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Development of student and teacher measures of Happiness Curriculum factors

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"When we are feeling hot and really tired, we bring air conditioning to our homes, and we feel happy and relaxed about it. The Happiness Curriculum is doing exactly the same thing. If I am feeling tired and stressed in other classes, the Happiness Curriculum is like an air conditioner to me."

- Grade 5 Delhi Student

INTRODUCTION

There is a global learning crisis, as education systems around the world are struggling to provide a highquality education that will prepare students to succeed in an interconnected, rapidly changing world (Desai, 2018). In addition, a majority of children in public education systems are first-generation schoolgoers or learners and do not have some of the required capacities to engage in learning due to adverse childhood experiences (Kennedy, Pearson, Brett-Taylor, Talreja 2014). Education has a large purpose to serve, and recent research suggests that a primary purpose is to create confident, mindful, responsible, and happy individuals that contribute. In today's society, developing literacy and numeracy skills is not enough, and students must learn how to think critically, interact effectively, and work collaboratively. In addition, with increasing global challenges, such as income inequality, poverty, growing intolerance, and rising suicide rates of students, there has been a growing focus on promoting student happiness and well-being (Twenge, Cooper, Joiner, Duffy, & Binau 2019). In July 2018, the Delhi government launched the Happiness Curriculum (HC) in 1,030 government schools from kindergarten to Grade 8, to focus on the holistic development of all learners. This is consistent with the vision for India's education system as outlined in the New National Education Policy 2019, as well as the global Sustainable Development Goal (SDG) 4.

As part of the program, students spend one period each day in Happiness Classes engaging in a variety of games, reflective conversations, storytelling, guided practice for mindfulness, role play, and presentations. These activities are designed to target essential skills, as well as the more holistic competencies believed to contribute to happiness and well-being.

The study upon which this report is based was designed to complete the first step toward an evaluation of the program. This step was to develop tools that would provide information to schools, nongovernment organization implementers, and government agencies concerning student and teacher adoption of the desired outcomes of the HC. The two surveys developed—one for students and one for teachers—reflect factors which are aligned with the HC objectives and learning outcomes. For anticipated use in evaluation studies, the two surveys provide a basis for the capture of student and teacher functioning on the factors of interest.

This report provides:

- a summary of the factors believed to contribute to happiness, as reflected in the HC;
- information about the process undertaken to develop a survey approach to measuring these factors; and
- a description of the issues confronting educators as they move to evaluate the program.

HAPPINESS AND EDUCATION

Happiness means different things to different people, and this diversity is reflected in the research literature. Within the context of the HC, happiness is defined from the perspective of social-emotional

skills which enable one to regulate thoughts, emotions, and behavior. The HC framing as a set of "skills" is significant and deliberate since the context is the formal education system.

The existing curriculum in India is designed to promote cognition, language, literacy, numeracy, and arts. The HC adds the goal of creating a stimulating environment for learners, with a child-centered pedagogy that focuses on children's experiences and active participation. The premise of this curriculum is that helping students develop essential skills associated with happiness will improve students' learning and life outcomes (SCERT Delhi, 2018). In the classroom, teachers provide opportunities to connect knowledge to life outside of school, encourage students to apply skills in their lives, and use a variety of engaging teaching strategies, including active participation. Accordingly, this new curriculum is expected to enable students not only improve their scholastic skills but also their co-scholastic skills of mindfulness, critical thinking, reflection, and inner stability.

HAPPINESS

Happiness is seen as an outcome of material, behavioral, intellectuall, and experiential factors. It can be enhanced by a shift from being controlled by external factors to acting according to internalized beliefs and values, caring and concern for others, making good decisions, and taking responsibility for one's choices and behaviors (Greenberg et al., 2003). These competencies are hypothesized to provide a foundation for better adjustment and academic performance, as reflected in positive social behaviors, fewer conduct problems, reduced emotional distress and improved learning outcomes. Mindfulness, critical thinking and reflection, and social-emotional skills are competencies thought to contribute to happiness and are included in the HC.

