher-level job five years in the future, would choose the same line of work again, felt more in control of their lives, enjoyed talking about their work to others, would continue in their current line of work even if they were no longer paid, and felt that work was one of the most important things in their lives. They were less eager to retire, to anticipate weekends, or to leave work behind at the office. Moreover, they would be more likely to encourage a young person to pursue their line of work.

Employees who consider their work a calling report that their work is often inseparable from their life, is socially valuable even when it requires activities or responsibilities that may not be pleasant, and results in both higher self-esteem and intrinsic motivation (Wrzesniewski, et al., 2003). Those with a calling generally stay on the job longer, have higher overall life and work satisfaction, and miss fewer days from work. Workers with a calling demonstrate well-being and are more likely to be optimistic (Gillham, et al., 2001). People who perceived their work to be a calling were also more likely to be engaged in and passionate about the work they do. (Wrzesniewski, et al., 1997). Having the knowledge of one's strengths may make possible building the work of teaching into a calling. "Job crafting", using a combination of self-determination (intrinsic motivation) and competence at work, has the potential to make work more meaningful, increasing the feelings of purpose that come from work (Wrzesniewski and Dutton, 2001).

Any workers, and teachers are no exception, need to stay on the job long enough to gain work proficiency. In education, experience is linked to student achievement. Teacher turnover and attrition, however, are other significant concerns. The biggest issue is the “leaky bucket” of low teacher retention (Ingersoll, 2004). Nearly half of teachers do not stay in the profession for even five years (NCTAF, 2003). Federal survey data for more than 50,000 teachers nationwide indicates that on average teachers leave their jobs at a rate of about 13.2% a year. Most of this occurs during a teacher’s first five years in the classroom (Ingersoll, 2004). Turnover accounted for by retirement is relatively small compared to teacher job dissatisfaction and teachers pursuing other jobs. In the climate of accountability fueled by national initiatives such as No Child Left Behind (NCLB), teacher emotions already affected by the perception of overwork are vulnerable to the challenges of reform agendas (Kelchtermans, 2005).

Teacher effectiveness, the single most important variable affecting student achievement that is at least partially under school system control, is a topic of interest in value-added analysis (Sanders and Rivers, 1996). Presently, limited research has been done into the reasons for the large differences between the most effective and the least effective teachers. Furthermore, most factors with a moderate to large effect size happen as a result of teacher-action approaches at the classroom level such as direct instruction, so assessments addressing standardized curriculum mastery as the outcome may not be wholly adequate to determine what makes an individual teacher effective (Muijs, 2005). To adequately assess this, research in teacher effectiveness will need to incorporate a variety of tools, both quantitative and qualitative (Muijs, 2005).

Relatively little is known about whether offering positive psychology to an entire school or school district can provide data from positive psychology assessments which would correlate with schools or individual teachers deemed “high performing”, or schools which, for example, have lower-than-average teacher attrition or fewer days lost to educator illness. That being said, positive psychology research suggests that school personnel can increase their daily engagement, pleasure, and meaning in life, or, to use a broader term, their happiness. School climate predicts teacher and student satisfaction, lower stress levels, and better school results (Sangsue and Vorpe, 2000), so there is reason to believe that positive, attractive changes will, when made by an educational team within a school setting, result in “better” schools on a number of measures.

Positive Psychology Goes to School

Can the concepts and findings of positive psychology be introduced into a school system in a fashion that will achieve acceptance with a significant percentage of teachers? The purpose of this study is to monitor the effectiveness and the effects of a no-pressure, informational, research-study approach to introducing the concepts of positive psychology in a large, non-urban school system during a three-semester period ending June 2007. Chafouleas and Bray (2004) suggest that positive psychology could be used in schools to promote mastery of positive characteristics such as motivation, creative problem-solving, and persistence in much the same way as other content areas further learning through mastery. School-based resiliency programs have shown the benefits of prevention through positive psychology approaches (Reivich, et al.). Clonan, et al., (2004) draw attention to the positioning of public schools as community institutions with funding, staffing and direct connections to children and families. As positive

developmental settings (Eccles and Gootman, 2002; Clonan, et al., 2004), schools could have an enormous impact on promoting the well-being of children and educators.

Our study takes positive psychology into a large (>10,000 students) public school district in a way which provides personal, strength-based information for educators, as well as the beginnings of a foundation in positive psychology. It provides an appealing, low-impact introduction to positive psychology focused primarily on self-awareness. Any resulting changes in teaching are the contribution, not the requirement, of teachers. One way to think about this project is as action research aimed at helping an organization embrace the science of positive psychology in a meaningful, broad-based way. Some research and data collection will be squarely within a quantitative research framework and can be approached as such, but we believe this should not be at the expense of the bigger goal of comfortably disseminating positive psychology in an educational setting.

