*Exploring Adolescents' Perceptions of Contemplatives Practices and Forms of Learning in Indian Secondary Schools**

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Abstract

Four different secondary schools in India that were implementing different forms of contemplative education and contemplative practices with adolescents were studied to (a) document adolescent student perceptions of such approaches and (b) explore the impacts of such approaches on students. Results revealed that students were familiar with the notion that such practices trained mental skills such as attention regulation and relaxation, and that such skills could be beneficial for life outcomes like academic learning. Students reported only moderate levels of engagement with these practices, and engagement seemed to be linked to the framing of the practice in the school. Results are discussed in relation to (a) research in the West on contemplative practices with adolescents; (b) different notions of learning that seem to be implicated in the practices observed in Western India; and (c) how different cultures are introducing new forms of education as means of addressing societal-level changes and challenges.

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Education does not change the world. Education changes people. People change the world.
- Paolo Friere (1968)

Education and Social Change

Education has long been seen as a vehicle of social reform and renewal in democratic societies (e.g., Dewey, 1902; Freire, 1968). For through education "society can formulate its own purposes…and

shape itself…in the direction in which it wishes to move" (Dewey, 1897). This is done, presumably, through the socialization of specific kinds of skills, dispositions and values that form future generations of citizens (e.g., OECD, 2019). For democratic educational institutions to speak to the pressing global challenges of our times – economic inequality, ethnic, racial, and religious division, and climate change – new educational aims and pedagogical approaches that focus on the development of the whole student, especially students' ethical and social-emotional development alongside their academic development, are needed (e.g., Mahoney et al., 2021; Osawa di Silva & Frazier, 2019). A more holistic approach could counterbalance those that focus rather exclusively on the development of students' academic skills and knowledge aimed at success in the global economy (Roeser, 2019). Even with regard to academic development and economic success, centuries of debate have revealed that both academic knowledge and skills related to attention, self-regulation, creativity, care, collaborative problem-solving and so on are critically important for a well-rounded education (e.g., Cuban, 2015). In essence, to reinvent education is also to re-envision what it means to be educated and fully human beyond the vision of "homo economicus" – a vision of the human being as primarily an economic actor motivated by material rewards (e.g., Cohen, 2014; Donald, 2019; Fox, 2006).

As Fox (2006) put it, today we need educational institutions that "put forth an agenda that carries us beyond knowledge and power for power's sake, to wisdom and power for the sake of service and community" (p. 11). How can educators attend to and cultivate young people's flourishing and motivation to be forces for good in the world (Ergas et al., 2022; Goleman, 2015)? How do they prepare students to be successful, happy, *and* ethically engaged members of society? What are the pedagogical practices and activities that are best suited for cultivating the skills and dispositions that all children and adolescents need to succeed, flourish and contribute to building a new world (see Ergas et al., 2022; Trilling & Fadel, 2009)? How can children and adolescents be motivated and engaged in practices to build these skills (Roeser et al., 2023)?

These questions are ones that educators, in many countries of the world, are currently exploring in earnest under rubrics like character education, values education, whole personality development, social-emotional learning, positive education, and positive youth development (e.g., Asah & Singh, 2019; Dorjee & Roeser, 2021; Osawa di Silva & Frazier, 2019). One feature that unites these disparate approaches is a focus on educating the whole person: body, heart and mind in ways that employ indigenous wisdom and experiential practices focused on awareness and connection, alongside modern educational methods (e.g., Fox, 2011; MLERN, 2012).

For the purposes of this paper, we use the umbrella term "Contemplative Education" to refer to diverse approaches and practices used to educate children and youth holistically. We present research findings from a project done in India in selected, private, secondary schools that were offering novel contemplative educational approaches focused on cultivating students' attentional, social-emotional, and ethical skills (e.g., Goleman & Senge, 2014). The research project aimed to explore how and why educators in these schools were implementing such approaches with adolescent students, and also, how adolescents in these schools understood and experienced such approaches. Four different

schools were selected as a focal point for this paper, and together, we believe these schools and the findings we document here illustrate larger issues of interest in the field of Contemplative Education – including (a) how contemplative practices represent novel, holistic approaches to student learning and development; and (b) how the introduction of contemplative practices in schools may constitute efforts to reinvent education in different cultural niches facing unique social challenges. Specifically, in India, we propose that the contemplative educational approaches we observed were likely educational efforts aimed at maintaining traditional cultural values and practices while also preparing students academically.

Defining Contemplative Education

What is Contemplative Education, specifically? Contemplative, from Latin root *contemplatio*, can refer to the marking out of a space for observation and attentiveness to the fullness of life – including oneself, other people, and sociocultural and natural worlds (Zajonc, 2016). Education, from the Latin root *educare*, can be defined as the "drawing forth" of children's intrinsic qualities – relational, somatic, emotional, imaginative, cognitive, attentional, and ethical in nature – and the guiding of these qualities towards fruitful personal and societal ends (Dewey, 1902). Given these etymologies, we can say that as an applied, practical approach, *Contemplative Education* (CE) is an umbrella term for educational approaches that aim to draw forth and cultivate children's and adolescents' intrinsic attentional and social-emotional skills, and their ethical dispositions, in the directions of fruitful ends such as focused attention, mindful awareness, kindness, care, compassion and altruistic motivation and action (e.g., Miller, 2015). Similar to other forms of education, CE can be theorized to consist of a theory or philosophy concerning *what* is important to teach and learn in order to understand oneself, life and the path to happiness; and a pedagogy, concerning *how* teaching and learning of the content should occur.

The theory of curriculum in CE is what can be considered a *contemplative philosophy*. Contemplative philosophies offer a means of understanding the nature of the human being, the nature of life, and how to realize flourishing for oneself and the world (e.g., de Wit & Baird, 1991). Such a philosophy also describes and prescribes the skills, dispositions and self-knowledge that demarcate the way to a meaningful, fulfilling and flourishing life (de Wit & Baird, 1991). *Contemplative pedagogies* refer to the forms of teaching and learning that occur in contemplative programs that are thought to help individuals traverse a path to flourishing. *Contemplative practices* refer to specific experiential exercises and activities that function in this regard. These include, but are not limited to, practices like meditation, art and social action, and are designed to draw forth and cultivate individuals' intrinsic attentional, social, emotional and ethical skills and dispositions in ways that are posited to lead to flourishing for self, others and the world (e.g., Dalai Lama, 2001; MLERN, 2012). For instance, many mindfulness programs teach focused attention and loving-kindness practices aimed at the cultivation of students' attentional focus and kindness towards self and others (Roeser et al., 2022). In this paper, we present research on private secondary schools in India that were implementing forms of CE that differed somewhat in terms of their contemplative philosophy (e.g., view), contemplative pedagogies and practices (e.g., path), and the intended developmental outcomes of engaging in the practices (e.g., fruits).

Contemplation in Education in Indian Private Schools

Education is the manifestation of perfection already in human beings.
- Swami Vivekananda (1924)

For over 2,500 years, the contemplative spiritual traditions of India have evolved sophisticated theories of the human being and the mind, as well as corresponding sets of mental and physical training practices, by which the empowerment of the individual, the stabilization of attention, the refinement of awareness and insight, the promotion of harmonious relationships, and cultivation of ethical values in everyday behavior (e.g., peace, kindness, fairness) can be realized (Mookerji, 1947/2003). The search for how to bring this form of education into the modern era was articulated in the early 20th century by Swami Vivekananda of India:

> We need the kind of education by which character is formed, strength of mind increased, the intellect is expanded, and by which one can stand on one's own feet. (Swami Vivekananda, 1924).

This kind of education that Swami Vivekananda envisioned was deeply embedded in a specific contemplative worldview (e.g., view or philosophy) called non-dualistic Vedanta (Vedanta Society, 2002). On this view, the source of human health and flourishing lies significantly within the mind, and contemplative practices (e.g., the path) are thought to help "uncover" or gain insight into this underlying source of wellbeing (Avinashilignam, 1970). The fruit of engaging in such practice, according to the Vedantic worldview, is both personal and communal flourishing – "for the realization of the Self and for the good of the world!" (Ranganathananda, 1988). Thus, CE in India (and elsewhere we would argue) involves the training of attention and awareness, as well as the cultivation of prosocial motivation (e.g., another orientation characterized by kindness, generosity and compassion). India has many examples of CE that differ in terms of view and path towards these common ends, and schools in this study were selected to highlight some of this rich diversity (Roeser, 2005). Nonetheless, the schools in this study were either promoting the views of non-Dualistic Hindu Vedanta, or related philosophy concerned with developing awareness and love for others put forth by an Indian contemplative in the 20th century named J. Krishnamurti (1953). The purpose of this study was to investigate student perspectives on the core contemplative philosophies and practices used in their private secondary school in Western India.

Study and Research Questions

We address the following research questions in this study:

1. How can we describe the forms of CE that were being implemented in each of the four schools under study?
2. How did adolescents in these schools describe their perceptions of the purposes or intended outcomes of CE; and how did they talk about their experiences of doing contemplative practices in school?
3. How much did students like these practices, and how much did they believe such practices (and their school experience generally) affected their ability to concentrate and to be caring?

