



Can Virtue Be Measured?

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A Multifaceted Approach to Measuring Character and Well-being in Staff and Students

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Abstract

How can school leaders measure 'good school' cultures that foster character and well-being in both the classroom and the staffroom? Peterson (2006) called for positive psychology to be applied to institutions in what he termed as 'enabling institutions'. In his conceptualisation of an enabling institution, he argued that virtues should be present not only within the individual members of an institution but at the collective level so that the institution itself has 'moral character' which contributes to the goals of the institution. Seligman (2011, 2013) introduced the PERMA model of well-being, with five elements of flourishing: **p**ositive emotion, **e**ngagement, **r**elationships, **m**eaning, and **a**ccomplishment. We empirically tested this multidimensional theory with 516 Australian male students (ages 13 to 18). Students completed an extensive well-being and character assessment. We selected a subset of items theoretically relevant to PERMA for analysis. By directly assessing subjective well-being across multiple domains, schools can identify specific areas of strengths and areas to target to cultivate greater student well-being. Such multidimensional well-being assessments offer the potential for schools to expand their focus beyond academic outcomes to more systematically include wellness promotion.

Introduction

We believe character is as important as intellect and that schools should develop well-being measurement strategies to strengthen existing policies, practices and programs within schools. Character development as a goal of education has a long history. However, the *measurement* of character and well-being to inform educational strategy and pedagogy is a recent phenomenon. The recognition of well-being as a scientifically-informed approach, integrated into the education of young people could be a hallmark development of 21st century educational policy (Gilman, Heubner, & M. Furlong, 2009; Knoop, 2011). The future for our young depends on what we do today. At a global scale, the World Health Organization (WHO) predicts by 2030, depression will be the highest level of disability of any mental or physical disorder (WHO, 2008). This burden of depression will touch the lives of students currently aged five and six currently in our schools. If we accept the view that young people are the keystone of our future, then the world they inherit will be one with too much

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mental illness (Keyes, 2009). What can schools and governing bodies do to prepare for this challenge? We believe that measurement matters – and that it is essential school measure well-being in the same way they use data to develop literacy and numeracy strategies (White, 2009, 2010 & 2013).

What is well-being, positive psychology and positive education?

Burns, Davenport, Durkin, Luscombe, and Hickie (2010) reinforce the significance of adolescence and young adulthood as an important window for the early onset of mental health problems. The Australian Bureau of Statistics highlights, “suicide rates remain high, with suicide now the foremost cause of death in 15 to 24 year old age (Robertson, Blanchard, Coughlan, and Robertson, 2013, p. 10).

Madden, Lenhart, Cortesi, Gasser, Duggan, Smith and Beaton (2013), Waters (2013) and Robertson, Blanchard, Coughlan, and Robertson (2013) from the Melbourne-based Young and Well Cooperative Research Centre (2013) each emphasize the real challenges and opportunities faced by young people, as young people share more personal information on their digital profiles now than in the past.

In 2009, Seligman and colleagues defined positive education as “education for both traditional skills and for happiness” (p. 293). The paper outlined a framework for teaching positive psychology skills to an entire school, and foreshadowed a “new prosperity” (p. 308) that shifts educational policy from welfare to well-being. Although many commentators agreed with Seligman et al.’s perspective, only a handful of publications have grappled with the introduced well-being strategies to schools, beyond specific focused interventions (Waters, 2012; White, 2009, 2010). In response to the 2009 study, the current paper contributes to well-being discourse by applying the first multi-dimensional, whole school framework based on Seligman’s (2011) PERMA model of flourishing to measure well-being within a school environment. Seligman (2011) outlined the PERMA model of well-being, and theorised five elements of flourishing: **p**ositive emotion, **e**ngagement, **r**elationships, **m**eaning, and **a**ccomplishment