Because schools generally have not operationalized what a positive school environment would look, feel or be like, positive psychology runs the risk of looking like another educational fad. Establishing a research portal offers a school district a low stress/low accountability introduction to positive psychology, and it offers researchers a baseline of positive psychology assessment data. Future research projects of interest to both researchers and the school district can be developed using the data portal, sustaining the empirically-based introduction of positive psychology in this district.

Method

Research Participants and Procedure

We used two samples. One consisted of 146 adult participants from the participating system who identified themselves as teachers and who completed one or

more questionnaires on the research web site established for the study. This sample represented 18.9% of all teachers in the system. The other sample consisted of respondents who completed one or more of the same questionnaires on the Authentic Happiness web site (www.authentic happiness.com) between January 1, 2006, and June 15, 2006, who selected the United States as their country of residence, and who selected “teacher” (N=2430) as their occupation. Both samples included only the first iteration in cases where respondents completed a questionnaire more than once.

The Authentic Happiness web site has been available on the web since Fall, 2002. It can be accessed with several *url*'s including www.authentic happiness.com and www.authentic happiness.org. Readers of *Authentic Happiness* (Seligman, 2002) are directed to the web site at numerous points in the book, and a *Google* search conducted on July 13, 2006, for the word “happiness” returned the web site as its number five result.

We recruited respondents in the system through flyers distributed by the principal of each school and attached to an e-mail from the superintendent. The flyers directed participants to a web site designated the research portal containing the research questionnaires. The research portal was established under a program made available by the management company for www.authentic happiness.com and thus was operationally similar to that web site. The terms and conditions of the research portal included a privacy policy covering use of the data and anonymity of respondents. Informed consent was obtained through acknowledgment by the participants in the registration process that they had read and understood the terms and conditions.

The system's teachers were 90.4% female and 49.4% had a masters degree or higher. The AuthenticHappiness (AH) teachers were 81.4% female and 62% had a

masters degree or higher. The age distribution for both groups was an unsurprising normal distribution with the 35-44 category as the modal response.

Measures

Five questionnaires were available to the system's teachers:

The *Authentic Happiness Inventory* questionnaire is a new 24-item measure of general happiness including general life satisfaction, feelings about oneself, enjoyment of day-to-day experience, and optimism for the future (Peterson, Park, Steen and Seligman, 2006). The items on the AHI reflect the view that savoring life's pleasures, losing oneself in engaging activities, and building meaning in life, all contribute to happiness. The AHI's developers report high internal reliability ($\alpha = .95$), and we obtained a similar result, ($\alpha = .91$) (Peterson, et al., 2005).

The *Approaches to Happiness* questionnaire measures the degree to which the respondent derives happiness from pleasure, engagement, or meaning (Peterson, Park, and Seligman, 2005). While people differ in the ways they pursue happiness, the "most satisfied" are those who, of the three pathways to happiness, experience higher levels of engagement and meaning, and moderate levels of pleasure (Peterson, et al., 2005). The developers report internal reliability for the three scales at $\alpha = 0.82$ for pleasure, $\alpha = 0.72$ for engagement, and $\alpha = 0.82$ for meaning (Peterson, et al., 2005). We obtained values of $\alpha = 0.79$ for pleasure, $\alpha = 0.61$ for engagement, and $\alpha = 0.72$ for meaning.

The *Seligman Attributional Style Questionnaire (SASQ)* is a measure of optimism, persistence and resilience consisting of six good and six bad hypothetical events for which the respondent generates a causal explanation. The participant then rates that explanation on a seven-point Likert scale as to its permanence, pervasiveness, and

personalness. Explanatory or attributional style is a predictor of performance, well-being and motivation in both work, athletic, and educational settings (Buchanan and Seligman, 1995; Schulman, 1995).

The VIA (Values in Action) Signature Strengths Survey is a 240-item test that ranks orders a person's 24 strengths of character (Peterson and Seligman, 2004). The selected strengths are those that proved ubiquitous in a review of writings on character (both religious and philosophical) across the major cultures of the last 3000 years. Each of these strengths substantially meet a set of ten criteria that include a determination that the strength is fulfilling to the individual in its exercise, morally valued in its own right and not just for consequences, uplifting to others in the vicinity when exercised, and manifests in a range of behavior, thoughts and emotions. (Peterson and Seligman, 2004). It uses a five point Likert-type scale with 10 items per strength to measure a participant's response to items reflecting the 24 character strengths. Internal reliability obtained from our data showed Chronbach's α for each of the 24 scales ranging from 0.72 to 0.91. The Web-based version provides participants their top five or "signature" strengths upon completion of the survey. All 24 strengths are also available if the participant so chooses. Seligman proposes that our highest satisfaction and greatest emotional well-being comes from building and using one's signature strengths, including re-crafting work to make greater use of one's strengths (Seligman, 2002).