In addition, we were interested in school-specific practices and differences between schools in adolescents' perceptions of them. Here, additional research questions were pursued:

4. Were there between-school differences in adolescent students' liking of and perceived outcomes of the practices?
5. Were the practices adolescents were asked to do in their schools differentially related to how they talked about such practices in terms of their purposes, and how engaged they were while doing them?

We discuss findings in relation to research in the West on contemplative practices in school. In addition, we discuss the implications of our results in terms of different forms of contemplative learning that accompany the use and framing of different practices. We also discuss our results in relation to how such practices may reflect a particular way of addressing larger-scale societal changes occurring in India in the early part of the 21st century and conclude with some suggestions for future directions in research and practice.

Methods

Study Design

The study design was a cross-sectional, mixed methods, school-based study of adolescent students in the seventh, eighth, and ninth grades attending four different private schools in or around a growing city in the Western Indian state of Maharashtra (e.g., Creswell & Creswell, 2017; Yin, 2018). The four schools in this study were purposively sampled because of their different educational philosophies and contemplative practices. Nonetheless, all the schools served English-speaking, middle to upper-class, primarily Hindu families. Classrooms were randomly selected within the school for inclusion in the study. There were approximately 40–50 adolescent students per classroom per grade (7-9th grades) per school. Data was collected in 2005.

Study Procedures

The study procedures were as follows: First, we gained consent from the school principal to conduct the study, and from parents regarding their child's participation in the study. For adolescent students, letters describing the study purpose and procedures were sent to parents through mail from the school principals. Passive consent was used. Parents were asked to return a form only if they did not want their child to participate in the study. Second, we interviewed the principals and collected archival material on each school to be able to describe their contemplative philosophy, pedagogy and practice. Third, we conducted focus groups and surveys with adolescent students to assess their perceptions of CE in their school. To carry out data collection with students, the first author recruited five graduate research assistants (GRAs) from the Department of Psychology at the University of Pune. The Indian GRAs served as cultural-linguistic brokers and ensured the cultural relevance of the study (see Rao et al., 2013). All of the GRAs had grown up in Maharashtra where the study took place and thus were familiar with the context. Finally, the first author directly observed various contemplative practices in the schools during multiple visits to each site.

All data from principals and students were collected during regular school hours. All interview, survey, and focus group measures were assessed in English. The first author conducted principal interviews at a convenient time in the school principal's office. Student surveys were

collected in a single classroom session of 30 minutes. The Indian GRAs were present during data collection to explain words or concepts to adolescents as needed. After the surveys, students were invited to participate in focus groups conducted by the Indian GRAs. Adolescents in each grade level were asked to self-organize into same-sex groups of between five to nine students. Same-sex focus groups were 30 minutes in duration, and student responses were audiotaped and later transcribed, corrected, and segmented into codable units before they were thematically coding by multiple coders.

Student Sample

The sample consisted of 949 adolescents. The sample was urban, middle class, 48.6% female, 93.2% Hindu and included adolescents between 12 and 15 years of age (M = 14.28, SD = 0.95). Students were in seventh (36.6%), eighth (31%) and ninth grades (33.2%).

School Descriptions

Four schools were purposively sampled for this study[1]. The first school we called *JK School*. This was a fully residential and co-educational school serving grades four to ten (n = 100 students in study, 10.5% of sample). The school is affiliated with a non-Governmental National Board of Secondary Education (CISCE), and the campus is located on a hilltop in a rural area on 55 acres overlooking a river. The core teachings on which the philosophy of the school was based were those of Jiddhu Krishnamurti. J. Krishnamurti was a famous spiritual teacher who often talked about education as a process of knowing oneself. He emphasized the importance of conscious awareness and compassion in relation to circumstances moment to moment (e.g., other people, nature, the mind) within a community as a path to flourishing (e.g., Krishnamurti, 1953). Archival materials revealed that the educational philosophy of the school was "to create the right climate so that the child may develop fully as a complete human being." The approach to CE in this school included community spaces for dialogue and reflection, extensive engagement in the arts, and the use of a contemplative practice called "astachal" that is described below.

The second school that was studied, we called Bharata School. This was a private day school serving students from grades five to ten (n = 128 students in study, 13.5% of sample). This was a school for gifted students from all over India that followed the national level board of education curriculum standards in India for public and private schools (CBSE). The school had also evolved its own curriculum from the fifth through ninth grades to educate gifted students in a unique form of education developed at the school. This unique form of education focused on collaborative learning, critical thinking, social awareness, motivation for social work, and leadership qualities. Based on archival materials, the educational philosophy of this school was "To awaken a consciousness concerning the society and nation in which one lives and consciousness concerning the whole of humanity." The educators in this school believed values were more caught than taught, and thus there was not a formal class on values/moral development. Instead, the main approaches to CE in this school focused on critical inquiry into all subjects, as well as engagement in a variety of traditional, but updated, contemplative Hindu rituals and practices. These included recitation of daily community prayers (e.g., Gayatri mantra[2]) followed by silent

[1] All school names are pseudonyms.

[2] The Gayatri mantra is one of the most popular prayers/mantras in India and is recited to invoke the

meditation (e.g., mauna[3]), extended chanting and meditation practice on Fridays, and occasional spiritual retreats that incorporated elements of classical Hindu rituals (e.g., a version of the Hindu "coming of age" thread ceremony that initiates students into adulthood status).

The third school we studied was called Vivekananda School. This private school served students in kindergarten through grade 10 and followed the curriculum set by the Central Board of Secondary Education (CBSE), New Delhi. The motto of the school was "discovering inner strength" and the educational philosophy of the school, based on archival materials, was "to enable children to discover their inner strengths and grow up to be responsible citizens of the country." The main approach to contemplative education in this school was a classroom-based personal development course, the recitation of prayers, and a school-wide meditation practice involving focused attention on the breath that was done at the beginning (morning) and end (afternoon) of the school day for approximately 5 minutes.

The fourth school we studied was called Saraswati School. This school served students in kindergarten through grade 10 and followed the state certification board of Maharashtra's curriculum (e.g., MSBSHSE). The educational philosophy of the school, based on archival materials, was (a) provide value based education of high standard with excellent moral character through good discipline and affectionate care; (b) provide opportunities and facilities to help students grow physically strong, mentally sound and intellectually sharp; (c) inculcate human values in students and to make them appreciate beauty in all forms: literature, art, music and nature; and (d) educate and train students to become responsible citizens who have a scientific outlook and strong roots in the rich tradition, heritage and culture of India. While the school has no formal motto, it promoted the idea that science and spirituality together can promote peace, democracy and tolerance in the world. This school implemented a classroom-based student recitation of the Gayatri Mantra (e.g., a prayer) at the beginning and end of the school day, and a session of meditation and yoga on Saturdays (when schools are in session in India).

Measures

To assess the view, path and outcomes of CE in these four schools, the authors collected principal interviews, archival information, and student surveys and focus group data. Interview, survey and focus group measures can be obtained from the first author (see also Rao et al., 2013).

Principal interviews assessed the school leaders' description of the philosophy of the school (view), the kind of contemplative practices that were being implemented with students (path), and how and why these practices were chosen in relation to student outcomes (fruit). Interviews with school leaders were transcribed and quotations regarding the view, path and fruits of contemplative practices were extracted. Principals in two of the four schools were interviewed formally, and informal meetings with the other two school principals were used to collect data on the schools' approaches to CE.

Archival information about each school was drawn from the prospectus of each school - a document

blessings and the arising of true knowledge and light within one's mind (Rajhans, 2018).

[3] In Sanskrit "mauna" can be translated as "silence of the mind" and can be understood to be a practice of silent meditation.

given to prospective parents and students that explains the school and its mission, the grades it served, and its pedagogical approach and resources. The data in the summaries of each school presented below were drawn in part from these archival sources.

Student survey data was collected and entered by the Indian GSRAs. The first author cleaned the data and created scales from survey items (see Rao et al., 2013). In this study, we examined 3 single item questions, assessed on a 5-point Likert scale (1 = not at all true of me, 3 = somewhat true of me; 5 = very true of me), regarding adolescent student perceptions of the contemplative practices implemented in their schools and the impacts of such practices on their attention and character. Specifically, questions examined in this study aimed to assess students' overall experience/engagement with the practices: "I like the periods of silence / meditation / prayer at the beginning/end of school." To assess the fruits of doing such practices, we examined two survey items: "My concentration has improved since I have been at this school" and "I think this school has helped me to become a better person." In addition, given the focus in all of these schools on creating prosocial, caring students, we also included data from a question asking students "If you had three wishes, what would you wish for?" These responses were coded for other-oriented, altruistic wishes by two raters who established a high level of inter-rater agreement (93%). All disagreements were discussed by raters and 100% agreement was established. After coding the presence of altruistic responses, we created a variable indexing whether or not students mentioned an altruistic wish in their three wishes. This variable was coded 0 = no altruistic wish or 1 = altruistic wish present.