Mindfulness

Mindfulness is hypothesized to help participants feel a sense of calm, happiness, well-being, and engagement with others. It can also enhance exploration, imagination, inquisitiveness, and the ability to develop relationships, which can contribute to success in school and beyond (Scoffham & Barnes, 2011). Mindfulness supports autonomous functioning, which results in better choices, more congruent activities, and less stress and conflict.

- Awareness is a form of non-judgmental, non-reactive attention to experiences occurring in the
 present moment; it includes cognition, emotions and bodily sensations by paying attention to the
 surrounding environmental stimuli (Vago & David, 2012). It is a skill that can be learned and
 improved throughout life.
- Self-awareness is how the mind receives and reacts to experiences; it involves paying attention to oneself and knowing one's strengths and weaknesses. Self-awareness skills are thought to reduce attention and behavior problems and anxiety symptoms in children (Semple, Lee, Rosa, & Miller, 2010).
- Awareness of others is the ability to comprehend and react appropriately to societal and interpersonal difficulties. Being socially aware means being able to interpret accurately the emotions of people with whom one interacts (Cerezo & McWhirter, 2012). These skills have been associated with better social adjustment and responsible decisionmaking (Van Huynh, 2018).

Critical Thinking and Reflection

Critical thinking is an essential life skill which enables one to adapt to changes in today's world (Lucas & Spencer, 2017). Critical thinking is the ability to evaluate and judge statements, situations, ideas, and theories relative to alternative explanations to reach competent positions.

- Critical and creative thinking skills (DiYanni, 2016) can be developed through practice, and have been found to have an impact on student academic performance (Hove, 2011). Focus on students' creative thinking skills rather than only on subject knowledge helps students to explore and discover alternatives rather than simply memorize (Beghetto & Kaufman, 2014).
- Metacognition, or reflection, refers to the skills of "thinking about thinking," facilitating
 individuals' awareness about their cognitive processes and strategies (Winne & Nesbit, 2010).
 People with good metacognitive skills are aware of their strengths and weaknesses and are
 better able to evaluate their capacity (Sperling et al., 2012). A positive relationship has been
 found between metacognitive skills and academic performance (Taraban, Rynearson, & Kerr,
 2000).

Social-Emotional Skills

- Social-emotional skills enable individuals to recognize and manage emotions, appreciate the perspectives of others, establish and maintain positive relationships, make responsible decisions and handle interpersonal situations constructively. Evidence suggests that these skills contribute to the development and use of cognitive skills (OECD, 2017).
- Empathy can be defined as the affective and cognitive ability to feel and understand another's emotional state or condition (Eisenberg, 2003). It can contribute to altruistic and prosocial behaviors and is associated with psychological health. Healthy relationships with peers, parents and teachers can help enhance psychosocial development and emotional well-being, including optimism, empathy, self-esteem and self-efficiency (OECD, 2015).
- Communication skills include the ability to understand knowledge and ideas and to express these effectively in verbal, nonverbal and written communication. These skills include the ability to negotiate, persuade, transmit and interpret knowledge (Lippman et al., 2015).

Summary

The literature on happiness and well-being informs the focus of the HC, which integrates the cognitive and social dimensions of functioning. Accordingly, the objectives of the HC are:

- To develop self-awareness and mindfulness among learners;
- To inculcate skills of critical thinking and inquiry in learners;
- To enable learners to communicate effectively and express themselves freely and creatively;
- To enable learners to develop empathy and understand their expectations in relationships to build healthy relationships with peers and teachers;
- To enable learners to apply life skills to deal with stressful and conflicting situations around them;
- To develop social awareness and human values in learners to engage in meaningful contributions to society; and
- To develop a holistic approach to education in a universal context.

SURVEY DEVELOPMENT

Three processes were undertaken in the development of a measure to identify HC values among students and teachers. First, analysis of the curriculum was undertaken; followed by group interviews with students and teachers; and finally, item and scale development, informed by the first two processes.

CURRICULUM ANALYSIS

To check that the HC content reflects the HC objectives, an analysis of lesson plans from Kindergarten to Grade 8 was undertaken. The analysis noted the intended objectives and the contributing skills required to complete the lessons. A summary of findings from the curriculum analyses is shown in Figure 1. The

factors of *self-awareness*, *communication*, and *mindfulness* are those most strongly represented across the curriculum.