The *Work-Life Questionnaire* operationalizes the extent to which a person views their work as a job (focus on financial rewards, necessity of work), a career (focus on advancement and future success), or a calling (focus on socially valuable and fulfilling work) (Wrzesniewski, et al., 1997). The version used in this study consists of three

paragraphs describing a person whose thoughts, feelings, and behaviors would likely accompany each orientation toward work. The respondent chooses the description which most captures their view of their current work. There is also a single question on a seven point Likert-type scale which asks about overall work satisfaction. In work settings, people who actively crafted their work into a calling from viewing work as a job or a career stayed on the job longer (Wrzesniewski, et al., 1997) and found their work more meaningful.

Results

A primary objective of this study was to establish a baseline for a school district in the south central United States, both for future studies within this district, and for comparisons to other school systems. Based on that objective, we have chosen to present all means for all results for both the school system teachers and the AuthenticHappiness teachers, plus the results of independent samples t tests. Table 1 presents results for the AHI, Approaches to Happiness, and Work-Life Questionnaires. Table 2 presents results for the VIA Questionnaire. We also calculated correlations between the various scores and report the most meaningful. Correlations for School district teachers for AHI, Work-Life, and SASQ's summary score are shown in Table 3.

The mean Overall Optimism score (SASQ) for school district teachers was 2.45 (N=49, SD=1.31). We have chosen not to report the mean Hopefulness score (ASQ) determined for AuthenticHappiness teachers because, though both the SASQ and the ASQ assess explanatory style, their results cannot simply be compared as averages.

Correlations for AuthenticHappiness Teachers for AHI, Work-Life, and ASQ's Hopefulness summary score are shown in Table 4.

Correlations for school system teachers between AHI and VIA strengths are shown in Table 5. A comment about “naming” the strengths measured by VIA is in order. Peterson and Seligman (2004) call the multi-word names for these strengths “piling on synonyms” and suggest that it helps capture the breadth of these natural categories and minimizes subtle connotations that might attach to one of the words. We concur and have therefore resisted the temptation to “shorten” these labels. The labels are not holographic; a part does not contain all the information of the whole.

Discussion

The purpose of this study was to develop a positive psychology baseline for an actual school system. Ultimately, the usefulness of such data will be determined by its connection to the purpose of any school: assisting children along the pathway to adulthood through the acquisition of knowledge, abilities, and beliefs that are valued by them, their parents, and their communities. Connections have not yet been developed between the data presented here and other indices of success including student scores on standardized tests, graduation rates, attendance rates for both students and faculty, and other survey data. As such data are connected to the results of this study, more correlations of interest will be possible. In the current data, however, we note that the pattern found by Peterson, et al., (2005), of increasing correlation to happiness for pleasure, engagement, and meaning does not hold true for the AuthenticHappiness teachers sample. Instead, in this group, the relationship drops ever so slightly between engagement and meaning. In the *Approaches to Happiness* measure, however, interesting future directions can be anticipated by comparison of the scores the school

system's teachers and those obtained for AuthenticHappiness teachers in light of the known correlates for some of the constructs measured by the data presented here.

As compared to the AuthenticHappiness teachers, our school system's teachers were:

- happier (3.48 to 3.18, AHI)
- more spiritual (4.23 to 3.80, VIA)
- more hopeful (3.98 to 3.73, VIA)
- more modest (3.79 to 3.54, VIA)
- more diligent (3.96 to 3.74, VIA)
- more zestful (3.84 to 3.69, VIA)
- and more satisfied with their work (5.65 to 4.74, Work-Life).

On the other hand, compared to AuthenticHappiness Teachers, the school system teachers were:

- less prone to say they are often very engaged in what they do (3.10 to 3.16, Approaches)
- more inclined to say they find meaning in life (4.02 to 3.82, Approaches)
- less creative (3.66 to 3.79, VIA)
- and much less inclined to see their work as just a job (0.65 to 1.06, Work-Life).