Focus groups. A total of 29 focus groups with students were conducted (JK School *n*=5; Bharata school *n*= 2; Vivekananda School *n*= 14; Saraswati School *n*=8). Approximately 200 adolescent students participated in these focus groups. The subsample of students in the focus groups mirrored the larger sample in terms of gender, age, and religion (see Rao et al., 2013). Questions asked during the focus groups that were concentrated specifically on the contemplative practices used in the school are highlighted in this report. Specifically, the focus here is on a question to students asking about their perceptions of the purposes or intended impacts of doing these practices, as well as their actual engagement in the practices in school.

Focus group data from students was coded through an interactive, bottom-up process by multiple raters. After reading the material over and over, a thematic coding system was developed and refined to account for the range of student responses (Creswell & Creswell, 2017). This coding scheme was then used by two raters to code the actual data and establish inter-rater agreement. Coding schemes can be obtained from the first author and reflect the ranges of responses adolescents provided regarding (a) the perceived *purposes* for / fruits of doing contemplative practices in school and (b) their *experience* doing such practices in terms of engagement (e.g., positive, neutral, negative). Acceptable interrater reliability was established for coded purposes (91%) and experiences/engagement in the practices in school (83.9%). All disagreements were discussed by raters and 100% agreement was established. The coding manuals for these questions can be obtained from the first author.

Data Analysis

Principal interviews and archival data were used to describe CE in each school (Research Q1). Descriptive sample-level data from focus-groups on adolescent students' perceptions of the purposes of their school practices, as well as their reported engagement with them, were used to address Research Q2 (see Figures 1-2). Descriptive results from survey data on students' reported liking of the practices, their perceptions of the impacts of these practices on their concentration and prosocial motivation were used to assess Research Q3 (see Table 1). Cross-tabulations were used to examine between-school differences in thematic codes from the focus groups regarding the perceived purposes and levels of student engagement in contemplative practices (Research Q4, see Table 2). Selected quotes from students were used to illustrate the general pattern of results revealed by these cross-tabulation analyses. Finally, in relation to Research Q5, analysis of variance techniques was used to examine mean-level, between-school differences in students' survey responses to liking the practices and their impacts on concentration and prosocial motivation.

Results

Full Sample Results

The first research question concerned how the sample of approximately 1,000 students in these four private schools viewed the implementation of the kinds of CE in their schools. Figure 1 presents the thematic codes derived from adolescent students' focus groups regarding their perceptions of the *purposes* for doing contemplative practices in their schools. Themes are presented in order of most to least commonly expressed. The most frequently reported purposes students saw for doing such practices were to relax (e.g., stress reduction) and to improve concentration (e.g., attentional focus). Additionally, some students reported that the purposes of such practices were to improve academic learning on the one hand, or to commune with various cultural notions of the transcendent reality (e.g., divinity), on the other.

Next, we examined adolescent levels of engagement while doing the practices in school. Figure 2 shows that, in general, 51% of the thematic codes in the focus groups reflected adolescent reports of positive engagement during CE practices in their schools. Approximately 30% of the codes reflected students being disengaged or distracted during contemplative practices, and 13% of these codes reflected sleepiness, lethargy, or a lack of feeling during these practices. It is interesting to note that the final 6% of codes referred to adolescents' perceptions that other students were disengaged during the practices.

Survey data was also used to examine students' engagement and potential outcomes of doing these practices (see Table 1). In general, sample-level means (presented in the first column of Table 1) showed that students across all schools reported "somewhat liking" the contemplative practices implemented in their schools. Furthermore, students reported that these practices "somewhat" improved their concentration, and generally agreed that their schools had improved their character and made them better people. Approximately 38% of students reported altruistic motivation when asked what they would do if they had three wishes.

School-Specific Results

Next, to address Research Q4, student focus-group and survey data were examined in terms of between-school differences. Results from cross-tabulation analyses showed that

adolescents' perceived purposes and engagement with the contemplative practices in their schools showed significance between school differences (see Table 2). Results showed between-school differences in the perceived purposes of the practices ($\chi^2(33,164) = 104.61$, $p < .001$), and in students' levels of engagement in the practices ($\chi^2(9,306) = 61.61$, $p < .001$). We discuss these results below. In relation to Research Q5, results of the analyses of variance of the survey data also revealed significance between school differences in the liking of the practices ($F(3,799) = 36.30$, $p < .001$), and in the outcomes hypothetically related to these practices. This included between school differences in perceived improvements in concentration ($F(3,799) = 8.31$, $p < .001$), character ($F(3,799) = 6.41$, $p < .001$), and altruistic motivation ($F(3,947) = 6.37$, $p < .001$). In the next section we summarize findings for each school separately and in relation to its contemplative philosophy (e.g., view), practices (e.g., path) and intended outcomes of the practices (e.g., fruits).

JK School –Resting in Awareness at Sunset as a Community

Results of both focus-group and survey data showed that students in JK School saw the purpose of the practice of contemplative practice in their school - astachal - as a time to plan, dream of the future, or to reflect on the past. In addition, students were more likely to say they didn't know the purpose of the practice compared to students in the other schools. In general, they reported high levels of engagement in the focus groups, but also reported the lowest levels of liking the practices in the survey compared to students in the other schools.

An interview with the principal of a JK School revealed linkages between the school's contemplative philosophy, pedagogy, and practices in relation to cultivating contemplative minds among students. The principal described the school's ultimate goal as that of "helping the children to become more aware, more cognizant of suffering and to be moved by the question of how to escape it." He suggested that this questioning and the journey it provokes are the "bedrock" of the school - the reason for its existence. Student exploration is encouraged by providing a daily affordance for being together, in community, in silence at the day's end; as well as facilitating healthy relationships among peers and with adults. Existential questioning and dialogue were also facilitated in the school by a specific class in which communication and self-awareness were the focus. The principal also talked about love and affection as "permeating the atmosphere", as well as the constant focus by educators on the importance of an awakened life.

"To be is to be related," the principal of the school stated, quoting from the contemplative practitioner J. Krishnamurti. Throughout the interview, the principal discussed various ways that students learn through communication and being in relation within a community. To give a concrete example, he describes a structured conversational space at the school designed for students to – in theory – openly listen to each other, consider different points of view and learn how to become non-judgmental conversational partners. The younger children, he explained, only want to talk about themselves, but as they grow and mature, they become less egotistical. Because this is taking place in a group format, other students "see that the shift is possible" the principal said, and he saw this as a powerful lesson that one learns from peers.

This conversational space was also designed to teach students how to express their thoughts and

feelings and note and label their thoughts and feelings. The principal noted, "You may be experiencing anger but not [be] aware that you're angry, so learning what different states are through interaction can be helpful to the development of awareness." In fact, the principal believes, as did J. Krishnamurti, that conversation is more effective than traditional Buddhist education models that emphasize memorization of philosophical arguments for learning about one's mind (Krishnamurti, 1953). He believes that many profound philosophical teachings are embedded in relational living and that the development of awareness in the context of relationship is key in CE.

Consistent with this view, the daily contemplative practice that adolescents participated in at JK school was called "astachal." Astachal can refer to the hem of a saree, or more generally to the border region between two things. In this context, astachal referred to witnessing the sunset together as a community, and therefore the border region between day and twilight. Every evening, for a period of about 15 minutes, the school came together as a community outside on a hillock and quietly witnessed the sun setting. Adolescents were instructed to be silent as a community, but each person could do as they wished if they did not disturb others (e.g., sit quietly, read, listen to music, daydream).

The principal's described his view of the purpose of astachal in this way:

> *The rationale for astachal is linked to the process of simple awareness of the mind. It's just an occasion for a child to be quiet and begin to just be aware of what is taking place instead of getting carried away by thought processes.*

This practice, based on the teachings of J Krishnamurti, can be likened to open-awareness meditation – attending in the present moment to whatever is arising in the field of sensation-perception, emotion, and thought in a curious and open way (e.g., Dahl et al., 2020). This is different from focused attention meditation, where the goal is repeated return of attention to an intentional focal object of meditation. The principal further described open-awareness practice during astachal:

> *There's daydreaming that's happening, or some remembrance of things past or feelings, among the students. Or there is a cloud there or the sound of a bird or music from the village down below. For the mind to simply be in awareness of whatever is, <u>is</u> the critical element. The practice I am describing is not one of being conscious of distractions and then getting back to some other conscious doing of another kind, but just to simply be in awareness of what's taking place. I think that's the seed – being in awareness of what is.*

An explicit description of the purpose of the practice, and instruction in what do to during astachal, were notably and consciously absent, however. The principal stated that:

> *In the context of the astachal, however, we're not even discussing those things or talking to the students about all of that. We try to talk about a few things to children – things about just being simply aware of your breathing and about how there seems to be something in the mind—*

> *some part of us, perhaps, that is quite different from the way we normally experience our relationships, our feelings and our thoughts. And there is an exploration into that. There is a journey into that. I think that's speaking in a certain way and making the space available with minimal telling of "don't do this, don't do that." Just let it be. Some of them are reading. You see them reading for weeks on end. And suddenly she'll look up at a cloud and something quite different may happen.*

The principal appears to be describing how the practice of resting in awareness can strengthen students' ability to be aware of the mind from a psychological stance of an observer, and thereby to dispel the tendency to fuse with its ever-changing contents of the mind. That is, resting in awareness cultivates our capacity to simply witness ever-changing experiences with equanimity. This can lead to insight into self and relationships with others. Resting in awareness is thus beneficial as it calms, clarifies, and heals; and the fruit of the practice is conscious awareness, living, learning and relationships. While the principal saw astachal as an important activity for cultivating awareness, he spoke much more about the importance of relationships among children and between the children and the adults.