We believe that an answer to these challenges lies in Seligman and Csikszentmihalyi’s (2000) call for schools to become positive institutions. In this approach, whole systems adopt well-being as a goal, where staff well-being and culture are explicitly part of a school’s operational agenda and students are taught scientifically informed well-being programs in the same way we teach history, mathematics, and science (Boniwell, 2013, p. 535). These calls have been echoed by Waters, who argues that education must evolve to include a fourth *R* to become reading, writing, arithmetic, and resilience (Waters, 2013a). As Popovic (2013, pp. 551-562) argues that when we teach reading, writing, and arithmetic in schools, we do not have an end goal in mind – in the long run, we don’t mind if a student writes the book or just reads it. When we teach, we believe that it is a child’s right to be able to read, write, and count. The same should apply to well-being.

Recently, positive psychologists have attempted to more clearly delineate the theoretical framework of well-being. Seligman (2011) suggested a framework of well-being in which flourishing is defined in terms of five components: *p*ositive emotion, *e*ngagement, positive *r*elationships, *m*eaning and purpose, and *a*ccomplishment or achievement (PERMA). Building upon the PERMA model, Kern and colleagues (2012) suggested a developmentally appropriate model of adolescent positive psychological function, comprised of five factors: engagement, perseverance, optimism, connectedness, and happiness (EPOCH). Similarly, Ryff and Keyes (1995) suggested six components of well-being. To address both positive and negative

aspects of psychological function, Huppert and So (2011) suggested 10 flourishing items that directly contrast with common depression and anxiety items.

A core theoretical concept stemming from these models, with substantial implications for educational settings and pedagogy, is that well-being is best characterized as a profile of indicators across multiple domains, rather than as a single number. For instance, grade point average can provide some indication of a student's level of achievement overall, but obscures the fact that she excels in mathematics and is average in history. Just as students receive indicators of performance across multiple academic subjects, student well-being should be assessed and reported as a profile across multiple domains. Figure 1 was created at St. Peter's College, with student input, to visually give meaning to the rather abstract notion of well-being, emphasizing a *dashboard approach* (Frey & Stutzer, 2010; Seligman, 2011; Stiglitz, Sen, & Fitoussi, 2009). For example, a person may need to 'dial up' their sense of meaning to promote well-being; at other times the person can seek to increase their positive emotions or further develop positive relationships.

A positive psychology perspective suggests that mental health is multidimensional and extends along a spectrum from extremely negative to extremely positive. Well-being is more than the lack of problems or dysfunction (Seligman & Csikszentmihalyi, 2000), but traditionally has been measured from a disease standpoint. For example, in psychology, problem indicators such as depression, anxiety, bullying, and substance abuse are typically measured, rather than strengths such as hope, gratitude, perseverance, and self-control (Andrews & Ben-Arieh, 2009). Clearly, negative outcomes should be monitored and reduced. However, Peterson and Park (2003) aptly note: "if our interest is in the good life, we must look explicitly at indices of human thriving" (p. 144). This key philosophical assumption drives our rationale. We argue that positive education then is an umbrella term used to describe empirically validated interventions and programs from positive psychology that have an impact on student well-being.

How to build and measure a positive institution: defining Positive Institutions

Measurement matters. We believe the long-term goal of building schools as positive institutions is much larger than focusing on academic outcomes. To be clear, we are not proposing an either-or, well-being or learning model. We firmly believe that positive education is education for both traditional skills and character development. Leming (2000, p. 413) states that a major stumbling block for schools is a lack of explicit theoretical models to bring character education and well-being programs to scale. While Norrish and Vella-Broderick (2009), Seligman et al. (2009), Waters, White and Murray (2012) have advanced the area, further details must be published; much can still be learnt from positive organizational scholarship "to unify a variety of approaches in organizational studies, each of which incorporates the notion of the positive" (Cameron & Spreitzer, 2012, pp. 1-2).