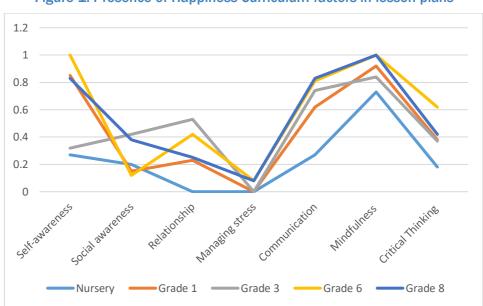


Figure 1. Presence of Happiness Curriculum factors in lesson plans

INTERVIEWS WITH STUDENTS AND TEACHERS

The researchers interviewed students, teachers and mentor teachers to understand the ideology, activity of and responses to the HC from the direct stakeholders—students and teachers.

Students

Students were asked a selection of questions following a warm-up activity to put them at ease. The main themes upon which they spoke concerned *better relationships with teachers, increased participation in class, and increased ability to focus.*

Better relationships with their teachers

Students initially found the HC very different from their traditional classroom experiences. In other subjects, teachers are restricted in terms of timeline and content, and the focus is on knowledge and providing the right answers for questions. Happiness Classes were seen as different, with opportunities for interesting activities and discussions; in particular, there were no right and wrong answers. As both students and teachers have become more familiar with the HC, interaction and discussion have increased; and teachers have the opportunity to know their students better—with the outcome perception of improved relationships between students and teachers.

Increased participation in classes

With the transition to a new classroom dynamic in the Happiness Classes, students had some difficulties adjusting and understanding what is expected of them. Since there are no textbooks in the classes, no examinations and no need to provide correct answers, students have come to feel less pressured and realise that everyone has something to contribute to the discussion. Whereas in the past raising one's hand to respond to questions was seen as an indication of academic success, students now feel more comfortable in raising their hands just to share their perspectives with their teachers and classmates. The classes appear to have decreased inhibitions or anxieties that discourage students from sharing their opinions.

Increased focus and mindfulness among students

Mindfulness sessions are a central component in the HC; these occur every day of the week (five to seven minutes of mindfulness breathing in the morning and the whole class on Mondays). These classes enable students to practice and improve their attention skills and being present in the moment. Students mentioned their experience as feeling recharged, calm and relaxed. Mindfulness classes help them to reflect before reacting. Students noted that they interact with their peers more positively and are less likely to get into fights over little things.

Teachers

Teachers were interviewed in small groups together with their peers. They identified several themes: a recognition that values need to be prioritized in education; the need to re-orient teaching methods; and increased collaboration with peers as they became more attuned to HC.

Prioritizing values over academic success

Historically, the curriculum has primarily focused on academic success and achievement. In contrast, the HC is centered on building values to make students better citizens. This curriculum has been developed to promote the importance of factors other than competition, such as better relationships, cooperation, and mindfulness. Teachers find that the HC supports these values, and have observed changes in student behavior such as student willingness to share perspectives.

Changing teaching orientation

Teachers see the flexibility of the HC as a positive development. In the absence of required standardization in content, timeline and assessment, teachers have the freedom to design classes according to students' needs and interests. One of the teachers stated: "There is no pressure to complete in one year—we can stick with the pace of the students." This statement is in contrast to how teachers and students still see their behavior in traditional subject classes, which sometimes reflects a less positive teacher-student dynamic in which teachers might yell at students.

Increased collaboration among teachers

The introduction of the HC represents a major change for some teachers. They receive one to two days of training before they start implementing the HC and continuous year-round coaching from mentor teachers; some find this period insufficient. Some teachers experienced difficulties in understanding how to teach students and follow the HC lesson plans while others have shared their strategies to help one other. Teacher responses reveal significant differences in how they view their preparedness for HC classes.