Data from students (see Tables 2-3) showed that those in JK school reported liking the practices "somewhat" – a value lower than other schools. In focus groups, students' most frequently mentioned purposes for engaging in astachal were "thinking about the future or the past," or "not actually knowing the purpose." As one 7th grade male noted:

> *I don't know why we have astachal each day. I don't know what it's about…sometimes I wonder why we have this period of silence. I want to ask the principal what it is about.*

On the other hand, it was also clear some students did understand the purpose of the practice. One female 8th grader noted that doing astachal at the end or "hem" of the day was significant:

> *Astachal is like sunset. We see the sunset, with the beauty of it, we can forget about everything for fifteen minutes and then get back to work again. I think they've kept astachal only in the evenings because maybe you can look what you've done the whole day. The whole day, all you came across, all the bad thoughts, whatever happened through the day – you tend to leave it all in the air. You have a clear mind again after.*

Another noted the purpose was not singular:

> "*It just depends on you. What you want to think, how you want to think. No instructions. You just sit there. It's a time to refresh yourself from whatever troubles you throughout the day* (Female, 9th grade).

Focus groups also revealed that students in JK school were positively engaged in the practices. One seventh-grade female student said it was hard to stay still or quiet during astachal, but that just being with oneself was okay and even beneficial.

> *I think astachal is basically to be with yourself. You do anything with yourself. You can either think, you can dream, you cannot think at all. You can be blank. You can do anything* (Male, 8th grade).

nonetheless,

> *For me actually, I've never been quiet for astachal. I'm fidgeting around. But a day when I'm really upset I'll just sit alone and think for myself. I think that day I really came to know what astachal is. Because I've always been like, astachal is fifteen minutes of silence, that's all. You just have to sit, listen to music and get up. But when you actually feel that beauty of silence coming into you, life comes back to you. Your soul is like new again. If you really keep silence, it's a really good part of it* (Male, 9th grade).

Finally, as the principal had suggested, it did appear that over time, some students reported going from reading or not being interested in astachal to finding some value in it for themselves.

> *I remember one day I was reading a book in our astachal time. I didn't pay too much attention to myself. Then the next day when I paid attention to myself, I realized there was no point in reading the book during astachal. Instead, you can reflect on your own mistakes and work on them* (Male, 7th grade).

> *Usually I just read a book. Sometimes* I don't have any book to read, *I'll just sit quietly and I'll think about things. Sometimes I'll realize that I've changed a lot. Sometimes I realize that I've not changed. It's something like all the feelings getting to me and I'm thinking over it* (Female, 7th grade).

In the end, CE at JK School seemed consistent with the view of education of J. Krishnamurti who believed that "truth was a pathless land" (Krishnamurti, 1929) and that no practices other than those of awareness and being in relationship with others were necessary to find happiness. Students seem to understand this idea, though it took time given the unstructured nature of the approach to CE in the school. J. Krishnamrti once noted that "Understanding comes only through self-knowledge, which is awareness of one's total psychological process. Thus education, in the true sense, is the understanding of oneself, for it is within each one of us that the whole of existence is gathered" (Krishnamurti, 1953, p. 17).

Bharata School - Contemplation in Service of Social Change

Bharata School served gifted students from across India. The school motto was "motivating intelligence for social change." Archival data on the school explained:

> "…our school realizes that changing our society is a Herculean task and what is perhaps needed is a 'meeting of minds'- thinking minds who want to change things for better. Our school name (not the pseudonym) means "Awakener of Knowledge," and our school aims to direct such awakened minds towards work in the fields of Education, Research, Organization, Development, and Health."

Data showed that students in Bharata School seemed to really like the contemplative practices they did in school (see Tables 2-3). In focus groups, students in the school reported that the development of prosocial motivation to serve, and opportunities to connect with God/Divinity and one's true nature as core purposes of the CE practices in their school. They also reported generally positive engagement with these practices.

One 9th grade male student explained how prosocial motivation was cultivated in these sessions:

> *In some prayers, we give thanks to those who sacrificed for the freedom of our country. We also remember those who helped improve our country. Finally, we also spend time thinking about what we ourselves might do to improve our country.*

Students discussed how the meaning of the prayers were explained to the students:

> *The teachers will also explain the meaning of the prayers, so when we are praying those prayers, we have the meaning behind it in our minds. The prayers have helped me to build a stronger idea in my mind that I have to do something for my country, for my community. And every time the prayers say that I think "I have to do it." And so now, for 4 or 5 years, it [this idea] has been very strong in my mind – that I have to do something. I have developed this idea in my mind* (Female, 8th Grade).

Another shared how the prayers they were taught are said for the benefit of others.

> *There is the Gayathri Mantra we recite – this is not for us but it is an offering for others, for the universe* (Male, 8th Grade).

A female student talked about the Friday session of prayers and meditation called "upasana." She noted that upsana referred to "meditations, prayers or really the idea of going nearer to God'." A male student added that doing these "prayers really help us to understand, 'who am I?'" When asked what he meant, he replied "Shivo Ham (I am Shiva)." This is a version of the core teaching of Vedanta, that the individual person and the Supreme Reality are, in the end, one. Meditation and prayer are seen as royal roads leading to this realization (Vedanta Society, 2002). In general, students in Bharata School seemed deeply engaged in, and understanding of, the CE practices in their school.

Vivekananda School - Meditation on the Breath

The educational aim of the third school was "to enable children to *discover their inner strengths* and grow up to be responsible citizens of the country." There was a sense in this school that discovering who you are is important to finding out one's strengths in a concrete sense - what you love to do and are good at in life. In addition, there was a sense that discovering one's passions and talents was also the discovery of a storehouse of motivational energy, wisdom, and love. Again, this is a basic notion of the Hindu philosophy Vedanta (Vedanta Society, 2002).

Vivekananda School's contemplative practices consist of both daily and weekly meditations. Each day, for 5 minutes in the morning before classes begin and 5 minutes in the afternoon, the teachers and students practice a form of breathing meditation referred to as *anapana sati* or awareness of the in-coming and out-going breath. The principal described it in this way (as *anapana*):

> *The first step to the meditation known as anapana is breathing in and breathing out and just concentrating on your natural breath. We do it in the morning for five minutes before we start the day and we do it now at 3 o'clock every day. Everybody who is on the campus, including the sub-staff, do it. We just calm down. Even if the children are tiny, they must learn this. It is very difficult to concentrate on your natural breath.*

In addition, once a week the school held an assembly where all the students, teachers, and staff pray and practiced meditation on the breath together for longer periods.

Data showed that students in Vivekananda School reported lower levels of liking the contemplative practices in their school compared to students in other schools (see Tables 2-3). In focus groups, consistent with the school motto and focus on developing inner strength, students in Vivekananda School reported themes associated with the development of concentration as an important reason for doing the practices. In addition, in focus groups, these students reported the most disengagement during the practices compared to students in the other schools.

For example, students were asked about the purpose (e.g., fruit) of doing the meditation for 5 minutes in the morning and afternoons in their school. Many responded "to increase our concentration" and linked this to relaxation. One 9th grade female noted:

> *It is very difficult for us to concentrate, like we need to concentrate on our breath, but if we concentrate actually for all those five minutes you really feel better than what we were feeling five minutes before. It causes relaxation and good thoughts in our minds.*

Other students noted:

> *When I joined this school, I thought this was useless but with this practice going on, right now I am fine…now it increases my concentration* (Male, 8th grade).
>
> *Sometimes we have, there is a lot of noise around you and it is difficult for you to concentrate. That is an art actually.*
>
> *Concentrating when there is a lot of noise around you* (Male, 7th grade).

At the same time, students were more likely than those in other schools to talk about experiences of feeling disengaged during these practices, or feeling some resistance to being made to do the practices. They also reported generally feeling like the practices were either too long or too difficult. Part of this seemed to be related to the instructions that students were given: they should be able to sit, not concentrate on anything in particular except the breath, and let their minds be blank. Students reported this was difficult and not necessarily their experience.

> *Sometimes if we have tension, I just close my eyes and thoughts are coming and going. I don't concentrate on breathing* (Female, 9th grade).
>
> *The teachers say that your mind should be clear and no thoughts should come, but throughout the day, a lot of activities take place and it's not practical or possible. That is why we keep on thinking about the incidents that took place and which are about to take place* (Male, 9th grade).