Educational researchers, including Hanushek, Kain and Rivikin (1998); Rowe (2004) and Hattie (2003), tell us that the quality of teaching, teacher interaction with students, and teacher feedback have the greatest impact on educational outcomes. If this is the case, our hypothesis is that it is impossible for a teacher to have a sustained impact on student outcomes without recognizing his or her student's character and the impact of his or her own. If we are to build positive institutions, school leaders must align their school's vision, mission, and operational goals to build clear frameworks and invest in quality evidence-based learning for teachers and support staff. This will

activate a virtuous cycle of school improvement (Manz, Cameron, Manz & Marx, 2006).

We argue a key to unlock the potential of positive institutions lies at the intersection of well-being measurement, whole school leadership, strategy, and lessons from positive psychology. This is explicitly linked to enriching the whole school staff's well-being first, and then student well-being, with the expectation to build whole community systems focusing on optimal human functioning (Roffey, 2012, pp.8-10). We assert that positive institutions must not lose sight of Aristotle's ancient wisdom that the development of individual and collective moral character education takes place within an institution as systems model examples of human character.

Applying the Whole School Approach to St. Peter's College, Adelaide

Established in 1847, St Peter's College, Adelaide, is a leading independent Anglican day and boarding school that offers "an exceptional education that brings out the best in every boy", from Pre-school to Year 12. The school includes over 1,300 students age three to 18 years old, and 230 teachers and staff. With a strong commitment to social justice and building character, amongst her alumni are three Noble Laureates, 42 Rhodes Scholars, and eight South Australian Premiers.

St Peter's College, has recently strengthened its pastoral care model to embrace well-being as a goal in its new strategic direction, organized around the PERMA model. Under the direction of Simon Murray, Headmaster, and endorsed by the School Council, St Peter's College has systematically adopted a systems change approach throughout the strategic plan of the school to achieve its mission and vision to be a "world class school where boys flourish". Since 2011, St Peter's College has engaged the advice and feedback of global leaders in positive psychology, well-being and organizational change from around the globe. The school has invited internationally recognized thought leaders to deliver public lectures and raise community consciousness about well-being.

The school aims to create a school culture that allows all students and staff to seek out and experience positive emotions, engagement, positive relationships, meaning, and accomplishment, and has planned various activities and interventions targeted at promoting the psychological well-being of students, teachers, and staff (Waters, White, & Murray, 2012). Notably, the school is committed to documenting and assessing the impact of their efforts. The school's culture is especially strong in the scientific tradition, and so an evidence-based approach has been welcomed from the outset and supported throughout the school from teachers and students alike.

Measures

The impact of the well-being survey was an important vehicle to engage the population in re-defining well-being. Our conceptual model was first envisaged by Waters and White (2012a; 2012b; 2012c), developed with feedback by Seligman, and refined in consultation with all key Senior and Junior School pastoral staff and a group of senior students. From the outset, White consulted a group of 20 student volunteers, age 16-17, using an appreciative inquiry 4-D technique (Cooperrider & Whitney, 2005), and asked what they wanted to know about their own well-being. After the questionnaire was developed, thirteen students from the school participated in a focus group, in which questions were discussed and further refined.

A similar consultation model was adopted with key pastoral staff from Early Years to Senior School, asking what staff would be interested in learning about the

boys' well-being. This enabled open dialogue with staff members about PERMA and what types of questions could be asked of the students. All Heads of House were provided with copies of *Flourish* (Seligman, 2011) and attended a number of the guest lectures focusing on well-being from a number of international experts. The resulting questionnaires were a comprehensive compilation of items and measures with student and staff input, aligned with contemporary well-being theory.

Currently, no single brief measure exists to measure PERMA for adolescents or adults. Kern and colleagues (2012) and Butler and Kern (2012) are developing such measures, and items were included in the current assessment to evaluate these items, alone and in comparisons with other theoretically relevant scales and measures. Thus, part of the assessment was used to help develop brief measures that can be used to assess PERMA in future assessments.