Both our interests and the focus of the Masters in Applied Positive Psychology program are on the application of the findings of positive psychology to the achievement of superior results in important areas of human endeavor. In that light, consider the meaning that might be attached to these results if the comparison data for the school system's teachers came from state-wide averages for teachers in their state. From the

perspective of those associated with the school system, this should be a call for appreciation, gratitude, and celebration of the teachers in that system. Most parents would be pleased to learn that their children were attending school in a system where the teachers were happier, more spiritual and hopeful, more zestful and more diligent than the average in their state. Moreover, in accordance with the Appreciative Inquiry principle that organizations tend to move in the direction of the questions they ask (Cooperrider, et al., 2000) the parents, administrators, and political leadership of the school district, having inquired as to the strengths of their teachers, might well be inclined to both build on and enhance those strengths.

But what if the results were reversed? What if the system's scores were those reported here for AuthenticHappiness teachers, and the state average equalled what we found for the school system? What would the parents, administrators, and political leadership of such a system do? With current, achievement-only data, the reaction is too often to pound on teachers and blame them for the results. At the risk of being labeled Panglossian, we suggest that the community's response, even to data showing teachers were unhappy, would likely also be toward building up rather than tearing down.

The overall evidence of positive psychology research suggests that positive emotions signal growth, achievement, and prosperity—flourishing—and their absence suggests the absence of such felicitous outcomes. While it may be possible to blame an individual who is not happy, growing, and becoming, it is far more difficult to hold that thought when considering a sizable group of individuals. In that case, we believe the tendency, even among those not familiar with the findings of positive psychology, will be to see the data as indicative of the need for systemic change rather than individual punishments.

The sign that hangs in many work places reading, "The beatings will continue until morale improves," is funny because we all immediately understand its absurdity.

Although school systems are often accused of behaving stupidly, they are not intentionally doing so.

Future Directions

This study reports on the pouring of a foundation, but the structure of the relationship between positive psychology and teachers, students, schools, parents, and communities remains to be built. Both correlational and causational studies need to be done. In the correlational category, possible relationships to investigate include the links between constructs such as happiness, explanatory style, and calling and data on absenteeism for teachers, attrition for new teachers and, ultimately, teacher effectiveness at helping students learn as measured by systems such as Tennessee's Value-Added Analysis System (TVAAS). Other constructs with well-established measures might also be added to the mix, such as hope theory (Snyder, 2000) and mindsets (Dweck, 2006).

Further, the same constructs used in this study can be correlated with desired behaviors and outcomes for students. Older students can likely use the instruments employed in this study. For younger students, specially adapted versions of some of these measures already exist (Park and Peterson, 2005; Dweck, 2006). Others will need to be developed. A beneficial and valuable side effect of work with students is that any increases in their hopefulness, the positivity of their explanatory styles, their engagement (flow), and so forth will work to their benefit and the benefit of their friends, families, and co-workers throughout their lives (Seligman, 2004).

Finally, the most powerful studies will address causality. These efforts will seek to measure the extent to which positive psychology interventions, some of which have already been shown to increase happiness and resilience and decrease the likelihood of depression, can be employed toward those ends within school systems. These future studies will also measure whether the resulting improvements in happiness, optimism, and hope will be accompanied by improvement in desired outcomes such as teacher retention, reduced numbers of teacher days missed for illness, and, ultimately, student achievement.

It is our hope that this study will facilitate such future efforts.

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Table 1: Results for the AHI, Approaches to Happiness, and Work-Life Questionnaires.

Test	School District	AuthenticHappiness		df	t
		Mean	Std. Deviation		
AHI		3.48	0.49	1634	3.93*
Approaches	Pleasure	3.11	0.82	361	-.98
	Engagement	3.10	0.56	361	-0.64***
	Meaning	4.02	0.63	361	1.69*
Work-Life	Job	0.6*	0.91	284	-2.74*
	Career	0.55	0.87	284	-2.73†
	Calling	2.05*	0.99	284	2.66*
	Satisfaction	5.64	0.99	284	4.43***