ITEM AND SCALE DEVELOPMENT

The purpose of survey development was to sample the student and teacher competencies associated with the HC. With many factors contributing to a sense of well-being and learning outcomes, attribution of effects to only one of these factors is not possible. However, the development of a survey that provides a single source of information about functioning levels of students and teachers in the factors of interest will contribute to an evaluation of the added value of HC over the sole delivery of academic teaching and learning.

Drafting of survey items relied on the insights gained from the HC objectives and learning goals, analysis of the curriculum, and interviews with students and teachers. Item drafting was targeted to the competencies of being *mindful and attentive, thinking critically and reflecting* and *social-emotional skills,* in the daily life contexts and scenarios with which students and teachers were familiar. This approach was designed to maximize the authenticity, that is, the real-life aspects, of the items to facilitate student and teacher responses. Draft items were reviewed by small groups of students and teachers for additional input.

Measurement Approach

There are several challenges to the measurement of "soft skills," social-emotional competencies, personal characteristics and values, and attitudes.

For this work, three challenges were particularly salient. The first challenge is the broadness of the goals of the HC and its description of relevant factors. For well-targeted assessments, it is essential to have detailed descriptions of the competencies of interest. Due, in part, to the recency of the concept of the HC, these detailed descriptions of the valued competencies have not been fine-tuned. The second challenge concerns social response bias, that is, the predisposition of respondents to present themselves in positive ways. The third challenge concerns the mode of assessment. How do we know whether two children are happy to different degrees when one endorses an item "I am very happy" and another endorses an item "I am happy?" Are these two children actually reporting different degrees of happiness? The answer, of course, is that we do not know.

To address the first challenge, item development was guided by the learning context and HC content, and by an extensive literature review focused on the competencies of interest. Key competencies were then targeted for the item and scale development process.

To address the second challenge, the rationale for the study needed to be communicated well to participants. Efforts were made to assure participants of the non-personal nature of the research, and, in particular, that they were not the ones being evaluated. Another way of addressing social bias is to develop items that may be less transparent than self-reporting of beliefs or attitudes. Such items might, for example, rest on behaviors or predictions of behaviors, as opposed to perceptions; this approach was followed in this study.

To address the third challenge, drafted items relied on evidential situations. Students and teachers were asked to respond to hypothetical but common daily situations, rather than to make evaluative or judgmental statements about themselves. The item development was situated in scenarios that were valid for both students and teachers while able to reflect the different role positions of the two groups.

Pilot of Survey Items

The drafted survey items were piloted across 16 schools with 218 teachers and 1,155 students (distributed across Grades 1, 3, 5, 6, and 8). Roughly double the finally selected number of items were piloted. The item format is shown in Figure 2 for students and teachers respectively. Each item has three parts: (1) the instruction to note how all of the responses are preferred, from most preferred to somewhat preferred to least preferred; (2) the stem of the question; and (3) the three response options. The stem of the question for all items presented an activity or situation that would be familiar, providing the opportunity to reflect on typical behaviors. The requirement that respondents express preferences for all of the items was to ensure rich data gathering to provide maximum information; respondents needed to read all options rather than focus only on what they most preferred.

The response options were developed to target levels of development within the scales. There are no intrinsically wrong or negative responses, in order to lower the risk of social bias. The rationale behind item design is to capture levels of the targeted skills rather than adhering to a paradigm which provides only correct versus incorrect options.

Discarded student item	Discarded teacher item			
For each question, show which response is "most like you," "somewhat like you," and "least like you," by putting a 1, 2 or 3 next to each option. You can use each number only one time. 1 = most like you; 2 = somewhat like you; 3 = least like you.	For each question, there are three options to choose from. Please choose one option that is "most like you" by circling the option and choose one option that is "least like you" by crossing out the option. You can only use each symbol once for each question.			
 If I am given a problem, the most important thing to me is: To find the solution. To think of different ways of solving it. To understand what the problem is asking. 	 If a student says that he/she does not understand, what would you do? I would tell the student to read the information again I would ask the student what exactly they don't understand I would continue with the lesson 			

Figure 2. Illustration of item format and response options

Note: These items were discarded.