Method

Participants

Over a five-day period in November 2011, pastoral time at St Peter's College was scheduled to allow students in years eight through eleven to complete the questionnaire online using SurveyMonkey software. To allow for follow-up and linkage in the future to other sources of data (e.g., academic), responses were assigned a random id number, and an onsite data manager will perform subsequent linkages to academic and other school records, thus maintaining student confidentiality from the School or other agencies. Five hundred sixteen students (all male) completed the survey, with 514 complete responses received. Students were relatively evenly distributed across the grades, with 134 students in year eleven, 145 in year ten, 116 in year nine, 118 in year eight, and three unknown. Twenty percent (105 students) were sons of an Old Scholar, and 53.1% (274 students) had at least one relative attend the school. About half the sample (49.6%) was non-religious, 21.5% Anglican, 14.3% Catholic, 5.4% Greek Orthodox, 2.5% Buddhist.

In January 2012, school employees were invited via email to complete the online assessment at their convenience anonymously using SurveyMonkey software. One hundred forty-eight staff completed the staff survey (73 male, 74 female, 1 unknown), with 143 complete responses. The survey did not include demographic questions, but the sample included junior and senior school teachers, administrators, secretarial staff, and grounds and maintenance employees. Although the anonymity prevents direct tracking of individual staff members, if well-being measurement is to be successfully incorporated into the school, it is vital that the staff members support the project, and demonstrating that confidentiality would be maintained was vital in this baseline assessment.

Discussion

The measures and assessments that are completed by teachers and students each year contribute to the implicit norms and values of the school's culture, as action is impacted by measurement (Stiglitz et al., 2009). Just as multiple components are necessary to define and understand academic performance, we suggest that school assessments can benefit from including a profile of well-being indicators. We applied this dashboard perspective to consider whole scale well-being at St. Peter's College, Adelaide. The school is committed to cultivating a culture of lifelong well-being for the students, staff, and ultimately the broader community. The St Peter's College leadership team has prioritized quantitatively documenting levels of and changes in student and staff well-being over the next few years.

This is the first study to systematically and empirically apply the PERMA model with a dashboard approach to whole-school well-being. It is also the first to report on the measurement of PERMA as it is applied to the development of a strategic intention of an educational institution or organization. Currently, there is no single measure of PERMA, although adolescent and adult versions are under development (Butler & Kern, 2012; Kern et al., 2012). Thus, in the current pioneering study, we included various measures addressing aspects of these components. This study offers a baseline snapshot of the psychological functioning of the school as aligned to its mission and vision, with relations to self-reported physical health for students and staff, and job satisfaction and organizational commitment for staff.

A Dashboard Perspective on Student Well-being

Students who reported higher engagement, perseverance, optimism, and happiness had higher levels of vitality, and students who were more hopeful and grateful reported fewer somatic symptoms. The results of our study, along with other evidence linking positive well-being and physical health (e.g., Diener & Chan, 2011; Howell et al., 2007; Pressman & Cohen; Steptoe, 2010; Veenhoven, 2008) suggest that St. Peter's College may be able to promote the physical health of their students by investing in programs that promote positive psychological states, such as *BouceBack!* (Nobel & McGrath, 2012), Boniwell and Ryan's (2012) *Personal Well-Being Lessons for Secondary Schools*, and the *Penn Resiliency Program* and *Strath Haven positive psychology* curriculum (Seligman et al., 2009). Of course, our results are cross sectional and it may be that the causal direction is one in which physical fitness promotes psychological well-being, or that both feed into each other. Still, the traditional use of fitness programs and physical education instruction at schools can be bolstered by the inclusion of well-being curriculum.

Whereas global measures leave little guidance on how to proceed, the greater specificity provided by the PERMA domains are potentially more informative (Diener, 2006). For example, if a boy reports low satisfaction with life, we can try a number of general well-being interventions to breed satisfaction. But if he indicates that he is bored or has low engagement with his classes, then we can intervene to increase his interest in class with activities such as goal setting and building character strengths, which may increase life satisfaction as a byproduct of the targeted intervention. If a student scores low on relationships, the school can assist through school buddy-peer programs, through senior-junior students mentoring, or by altering a few key teachers to deliberately cultivate positive relationships with that student. Similarly, specific measures of hope and growth mindsets can be used to design goal-setting programs to assist students to achieve academically, on the sports field and in other extra curricula activities such as music or social service programs.