Table 2: Results for the VIA Questionnaire

Test		School District		AuthenticHappiness		df	t
		Mean	Std. Deviation	Mean	Std. Deviation		
VIA	Appreciation of Beauty and Excellence	3.80	0.65	3.93	0.68	1372	-2.04
	Bravery	3.77	0.53	3.66	0.62	1372	2.00†
	Capacity to Love and Be Loved	4.20	0.48	4.08	0.56	1372	2.30†
	Prudence	3.83	0.50	3.64	0.57	1372	3.69†
	Citizenship	4.08	0.49	3.85	0.53	1372	4.72
	Creativity	3.66	0.60	3.79	0.72	1372	-2.05***
	Curiosity	3.99	0.49	4.11	0.56	1372	-2.22
	Fairness	4.24	0.44	4.12	0.49	1372	2.63
	Forgiveness	3.87	0.64	3.81	0.67	1372	1.07
	Gratitude	4.26	0.53	4.09	0.58	1372	3.08
	Honesty	4.18	0.41	4.04	0.48	1372	3.09*
	Hope	3.98	0.50	3.73	0.68	1372	4.02***
	Humor	3.98	0.54	3.88	0.65	1372	1.63***
	Diligence	3.96	0.47	3.74	0.66	1372	3.77***
	Judgment	4.04	0.45	4.07	0.51	1372	-.504
	Kindness	4.19	0.52	4.06	0.53	1372	2.56
	Leadership	3.98	0.50	3.90	0.53	1372	1.64
	Love of Learning	3.83	0.60	4.00	0.62	1372	-2.77
	Modesty	3.79	0.59	3.54	0.67	1372	4.09*
	Perspective	3.82	0.43	3.83	0.54	1372	-.074***
Self Control	3.44	0.51	3.35	0.64	1372	1.50***	
Social Intelligence	3.79	0.49	3.84	0.54	1372	-1.05	
Spirituality	4.23	0.61	3.80	0.82	1372	5.57***	
Zest	3.84	0.54	3.69	0.68	1372	2.48***	
Work-Life	Job	0.65	0.91	1.06	1.12	291	-2.73*
	Career	0.55	0.87	0.93	1.01	291	-2.70†
	Calling	2.05	0.99	1.64	1.14	291	2.63†
	Satisfaction	5.65	0.99	4.74	1.51	291	4.56***

† $p < .10$, * $p < .05$, *** $p < .001$

Table 3: Correlations for School District Teachers for AHI, Work-Life, and SASQ's summary score

School district teachers		AHI	Pleasure	Engagement	Meaning
Pleasure	Pearson Correlation	.375**			
	Sig. (2-tailed)	.003			
	N	59			
Engagement	Pearson Correlation	.477**	.260*		
	Sig. (2-tailed)	.000	.038		
	N	59	64		
Meaning	Pearson Correlation	.624**	.502**	.364**	
	Sig. (2-tailed)	.000	.000	.003	
	N	59	64	64	
OptimismOverall	Pearson Correlation	.356*	.420**	.205	.536**
	Sig. (2-tailed)	.018	.004	.172	.000
	N	44	46	46	46

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Table 4: Correlations for AH Teachers for AHI, Work-Life, and ASQ's Hopefulness summary score

AH Teachers	AHI	Pleasure	Engagement	Meaning
Pearson Correlation	.201**			
Sig. (2-tailed)	.004			
N	203			
Pearson Correlation	.486**	.252**		
Sig. (2-tailed)	.000	.000		
N	203	289		
Pearson Correlation	.483**	.160**	.515**	
Sig. (2-tailed)	.000	.007	.000	
N	203	289	289	
Pearson Correlation	.338**	.023	.442**	.457**
Sig. (2-tailed)	.000	.826	.000	.000
N	193	96	96	96

** Correlation is significant at the 0.01 level (2-tailed).

Table 5: Correlations for School District Teachers between AHI and VIA Strengths

	Pearson Correlation to Authentic Happiness Index	
	School district teachers (N=68)	AH Teachers (N=412)
Appreciation of beauty and excellence, Awe, Wonder, Elevation	.475**	.236**
Bravery and Valor	.468**	.331**
Capacity to love and be loved	.647**	.494**
Caution, Prudence, and Discretion	.277*	.196**
Citizenship, Social Responsibility, Loyalty, and Teamwork	.345**	.276**
Creativity, Ingenuity, and Originality	.477**	.240**
Curiosity, Interest in the world, Novelty-seeking, Openness to experience	.638**	.499**
Fairness	.392**	.306**
Forgiveness and mercy	.224	.341**
Gratitude	.617**	.577**
Honesty, integrity, authenticity, and genuineness	.395**	.290**
Hope, optimism, and future-mindedness	.697**	.694**
Humor and playfulness	.503**	.445**
Industry, Diligence, and Perseverance	.539**	.407**
Open-Mindedness ,Judgment,and Critical Thinking]	.517**	.194**
Kindness, Generosity, Nurturance, Compassion and Altruism	.461**	.320**
Leadership	.482**	.349**
Love of Learning	.419**	.276**
Modesty and Humility	.034	.061
Perspective and Wisdom	.528**	.392**
Self-control and Self-regulation	.452**	.304**
Social, Emotional, and Personal Intelligence	.504**	.312**
Spirituality, Sense of purpose, and Faith	.523**	.441**
Zest, Enthusiasm, Vigor and Energy	.768**	.676**

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).