Item responses and their distributions for both student and teacher surveys were reviewed followed by an analysis of how they contributed to the hypothesized scales through analysis of reliability coefficients and item clustering. Responses from Grade 1 students were discarded due to concerns about the validity of the responses. Some items also showed different patterns of response for Grade 3 students than for the older students. These different patterns could be due to literacy issues, or developmental issues associated with cognitive demand of items, or associated with emotional and social development.

The final sets of items did not adhere uniformly to the a priori attributed scales of *mindful and attentive*, *critical thinking and reflection* and *social-emotional*. Statistical analyses combined with substantive considerations led to the finalisation of the scales as shown in Table 1. One outcome of this approach is that the reliability coefficients for the scales are not as robust as they would have been had the statistical output alone been relied on. The interpretability of the information is prioritised, taking into consideration the need to establish the face validity of the survey.

Student competencies	Scale descriptions	Teacher competencies	Scale descriptions
Decisionmaking	Making decisions by reviewing the situation and assessing alternative actions; requires insight about one's possible emotional and cognitive reactions	Management	Student-centered classroom management
Focus	Being self-aware and focussed; demonstrating self-control and managing frustration and impulsive reactions	Metacognition	Encouraging student metacognition
Empathy	Thinking of and considering the other; understanding the emotions that another person may experience	Empathy	Considering students' emotional and cognitive responses in difficult circumstances
Relationships	Taking the perspectives of others into consideration in the context of relationship maintenance and facilitation	Relationships	Facilitating how students relate to each other in conflict situations

Table 1. Student and teacher scales

To assemble validation evidence for the scales, student and teacher scores were analysed. For students, scores were analysed by grade, while for teachers they were analysed by years of experience, age, and gender. As Figure 3 shows, students appear to gain greater proficiency in the competencies as they mature. This finding is consistent with our expectations of such competencies and provides some assurance of the meaningfulness of the scales. No significant or patterned differences by gender were observed across the competencies for students. There were no significant differences found for teachers by age or experience; female teachers scored higher than male teachers on all scales, with a significant difference only for *Metacognition.*^{*i*}

¹ The mean age of teachers was 36 years, with a standard deviation of 10; the years of experience, on average, was 10, with a mode of 5 and standard deviation of 10. Most frequently mentioned subjects taught were Happiness, English, Hindi, Sanskrit and Social Science. Class sizes varied widely; 17 percent included 30 students or less, 53 percent included 31–49 students and 30 percent included more than 50 students. Most of the larger class sizes were in Grades 6–8.

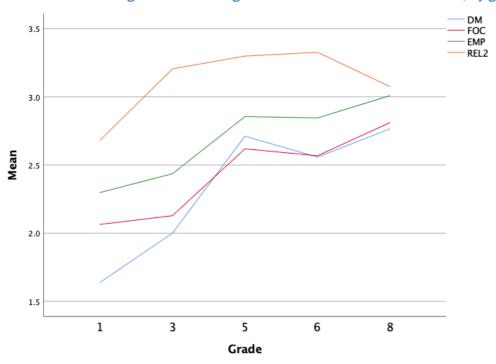


Figure 3. Increasing student mean scores across scales, by grade

Key: DM = Decisionmaking; FOC = Focus; EMP = Empathy; REL(2) = Relationships (adjusted to same scale as remaining three scales).

Surveys Summary

Analysis of student and teacher responses to the survey items reveal that different aspects of the competencies are reflected by the two groups. This makes sense, given both maturational and role differences across the groups. For example, *Metacognition* for the teachers takes the form of encouragement of this competency in students; for the students, it takes the form of insight into *Decision making* and *Self-Management*. *Empathy* looks more similar across the two groups; teachers consider how students respond in difficult circumstances, while students consider how others might respond across a variety of situations. *Facilitation of Relationships* for teachers concerns how students relate to one another in conflict situations, while students are engaged in earlier understandings of how others experience situations. These differences across the groups can be seen from a developmental perspective of growth and learning.