Overall, data from students in Vivekananda School suggested the students did not really like or engage with the practices, and were perhaps a bit unclear as to how to practice. Although they seemed to understand the purpose of the practices, they did not seem that motivated to engage in meditation on the breath as it was rather difficult.

Saraswati School - Rote Recitation of Prayers at Beginning and End of the School Day

The final school, Saraswati, was implementing CE in terms of having students repeat prayers at the beginning and end of the school day that were rote memorized. In addition, during Saturday sessions, they engaged in more intensive meditation and prayers (schools in India meet on Saturdays). Compared to students in other schools, results showed that students in Saraswati School reported some of the highest levels of liking the contemplative practices in their school (similar to Bharata School, see Table 1). Oddly enough, at the same time, during focus groups, students were most likely to report themes about being sleepy, lethargic, and not really liking or even hating these practices compared to students in other schools (see Tables 2-3).

In focus groups, students in Saraswati School reported that the purposes of doing the prayers and meditation practices in their school were to improve academic performance. Interestingly, there was some sense that although the students were asked to recite prayers every morning and afternoon, they didn't really know their meaning. In one focus group of 9th grade males, the interview asked: "What is the meaning of the prayers that you say in the morning?" One student responded, "It is not clear." The interviewer then asked the whole group, "How many would say that it is not clear what the meaning of the prayers are?" One student looked around and said - "All of us." Another clarified:

> *Some prayers are like, we do not know them because they are from the ancient scriptures and that language we don't understand. So, we only memorize the prayers and we recite them. In this way we can improve our memory* (Male, 9th grade).

Another added:

> *We pray so that we build confidence in our mind and this allows us to do our work more properly and with more concentration* (Female, 8th grade).

Overall, it seems like the rote repetition of prayers was not well understood by the students in Saraswati School. In addition, students were not that engaged in these practices, and the primary reason for their doing them was related to academic performance.

Discussion

Educational renewal is seen as an important vehicle for social change (e.g., MLERN, 2012; OECD, 2019). A contemplative education (CE) approach to educational renewal focuses on the intentional cultivation of attention, awareness, and prosocial motivation in students and educators alike through experiential practices and interpersonal exercises (e.g., Goleman & Senge, 2014; Roeser, 2019). The schools in this study were all offering forms of CE that drew upon classical Indian spiritual traditions, practices, and exercises to strengthen students' attention, awareness, and prosocial motivation. These were examples of what Fox (2006) referred to as the integration of premodern indigenous wisdom, values, and practices into post-modern educational curricula as a means of promoting generational social renewal (see Table 3).

Aims of Contemplative Education

The traditional wisdom, values and practices that were being incorporated into the secondary schools that were studied here included: (a) sacred Indian worldviews regarding the potential

of the human being (e.g., "discovering inner strength"); (b) traditional Indian spiritual values such as flourishing for self and world as the highest goals of human life (e.g., "motivating intelligence for social change" – see Rangathananda, 1988); and (c) spiritual practices like prayer, meditation and rituals (e.g., astachal, see Table 3). Given that India and Tibet were, arguably, the origin places of CE in the form of monastic traditions and learning centers such as Nalanda University (see Thurman, 2006), it is perhaps not surprising that innovative Indian private schools are looking back to culturally traditional practices and ways of education and learning in Hinduism, Buddhism, and other forms of indigenous India spiritualities for use in contemporary times. It is also not surprising that Indian parents with financial means would want to send their children to English-medium, private secondary schools that provided both the best academic education, as well as a kind of values education that emphasized traditional Indian worldviews, values, and practices. We found, for instance, In a previous study using this same sample of students in India (see Rao et al., 2013), that the loss of traditional cultural values and practices in young people due to globalization and large-scale cultural change was a major concern of educators and elders alike in the city in which this study took place. Thus, the blending of traditional and modern educational approaches, perhaps as a means of preserving and transmitting traditional Indian worldviews, values, and practices to a new generation of Indian youth (e.g., that God dwells within as oneself and one should meditate on this), was one of the key findings from this study.

The kinds of culturally- and spiritually-grounded approaches to CE studied here, aimed at preserving and committing traditional values and practices, illustrate rather different forms of CE, and different types of teaching and learning (see below), than those being implemented in Western countries in relation to movements like mindfulness in education (see Schonert-Reichl & Roeser, 2016). Approaches to CE in the West have been largely secular and used in public schools; and take recourse more in scientific worldviews (e.g., the evolved brain that can be mentally trained); (b) profane views of the human being (e.g., homo-economicus); and (c) "secularized'' contemplative practices (e.g., the body scan; see Roeser et al., 2023). In the West, CE has been cast more as an approach to prevent mental health problems and promote well-being than in terms of cultural values preservation and transmission. Such secular approaches have been criticized on numerous grounds, including too great a focus on self and personal growth and too little of a focus on concern for others, ethical development, and social renewal (see Ergas & Hadar, 2019; Roeser et al., 2023). Future research on CE might focus attention on understanding how macro-structural features of nations all over the world (e.g., history, cultural traditions, societal change, level of economic development) shape the aims, development and implementation of CE (see Table 3).

Adolescents' Perceptions of Contemplative Practices

We were particularly interested in how adolescents perceived the contemplative practices to which they were being exposed in their secondary school. We found that youth were generally aware that the implementation of prayers, meditations and other rituals in their schools were forms of mental training aimed at developing positive human qualities like attention regulation, awareness, kindness, and compassion (see MLERN, 2012). The idea that by training the mind through contemplative practices, one could

learn to relax, strengthen attentional focus, and improve character seemed generally understood by adolescents in the study. These purposes are very similar to those investigated by studies on CE in school settings in the West (Roeser et al., 2022). Unlike in India, however, the idea that there is something called mind training that can lead to better attention, less stress, and character values have only recently been introduced to children and adolescents in the West, and thus imparting this kind of background worldview to students is an essential aspect of such programs, often down through scientific means (e.g., the science of mental training and the brain).

Our results here also showed that although the adolescents knew that the practices they were doing in school were meant to cultivate positive qualities, they showed only modest motivation to engage with them. In fact, only about 50% of the statements that Indian youth made during the focus groups regarding their experience of the practices suggested that they found them engaging. Interestingly, these results bear some resemblance to those found in a recent large-scale study of mindfulness training for adolescents in the classroom in the UK (see Montero-Marin et al., 2023). In that study, on average, only about half of the adolescent participants reported that they liked the school-based mindfulness program. In addition, very few reported doing the practices outside of school.

Are the kinds of contemplative practices used in schools in diverse cultural settings across the globe meaningful, interesting, and engaging to youth (Roeser et al., 2022; 2023)? We remain unsure. Our results, and those from other studies, suggest that educators who are implementing CE during adolescence in particular face a significant "problem of motivation" for engaging students at this age. The universal and therefore, mandatory, nature of offering contemplative practices in secondary schools requires educators to think carefully about programming that motivates adolescents by addressing their stage-specific needs for autonomy, belonging, competence, mattering, transcendence, and wisdom (Roeser & Pinela, 2014)? Future research in diverse cultural settings might explore which kinds of practices, for which kinds of goals, are most engaging, motivating, and vitalizing among adolescents. Perhaps framing contemplative practices through a blending of scientific and traditional cultural worldviews could better motivate and more effectively engage adolescents who question everything during this life stage. In India, for instance, the theme of wanting more scientific explanations for phenomena both natural and religious, and less reliance on superstition and traditional belief systems, was one mentioned by these same youths (see Rao et al., 2013).

Between School Differences and Forms of Teaching and Learning

While the aims of contemplative practices may be differentially motivating for youth, so too may the forms of teaching and learning that go on around such practices. For instance, in JK School, the ritual of astachal was being practiced as a form of open-awareness, but the practice was not really explained rationally to students. Results showed that the adolescents in JK School were more likely than students in other schools to say the purpose was just to sit, be aware of the mind and surroundings, and to generally rest in awareness. However, even though some students did report understanding and appreciating this practice; most of the adolescents surveyed reported liking this practice less than students liked practices in other schools. What is the appropriate amount of

structure and explanation that is needed around such practices to engage youth?

The practice of astachal at JK can be compared to Bharata School where the implementation of prayers, meditation and rituals were explained to students in contemporary terms. The motto of this school was "motivating intelligence for change" and students perceived clearly that this was a central purpose of engaging in the contemplative practices in their school. Furthermore, students at Bharata also reported that they like such practices the most compared to students in the other schools, and that these practices improved their concentration, character and perhaps, altruistic motivation. Was the approach in Bharata, in which experientially practices were explained and scaffolded a bit more, more developmentally appropriate and therefore motivating? More research on this question is needed.

The comparison between astachal and the forms of CE at Bharata School highlight the importance of considering issues of student motivation, as well as the forms of contemplative teaching and learning in any given school around such practices (e.g., Hart, 2004). For instance, to fully understand the impacts of contemplative practices on students in various settings (e.g., awareness of sunset, focused attention meditation on the breath, rote repetition of prayers), it is useful to differentiate between different forms of teaching and learning that characterize different practices – specifically, procedural and declarative forms of teaching and learning (see Table 4; Ten Berge & Van Hezewijk, 1999).