A Dashboard Perspective on Staff Well-being

A dashboard approach summarizing responses across groups or classrooms has particular potential when considering developing whole school approaches to well-being. In many cases, schools programs meant to develop student well-being can be narrow in focus and appear to center only on classroom interventions, overlooking the multifactorial aspects of school life. Further, a dashboard makes what is 'invisible' or 'intuitive' in so many school settings – commonly referred to as school 'tone' or 'feeling' – transparent to members of the school community. Qualitative reports from the St Peter's College community support the value of using a systematic approach to well-being measurement across the whole school community.

In the current study, staff with higher levels of well-being reported better health, even after controlling for negative affect. However, when considered by component, only one well-being indicator – a sense of meaning – was predictive. Although growing evidence supports a positive association between well-being and physical health, the type of well-being under consideration may matter, but few studies have simultaneously compared multiple aspects (Boehm & Kubzansky, 2012; Diener & Chan, 2011). Likewise, staff members who reported positive relationships with coworkers, a shared sense of meaning, and feelings of accomplishment had greater job satisfaction. The hypothesis that happy workers are more productive workers has received mixed support, due in part to inconsistent measures of “happiness” and lumping all types of well-being (including depression and burnout) together (Cropanzano & Wright, 2001; Wright & Cropanzano, 2004). Job satisfaction relates to better performance, but may be moderated by positive affect and other aspects of well-being (Judge et al., 2001; Wright, Cropanzano, & Bonett, 2007). The dashboard perspective may help disambiguate discrepant findings.

Staff members with the highest levels of organizational commitment were those with a sense of engagement at work and a sense of accomplishment. Haase, Poulin, and Heckhausen (2012) suggest that positive affect motivates individuals to invest time and energy into educational and occupational goals. Positive emotion may foster motivation and engagement, reflected by greater commitment to the organization, with subsequent better performance. Hattie (2009) asserts that teacher efficacy is one of the critical factors in determining student engagement and lifelong learning. Efforts to cultivate engagement, meaning, relationships, and accomplishments may help staff members to feel connected to the school, with greater student well-being and achievement as desirable byproducts. The dashboard approach, thus, provides important information to the School’s Leadership Team and Human Resource Manager about the specific avenues needed to be built in order to promote different aspects of work well-being and physical health.

Limitations

We have presented a single measurement strategy. All data were self-reported. Future assessments will benefit from linking the student reports to objective outcomes, such as health records, grades, and test scores. As no validated measures of PERMA currently exist, we included two measures that are under development, along with a series of other measures meant to capture the different PERMA components. There was some evidence of convergent validity, particularly in the youth survey. Reliability was weaker for the staff PERMA items, and convergent validity was unclear. Subsequent assessments will benefit from the more reliable items that are now available (Butler & Kern, 2012). Despite these measure limitations, the findings presented here offer additional validating information for these measures. Finding brief but reliable measures is particularly important to maintain student engagement in subsequent assessments.

Hattie (2009) has developed a system for using assessments to guide learning (see also Hattie, 2012; Hattie & Timperley, 2007). Scores are visibly presented, with information about how one compares to others, what achievement at a higher level would look like, and tools for change. Well-being measurement needs a similar system. The current assessment offers a preliminary step in moving toward such a system, but at this point only gives a metric for comparison and could prove an important contribution in the development of a viable approach to well-being.

Subsequent efforts at St Peter's College, Adelaide, will develop positive pedagogy, based on evidence-based methodology.

Caught or taught?