The two surveys represent an initial pool of items that can capture student and teacher competencies in the context of the implementation of the HC. That the competencies have been shown to vary across individuals demonstrates that the surveys have the capability of differentiating between individuals, as well as of differentiating among competencies within the individual over time. The degree to which the surveys are sufficiently fine-tuned to capture small shifts in the competencies remains to be established through a test-retest plan. Such a plan would best include additional items to build more robustness into the scales for both students and teachers. Item review by HC teacher mentors and Dream a Dream staff led to simplifying some items, rewording others to clarify them, and changing some response options. Notwithstanding these changes, some concerns remain about language complexity and phrasing.

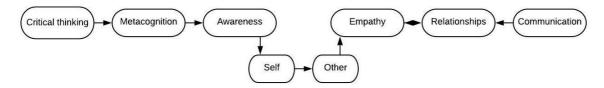
The survey scales represent the happiness factors and the intended learning outcomes. Figure 4 illustrates how the final scales map onto the three main competencies of *critical thinking and reflection*, being *mindful and attentive*, and *social-emotional skills*.

Categories of competencies	Critical thinking and reflection		Mindful and attentive		Social-emotional skills		
Sources							
Lesson plans: HC factors			Mindful	Self- awareness		Relationships	Communic ation
Lesson plans: Learning outcomes	Critical thinking	Reflection	Mindful		Empathy		Communic ation
Student scales				Focus	Empathy		
Student scales	Decisionmaking				Relationships		
Teacher scales					Empathy	Relationships	
Teacher scales		Metaco	ognition		Classroor	n management	

Figure 4. Mapping of HC factors across lesson plans and measurement scales

Figure 5 provides a conceptualization of the links between these seminal factors of happiness, illustrating the combined impact of cognitive and social factors. The figure depicts the commonality in the alignment of the theoretical foundations of the HC, its intended learning outcomes, and the student and teacher scales that most robustly capture the HC elements.

Figure 5. Structural conceptualization of student and teacher scales



DISCUSSION

The study was designed to establish whether a survey approach to measuring student and teacher key attributes that are targeted by the HC and that is assumed to have an indirect effect on both learning and holistic well-being can provide information useful for evaluation purposes. Challenges include the known difficulty of measurement of social-emotional human characteristics in "normal populations," and the influence of language on respondents' ability to respond invalid ways, particularly in the case of younger children.

Systems and schools worldwide are implementing programs that take a holistic approach to student learning and development; the HC introduced by the Delhi Government is one such approach. Such programs are implemented in countries and districts which vary in educational outcomes. For example, the shift away from knowledge-based to competency-based education is taking place in the Republic of

Korea, noted for its high academic performance in international large-scale assessments in recent years. Similar interest is indicated in Indonesia's decision to include measures of character in the national assessment system, notwithstanding its lesser success in international large-scale assessments. Each of these countries approaches the issue differently but with a common goal—the betterment of outcomes for the individual and society.

When educational systems identify systemic issues, as has been the case in Delhi and elsewhere, they are duty-bound to implement reasonable strategies to remedy deficiencies. They do not, however, have the luxury of running high-quality randomized trials to check on efficacy, due both to the considerable time needed to conduct these and to the ethical issues involved in providing some but not all constituents with the intervention.

Accordingly, the issue confronting the evaluation of the HC is that it cannot be undertaken through a strict experimental trial. All students in the Delhi Government school system are receiving the intervention, so there is no option to use control groups or randomized trials. And it will be many years before the fruits of the new trends in learning outcomes become visible. This study has taken an approach which acknowledges these limitations, and which has examined whether the HC aspirations are mirrored in the curriculum, and in teacher and student behavior. Taking this information, Figure 6 describes the decision flow model for evaluation of the HC utility and effectiveness in the longer term.

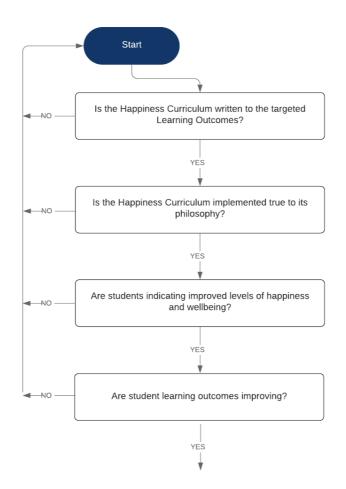


Figure 6. Decision flow model

At each point in the model, another step in the logic can be tested or evaluated. Where the answer to each logic question is "NO," that step goes to review. For example, if analysis of the HC were to identify that it was not well written to the learning outcomes, it would need review and rewriting.