Procedural learning refers to learning <u>how</u> to do something and is associated with what might be called skill or habit learning. Procedural learning is often non-conscious and focused on motor behaviors and the body (e.g., a tennis stroke). The memorization of texts, recitation of prayers, or the learning of focused attention meditation where, in each case, the object is to focus attention on a single thing (words, sounds, breath) – are all forms of procedural learning. It is learning *how to do something* via sustained practice, mentoring, and role modeling. There is considerable research showing the importance of learning procedural skills like attention and emotion regulation, empathy, perspective taking, and compassion for cultivating well-being and positive relationships (Dahl et al., 2020), academic and labor market outcomes (Chiteji, 2010; Moffitt et al., 2011), and perhaps even prosocial motivation across the lifespan (Roeser et al., 2013).

In a paper on teaching and learning in a Rinzai Zen monastery, Hori (1994) describes how procedural learning in a Zen monastery often takes the form of learning without understanding and, relatedly, teaching without teaching. He gives the example of a novice monk being put in charge of cooking for all the monks in the monastery without any explicit teaching by senior monks on how to do this. The novice may learn how to cook through observation of role models, repetition, and ritualized behavior according to traditional prescription, but there will be no formal instruction. According to Hori (1993), this is called "ritual formalism." Its aim is hypothesized to be subject- or person-centered learning – the focus is on learning about oneself and certain personal qualities like self-reliance, persistence, and resilience; rather than learning how to master a task like cooking (see Table 4).

It appears that astachal was a practice in which adults taught without teaching, and students were required to learn without understanding. The principal was rather explicit that this was his

approach. It is likely that such an approach is rather challenging, and potentially demotivating in certain settings – monastic or not. For instance, in JK School, the lack of teaching for understanding may have alienated some youth who lacked initial motivation to engage in the practice. On the other hand, comments from other students showed that this approach can be appealing, motivating. Even though many students did not seem to understand or even like astachal that much, it appears that it was successful in achieving the aim of getting them to begin to sit with themselves, reflect and plan, and gradually to see for themselves the value of simply resting in awareness.

Ritual formalism is also a way to describe the rote recitation of prayers where the meaning is unknown to students. This approach appeared to be used at Saraswati School (and perhaps other schools) where students reported not knowing the meaning of the prayers they recited each day. They were engaging in a practice without understanding it conceptually. Nonetheless, on the surveys, some students also reported liking such practices. On the other hand, in focus groups, statements about lethargy and sleepiness during such practices were also common. Given these contradictory findings, did these students really like these practices and find them engaging, or instead, did they find them unmotivating? We need to know more about the circumstances under which procedural learning approaches in CE that employ teaching without teaching, rote memorization, and recitation can be engaging, and not disengaging, for adolescents. Although constructivist forms of teaching and learning are emphasized in the West (e.g., teaching for understanding), it may well be that learning without understanding, when properly implemented, is a powerful if not indispensable form of learning in CE approaches. Alternatively, perhaps the skill of paying attention can be better developed through means other than meditation – for instance, through intrinsically motivating activities like the arts or sports, or the memorization and recitation of spoken word poems, popular music (e.g., hip hop music raps), or classic speeches (e.g., Emancipation Proclamation, I have a dream speeches). We believe more creativity in curriculum programs and contemplative practices might fruitfully address these issues in the future.

In contrast to these examples, we can see in Bharata School a different approach to teaching procedural skills like meditation and prayer. Here, the rote memorization and repetition involved in these practices was accompanied by explicit teaching for understanding. The students were taught, conceptually, why meditation was important, as well as the substantive content of the prayers they recited. Here, we see a different kind of learning – declarative learning – which refers to "knowing *what* something is conceptually" (see Table 4). Declarative learning is conscious, involves language and discursive, symbolic thought, and proceeds via direct verbal instruction from another or from cultural artifacts (e.g., books or talks). The students in Bharata School knew that the prayers that they recited each week were done to celebrate and ask for blessing from the freedom fighters and leaders who built the country. In this case, rote repetition of prayers was linked to an understanding of the nature of the prayers – which students in turn said increased their own prosocial motivation to do something for their country.

Hori (1994) associates declarative learning with rational teaching in monastic settings and suggests that the goal is for an expert of a body of

knowledge or skills formulates general principles, organizes conceptual information, and attempts to transmit those principles and concepts to the students through verbal instruction. In this case, there is a focus on "the why" and instruction is object, or content focused, aimed at enabling the student to master tasks and assimilate information and concepts. It is an open research question as to whether the introduction of contemplative practices to adolescents may be more motivating and engaging when educators provide the purpose and meaning of the practices themselves – either based on cultural traditions like Hinduism or in the case of the West, scientific notions regarding mental training and flourishing in ways that fit with adolescents' developmental needs (Roeser & Pinela, 2014). What is the best way to sequence and structure learning experiences that are more embodied or more conceptualized? Should experiences come before conceptual instruction, or is some amount of conceptual instruction necessary to make experiences engaging at different ages? These remain, for us, open and important questions for future research.

A final form of learning that is unique from, but hypothetically related to, procedural and declarative learning, is what might be called insight learning: a kind of seemingly sudden understanding of an idea, realization of a teaching, or grasping of the relation between a problem and its solution (e.g., Kohler, 1925; Lind et al., 2009). Hori (1994) proposed that the ability to "just see" something that is characteristic of flashes of insight (e.g., in domains like mathematics, logic or perhaps self-knowledge) rests on procedural and declarative learning. The theory here is that ritual formalism and rote-memorization lead to reasoning, and reasoning sets the stage for sudden insight during meditation. The process is described thusly: First, the student *attends to* the information they are memorizing as an "object of attention" (e.g., multiplication tables or logic formulas). Second, after memorizing information, this information implicitly becomes part of what the student *attends with* as a subject. The times tables or logic formulas become part of the subjective attentional-perceiving process itself during problem-solving or contemplation, rather than serving as an object of that process. This allows for "higher-order reasoning." This, in turn, is hypothesized to set the stage for insight which is thought to transcend the subject/object dualism as a form of gnosis (see Table 4). If this is the case, then we can see in these Indian schools, to different degrees, echoes of this ancient approach to learning: memorization, understanding, and insight. Indeed, a few students reported that after not understanding a contemplative practice for a sustained period, they had a moment where, suddenly, they gained insight into its value for their own development. Thinking about all three types of learning, and how to strategically implement each form in contemplative programs for adolescents, may be something to explore in future research (e.g., Hart, 2004).

Summary

This multi-method study aimed to document different forms of CE in use in several private schools in India, and to see how adolescent students perceived the purposes, experiences, and outcomes of such practices. In each school, we documented the view behind the use of contemplative practices; the path/set of practices employed; and the hypothesized fruits of such practices from the adolescents' points of view. Our results raised questions about how best to implement such practices with adolescents, what forms of teaching and learning might be most engaging with students at this age, and how CE differs depending on numerous contextual factors.

Clearly, the evidence presented here is exploratory and requires further research. Learning more about different approaches to CE in diverse cultural settings that are inclusive and not sectarian, that motivate rather than disengage, and that lead to insight and not the shutting down of the exploration of the inner life during adolescence seems important. Our very future may depend on refining and scaling age-appropriate forms CE across the globe.

Table 1

Students' Perceptions of School-Based Contemplative Practices and Related Outcomes: Sample and School Specific Means (Standard Deviations) and Group Comparisons

Variables	Full Sample	Contemplative Schools			School Differences
	All Schools (n = 800)	*JK School (n=97)*	*Bharata School (n=75)*	*Vivekananda School (n=126)*	*Saraswati School (n=501)*	
Liking of School-based Contemplative Practices	3.72 (1.26)	2.74 (1.20)	**4.01 (0.92)**	3.32 (1.23)	**3.97 (1.20)**	B,S > V > JK
Improved Concentration Due to School Experience	3.72 (1.15)	3.49 (1.29)	**4.07 (0.96)**	3.42 (1.16)	3.85 (1.11)	B > V
Improved Character Due to School Experience	4.21 (1.03)	4.18 (1.05)	**4.64 (0.72)**	3.97 (1.01)	4.21 (1.04)	B > JK, V, S
Altruistic Motivation (% Prevalence in 3 Wishes)	36.5% (0.48)	31.0% (0.46)	**48.9% (0.50)**	34.4% (0.47)	32.8% (0.47)	B > JK, V, S

Note: The "School Differences" column reflects the results of ANOVAs with school, gender, and school by gender interactions on the variables in the table. JK= JK School; B = Bharata School; V=Vivekananda School; S=Saraswatic School. School Differences represent mean differences between schools that were statistically significant at the $p < .05$ level.