If schools are to advance traditional approaches to character development measurement is a critical step in understanding character and its role in have positive impact on students' level of well-being. Critics, including Ecclestone (2004), warn against the 'therapeutising' of education this short-term perspective suggests. We believe she has missed the very real challenges of managing well-being in schools. Norrish and Vella-Brodrick (2009), Seligman (2009), Waters (2011), Waters, White and Murray (2012), McCall, Waters and White (2012), Paweski (2011), and Paweski and Moores (2012) argue that positive psychology can be integrated into the traditional curriculum. For example, in the Australian context, Robertson, et al. (2013) tabled in their report, How did we score? Engaging young people in the development of a National Report Card on Mental Health and Suicide Prevention, the work of Burns, et al. (2010) and Slade (2009) who asserts, "...timely and evidence-based treatments are only encouraged by a small proportion of those young people who do receive care. This has a substantial effect on the overall well-being of our community" (p. 11). Kristjánsson (2013, p. 213) underscores, and we agree with him, educators must learn from advances in psychology, philosophy, and sociology, and that education should not be about the "one-way traffic" of ideas and the view that it will somehow diminish the teaching of traditional subjects.

Measurement matters. It enriches conversation. It informs strategy. It enhanced decision making and it can act as a vehicle to build stronger school cultures. Based on our experience, we believe that there are eight operational goals that should be tackled over a three to five year period to achieve the vision of becoming a positive institution and measurement is at the heart. These goals include:

1. Build executive leadership capability in character measurement
2. Define and measure well-being
3. Enhance resilience
4. Develop a change management strategy with measurement of well-being
5. Invest in building staff leadership capability
6. Implement scientifically informed programs in Positive Education
7. Evaluate the efficiency of the program
8. Develop models for positive organizational change based on measurement

From these eight overarching goals, it is possible to develop organizational objectives and strategies to employ to achieve each goal. Based upon this organizational framework, we believe that it is possible to introduce systematic change throughout a school, aligned with the existing vision and mission. Particular strategies to manage organizational change are central to the implementation of this type of whole school framework and program. As educational developments take place within school contexts, it is important that school culture is integrated. Finally, the introduction of well-being and the change model being implemented should become part of the organizational culture, and integrate this support by Senior Leadership strategy in the institution.

Conclusion: A Vision for a Positive Future

To what extent should this assessment impact policies or procedures at the school or elsewhere? St. Peter's College, Adelaide, is actively embedding well-being into all components of its institution, from the classroom, to music, to staff training, to counseling, to health care, and to the playing fields (Waters, Scholes, & White, 2011). The Senior Leadership Team has been trained in positive psychology with experts from the University of Melbourne; 150 employees have been trained in an executive positive psychology program delivered by the University of Pennsylvania; and a senior staff member has undertaken the University of Pennsylvania's Masters in Applied Positive Psychology. A large positive psychology interest group has formed at the school. An Appreciative Inquiry summit was conducted with the whole staff, with impressive reports of benefit and engagement.

The school has presented its well-being practice and research at several internal peer-reviewed conferences (Barbieri, FitzSimons, Pitt, & White, 2012; Waters, Scholes, & White, 2011, 2012; White, Murray, Waters, Kern, & Adler, 2012) and has made these publically available on the school's website (www.stpeters.sa.edu.au). St Peter's College will teach Positive education through stand-alone courses on positive psychology to infuse academic courses, pastoral counseling, and extracurricular activities with positive psychology, and to empower students and staff to live flourishing lives beyond the time and space boundaries of the School. By 2015 over 2,400 students will complete one or more well-being and positive psychology interventions. We wait with anticipation to see the contribution they will make to create a better world for all.

Schools play a critical role in establishing and maintaining positive cultural values, as many children and adolescents spend much of their time in the school environment. Educational outcomes are typically determined by tests and achievements, while subjective perspectives must come from the students and staff themselves. By directly assessing subjective perspectives of well-being across multiple domains, there is potential to change the focus and conversation toward wellness promotion at all levels in the education system.

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