From this pilot study, it was shown that the current HC targets certain happiness factors to a greater extent than others. Following the model provides an opportunity to rethink whether all of the factors included in the HC objectives are appropriately part of the curriculum. It then provides the opportunity to review the curriculum with an eye to the inclusion of additional features to target the desired elements more comprehensively.

The next question concerns whether the HC implementation is true to the intention. Many factors affect implementation. These include the provision of guidance materials to schools and teachers; professional development for educators; acceptance of and engagement in the innovation and its philosophy by schools and teachers; and physical conditions, such as class size. Evaluation of the implementation is not the same as evaluation of the curriculum or of its impact on students—it is specific to the nature of the implementation activities themselves. If the curriculum is not implemented as intended, the evaluation of student learning outcomes would be based on unfounded assumptions.

The next question explores the effects of HC implementation. In the first instance, are students indicating happiness and well-being? To explore this question requires a method of capturing such indications, and this study describes a survey method. This is the point at which the non-availability of a control study approach needs to be recalled. It is not possible in the current case to ascertain any increase in happiness and well-being scientifically because all schools were involved and no pretesting was undertaken. The next best option is to ascertain whether the levels of happiness are consistent with the expectations, as explicitly stated in the curriculum. Over time, as the implementation of the HC becomes finetuned, it may be possible to examine increases in these affective outcomes.

Ideally, additional steps in the development of tools would take place. These would include the accumulation of evidence of construct validity through concurrent measures rather than through internal goodness-of-fit approaches.

The final question goes to the impact of student happiness and well-being on learning outcomes. If the curriculum is written to its target learning outcomes, and if the implementation of the curriculum is true to its philosophy, then improvement in levels of happiness and well-being, as defined by the HC, should improve over time. The next question then is if the levels of happiness and well-being improve, will learning outcomes improve?

It is through this last outcome that the most robust psychometric impact of the HC could be monitored. Education systems are relatively better equipped to assess academic learning outcomes than socialemotional conditions. The establishment of happiness levels in parallel with improved learning outcomes would provide conclusive evidence of the positive influence of HC on children and their futures.

CONCLUSION

This study demonstrates that it is viable to generate a measure of happiness factors in the context of the HC. The use of situational items with responses that reflect increasingly valued actions is a preferred approach to self-rating scales that reflect respondent evaluation of affective states. Situational items stimulate individuals to consider likely behaviors and actions and encourage metacognition—itself a valued factor among the happiness elements.

The study also demonstrates the utility of curriculum analysis in order to explore the degree to which intended content is integrated within lesson plans and materials. The analysis revealed differences in how the various HC competencies are reflected across grade levels. This raises useful questions about how children of different levels can engage with the competencies, and the nature of the associated developmental learning progressions.

Through a wider lens, from the field research undertaken as part of this study, there is no doubt of anecdotal support for the HC in schools in Delhi. School leaders, teachers and students all express enthusiasm for the philosophy and its externalization in classrooms. It is clear that there are differences in views on the part of all stakeholder groups. Some teachers would prefer more training and guidance; others are content with the current situation. Some students are less enamored of mindfulness sessions and more of moral stories, while others express the opposite view. These are all manifestations of our individual differences and reflect a healthy and balanced externalization of these differences, which, in part, the HC has nourished.

In conclusion, moving education systems towards more holistic outcomes like happiness has begun and it is just a matter of time before we can learn to evaluate them effectively to support all our students to thrive in this new, fast-changing world.