Table 2

Students' Perceptions of Purposes and Engagement in School-Based Contemplative Practices based on Focus Groups: School Differences in Most and Least Cited Purposes and Levels of Engagement based on Cross-tabulations

Schools	Over-Cited Purposes of Practices	Under-Cited Purposes of Practices	Most Cited Level of Engagement
JK School	Plan, think, dream about the future Reflect on the past I don't know, unsure of purpose	Improve concentration Improve academic performance	Positive Engagement
Bharata School	To cultivate prosocial motivation To connect with Divine	[none]	Positive Engagement
Vivekananda School	Improve concentration	To cultivate prosocial motivation I don't know, unsure of purpose	Disengagement, Resistance
Saraswati School	Improve academic performance	[none]	Sleepy Lethargic, Neutral Engagement

* "Over- and under-cited purposes", as well as "most-cited level of engagement," are listed based on the results of chi-square analyses and inspection of the magnitude of the deviations of the observed data from the expected data in table cells at the $p. < .05$ level.

Table 3. Two Different Approaches to Contemplation in Education Globally

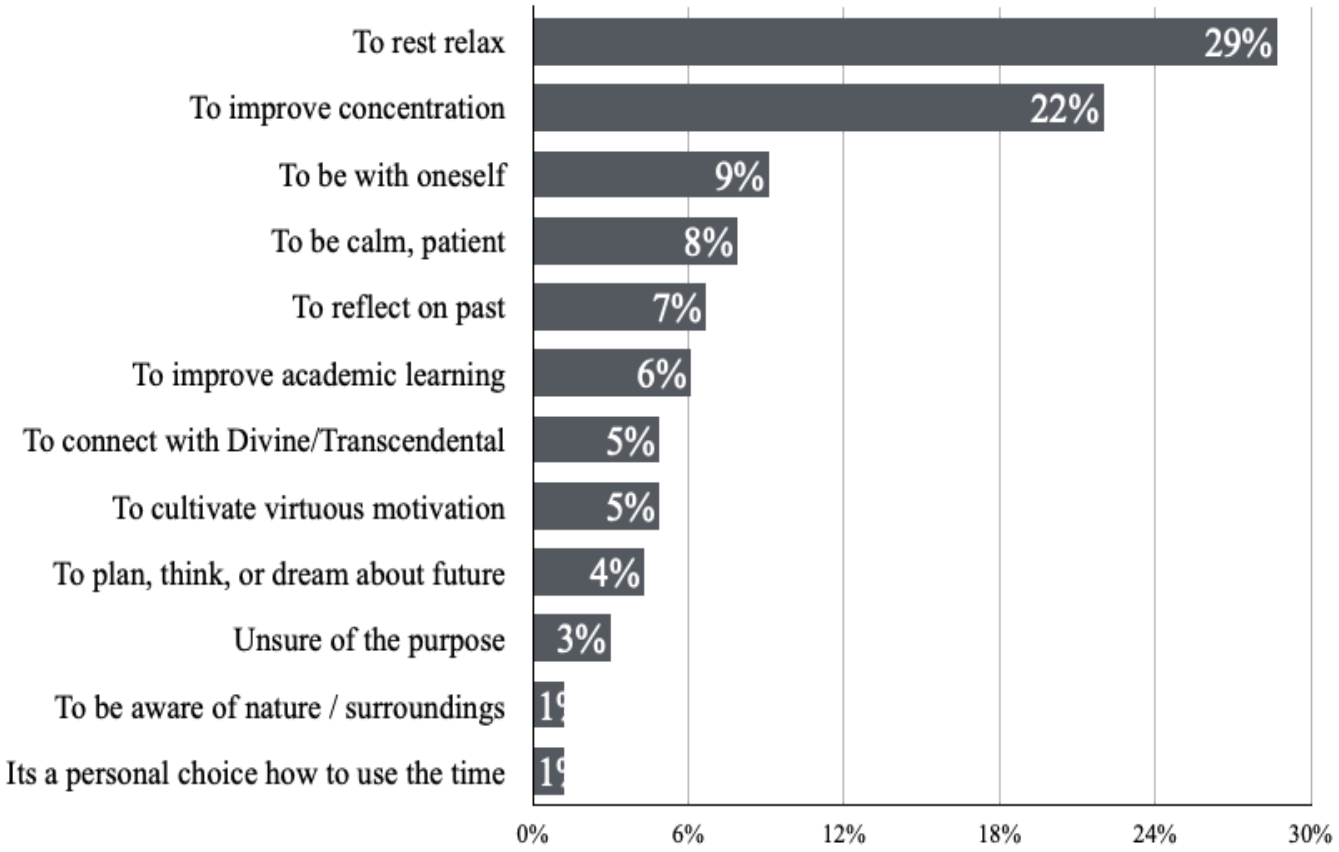
Elements of Contemplation in Education		Cultural Preservation and Blending Approach	Renewal of Whole Child and Whole Adolescent Approach
View	*Theory*	Sacred Worldviews and Views of Human	Science of Flourishing and Human Development
Path	*Practice*	Prayer, Meditation, Ritual	Secularized Meditation and Contemplative Activities
Fruit	*Applic-ation*	Flourishing for Self and Others	Flourishing for Self (and Others?)

Table 4. Different Forms of Learning in Contemplative Practices

	Procedural Learning	Conceptual Learning	Insight Learning
Type of Learning	Subject-Centered Procedural, Rote or Habit Learning [Can Include Learning without Understanding]	Object-Centered Declarative, Verbal or Concept Learning Learning for Understanding	Beyond Subject/Object Insight Learning Gnosis Beyond Understanding

Figure 1

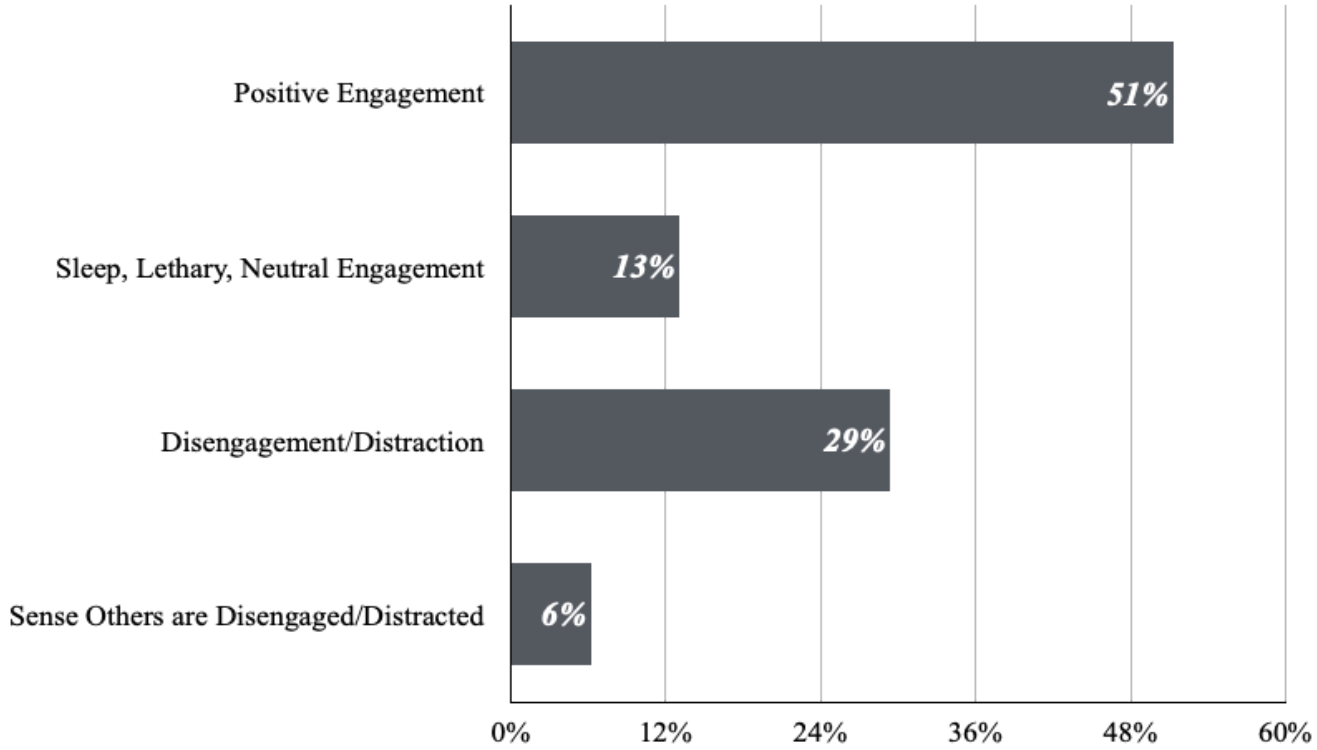
Adolescents' Focus Group Reports of the *Purposes* of Doing Contemplative Practices: Percentage of Total Utterances by Frequency and Coded Categories*



Note: Results are based on coded data from 27 focus groups and 164 coded utterances – data bars represent the percentage of coded utterances reflecting the categories of purposes coded: rest and relaxation; improvement of concentration; being with oneself; being calm and patient; reflection on the past; improvement of academic learning; connection with the Divine; improvement of virtuous motivation; future planning, thinking or dreaming; lack of surety of the purpose; awareness of nature; and personal choice regarding the purpose.