REFERENCES

- Beghetto, R. A., & Kaufman, A. (2014). Classroom contexts for creativity. *High Ability Studies*, 25(1), 53-69. http://dx.doi.org/10.1080/13598139.2014.905247
- Cerezo, A., & McWhirter, B. (2012). A brief intervention designed to improve social awareness and skills to improve Latino college student retention. *College Student Journal*, 46(4), 867-879.
- Desai, M. (2018). Module 7 Psychosocial Theories of Child Development, *Introduction to Rights-based Direct Practice with Children* (pp. 183-214). Springer: Singapore.
- DiYanni, R. (2016). Critical and creative thinking: A brief guide for teachers. Wiley Blackwell: West Sussex, UK.
- Eisenberg, N. (2003). Prosocial behaviour, empathy, and sympathy. In M. H. Bornstein, L. Davidson, C. L. M. Keyes and K. A. Moore (Eds.), *Well-being: Positive development across the life course*. Mahwah, NJ: Lawrence Erlbaum.
- Greenberg, M. T., Weissberg, R. P., O'Brien, M. U., Zins, J. E., Fredericks, L., Resnik, H., & Elias, M. J. (2003). Enhancing school-based prevention and youth development through coordinated social, emotional, and academic learning. *American Psychologist*, 58(6-7), 466.
- Hove, G. (2011). Developing critical thinking skills in the high school English classroom (Doctoral dissertation, University of Wisconsin-Stout).
- Kennedy, F., Pearson, D., Brett-Taylor, L., & Talreja, V. (2014). The Life Skills Assessment Scale: Measuring life skills of disadvantaged children in the developing world. Social Behavior and Personality: An international journal, 42(2), 197-210.
- Lippman, L. H., Moore, K. A., & McIntosh, H. (2011). Positive Indicators of Child Well-Being: A Conceptual Framework, Measures, and Methodological Issues. Applied Research in Quality of Life, 6(4), 425–449. doi:10.1007/s11482-011-9138-6
- Lippman, L. H., Ryberg, R., Carney, R., & Moore, K. A. (2015). Workforce Connections: Key "soft skills" that foster youth workforce success: toward a consensus across fields. Washington, DC: Child Trends.

- Lucas, B., & Spencer, E. (2017). *Teaching Creative Thinking: Developing learners who generate ideas and can think critically (Pedagogy for a Changing World series)*. Crown House Publishing Ltd.
- OECD (2015). Skills for Social Progress; The Power of Social and Emotional Skills. OECD Publishing: Paris http://dx.doi.org/10.1787/9789264226159-en.
- OECD (2017). PISA 2015 Results (Volume III): Students' Well-Being. OECD: Paris. http://dx.doi.org/10.1787/9789264273856-en
- Scoffham, S., & Barnes, J. (2011). Happiness matters: towards a pedagogy of happiness and well-being. *Curriculum Journal*, 22(4), 535-548.
- Semple, R., Lee, J., Rosa, D., & Miller, L. (2010). A randomized trial of mindfulness-based cognitive therapy for children: Promoting mindful attention to enhance social-emotional resiliency in children. *Journal of Child and Family Studies*, 19, 218–229.
- Sperling, R. A., Richmond, A. S., Ramsay, C. M., & Klapp, M. (2012). The measurement and predictive ability of metacognition in middle school learners. *The Journal of Educational Research*, 105(1), 1-7.
- Taraban, R., Rynearson, K., & Kerr, M. (2000). College Students' Academic Performance and Self-reports of Comprehension Strategy use. *Reading Psychology*, 21(4), 283-308.
- Twenge, J. M., Cooper, A. B., Joiner, T. E., Duffy, M. E., & Binau, S. G. (2019). Age, period, and cohort trends in mood disorder indicators and suicide-related outcomes in a nationally representative dataset, 2005–2017. Journal of Abnormal Psychology, 128(3), 185.
- Vago, D. R., & David, S. A. (2012). Self-awareness, self-regulation, and self-transcendence (S-ART): a framework for understanding the neurobiological mechanisms of mindfulness. *Frontiers in Human Neuroscience*, 6, 296.
- Van Huynh, S. (2018). Social Awareness and Responsible Decision Making of Students in Grade 4 and 5 in Vietnam. *Journal of Education and Human Development*, 7(4), 7-15.
- Winne, P. H., & Nesbit, J. C. (2010). The psychology of academic achievement. *Annual Review of Psychology*, *61*, 653-678.