Figure 2

Adolescents' Focus Group Reports of the *Experience* of Doing Contemplative Practices: Percentage of Total Utterances by Coded Categories*



Note. Results are based on coded data from 27 focus groups and 306 coded utterances – data bars represent the percentage of coded utterances reflecting student utterances about the positive personal engagement with the practices; lethargic or neutral engagement with the practices, personal disengagement from or distraction during the practices; and awareness of other students' disengagement or distraction during the practices.

Figure 3. Practice of Astachal.

References

Asah, S. T., & Singh, N. C. (2019). SEL for SDGs: Why social and emotional learning is necessary to achieve the Sustainable Development Goals. *The Blue DOT*, *10*, 54-60.

Avinashilingam, T.S. (1970). Swami Vivekananda on Education. In L. Chandra, D. Swarup, S.P. Gupta & S. Goel (Eds.), *India's Contribution to World Thought and Culture* (pp. 677-684). Vivekananda Rock Memorial Committee.

Chiteji, N. (2010). Time preference, noncognitive skills and well-being across the life course: Do noncognitive skills encourage healthy behavior? *American Economic Review*, *100*, 200-204.

Cohen, D. (2014). *Homo Economicus: the (lost) prophet of modern times*. Wiley & Sons.

Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage.

Cuban, L. (2015, November 3). Content vs. skills in high schools – 21st century arguments echo 19th Century conflicts. https://larrycuban.wordpress.com/2015/11/03/content-vs-skills-in-high-schools-21st-century-arguments-echo-19th-century-conflicts/.

Dahl, C. J., Wilson-Mendenhall, C. D., & Davidson, R. J. (2020). The plasticity of well-being: A training-based framework for the cultivation of human flourishing. *Proceedings of the National Academy of Sciences*, *117*, 32197-32206.

Dewey, J. (1897). *My pedagogic creed*. EL Kellogg & Company.

Dewey, J. (1902). *The child and the curriculum*. University of Chicago Press.

De Wit, H. F., & Baird, M. L. (1991). *Contemplative psychology*. Duquesne University Press.

Donald, D. (2019). Homo economicus and forgetful curriculum. *Indigenous education: New directions in theory and practice*, 103-125. University of Alberta.

Dorjee, D. & Roeser, R.W. (2022). The science of flourishing in child and adolescent development: Description, explanation and implications for prevention and promotion. In O. Ergas & N. Chatterjee (Eds.). *Education and Human Flourishing* (Chapter 3). UNESCO Mahatma Gandhi Institute of Education for Peace and Sustainable Development (MGIEP).

Dreyfus, G. (2003). *The sound of two hands clapping: The education of a Tibetan Buddhist monk*. University of California Press.

Ergas, O., Gilead, T. and Singh, N.C. (2022). Introduction to ISEE Assessment Working Group 1 – Education in and for flourishing. In Ergas, O., Gilead, T. and Singh, N.C. (Eds.), *Education and human flourishing, in Reimagining education: The International Science and Evidence based Education Assessment*. UNESCO MGIEP.

Fox, M. (2006). *The AWE project: Reinventing education, reinventing the human*. Wood Lake Publishing Inc.

Freire, P. (1968/2021). *Education for critical consciousness*. Bloomsbury.

Goleman, D. (2015). *A force for good: The Dalai Lama's vision for our world*. Bloomsbury Publishing.

Goleman, D., & Senge, P. (2014). *The triple focus: a new approach to education.* More Than Sound.

Hart, T. (2004). Opening the contemplative mind in the classroom. *Journal of Transformative Education, 2*, 28–46.

Hori, G. V. S. (1994). Teaching and learning in the Rinzai Zen monastery. *Journal of Japanese Studies*, 5-35.

Kohler, W. (1925). The mentality of apes (2nd rev. ed.) (E. Winter, Trans.). Routledge & Kegan Paul. (Original work published 1917)

Krishnamurti, J. (1953). *Education and the significance of life*. Harper.

Krishnamurti, J. (1929). *Truth is a pathless land*. https://www.jkrishnamurti.org/about-dissolution-speech.

Kuyken, W., Ball, S., Crane, C., Ganguli, P., Jones, B., Montero-Marin, J., Nuthall, E., Raja, A., Taylor, L., Tudor, K., Viner, R. M., All- wood, M., Aukland, L., Dunning, D., Casey, T., Dalrymple, N., De Wilde, K., Farly, E.-R., Harper, J., MYRIAD Team. (2022). Effectiveness and cost-effectiveness of universal school-based mindfulness training compared with normal school provision in reducing risk of mental health problems and promoting well-being in adolescence: the MYRIAD cluster randomized controlled trial. *Evidence-Based Mental Health, 25*, 99–109.

Lama, D. (2001). *Ethics for the new millennium*. Penguin.

Lind, J., Ghirlanda, S., & Enquist, M. (2009). Insight learning or shaping? *Proceedings of the National Academy of Sciences*, *106*, E76-E76.

Mahoney, J. L., Weissberg, R. P., Greenberg, M. T., Dusenbury, L., Jagers, R. J., Niemi, K., ... & Yoder, N. (2021). Systemic social and emotional learning: Promoting educational success for all preschool to high school students. *American Psychologist*, *76*, 1128.

Miller, J. (2015). Contemplative education. *Journal of Transformative Education*. DOI: 10.1177/1541344615608465.

Mind and Life Education Research Network (MLERN) (2012). Contemplative practices and mental training: Prospects for American education. *Child Development Perspectives, 6*, 146–153.

Moffitt, T. E., Arseneault, L., Belsky, D., Dickson, N., Hancox, R. J., Harrington, H., ... & Caspi, A. (2011). A gradient of childhood self-control predicts health, wealth, and public safety. *Proceedings of the National Academy of Sciences*, *108*, 2693-2698.

Montero-Marin, J., Hinze, V., Crane, C., Dalrymple, N., Kempnich, M. E., Lord, L., ... & Kuyken, W. (2023). Do adolescents like school-based mindfulness training? Predictors of mindfulness practice and responsiveness in the MYRIAD trial. *Journal of the American Academy of Child & Adolescent Psychiatry*. Advance online publication.

Mookerji, R. K. (1947/2003). *Ancient Indian Education: Brahmanical and Buddhist*. Motilal Banarsi Dass.

Organization for Economic Co-operation and Development. (2019). *OECD skills strategy 2019: Skills to shape a better future*. OECD Publishing.

Ozawa-de Silva, B., & Frazier, T. (2019). SEE Learning: Expanding the boundaries of social and emotional learning. *Blue Dot, 10*, 43-46.

Rajhans S.G. (2018). *The Gayatri Mantra*. https://www.learnreligions.com/the-gayatri-mantra-1770541.

Ranganathananda (1988). *Science and religion*. Advaita Ashrama.

Rao, M.A., Berry, R., Gonsalves, A., Hastak, Y., Shah, M., & Roeser, R.W. (2013). Globalization and the Identity Remix Among Urban Adolescents in India. *Journal of Research on Adolescence*, *23*, 9-24.

Ricard, M., Lutz, A., & Davidson, R. J. (2014). Mind of the meditator. *Scientific American, 311*, 39-45.

Roeser, R. W., Galla, B. M., & Baelen, R. N. (2022). Mindfulness in the schools: Evidence on the impacts of school-based mindful- ness programs on student outcomes in P–12 educational settings. Downloaded November 2022 from https://www.prevention.psu.edu/uploads/files/PSU-Mindfullness-Brief-2022.pdf.

Roeser, R.W. (2005). An introduction to Hindu India's contemplative spiritual views on human motivation, selfhood, and development. In M.L. Maehr & S.A. Karabenick (Eds.), *Advances in Motivation and Achievement, Volume 14: Religion and motivation*. (pp. 297-345). New York: Elsevier.

Roeser, R.W. (2019). Educating the head, the heart, and the hand in the 21st Century: Notes from India and the United States. *Blue Dot, 10*, 25-30.

Roeser, R.W., Greenberg, M. T., Frazier, T., Galla, B. M., Semenov, A. D., & Warren, M. T. (2023). Beyond all splits: Envisioning the next generation of science on mindfulness and compassion in schools for students. *Mindfulness*, *14*(2), 239-254.

Ten Berge, T., & Van Hezewijk, R. (1999). Procedural and declarative knowledge: An evolutionary perspective. *Theory & Psychology*, *9*, 605-624.

Thurman, R. A. F. (2006). Meditation and education: India, Tibet and modern America. *Teachers College Record, 108*, 1765–1774.

Trilling, B., & Fadel, C. (2009). *21st century skills: Learning for life in our times*. Wiley & Sons.

Vedanta Society of Northern California (2002). *What is Vedanta?* Vedanta Society.

Vivekananda, S. (1924). *The Complete Works of the Swami Vivekananda*. Vedanta Press.

Yin, R. K. (2018). *Case study research and applications*. Sage.

Zajonc, A. (2016). Contemplation in education. In K. Schonert-Reichl & R. W. Roeser (Eds.), *Handbook of mindfulness in education: Integrating theory and research into practice* (pp. 17-28). Springer.

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