Mapping of Values Associated With Open-Mindedness, Responsibility, and the Collaborative Collective in the Mauritian Education Population

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The success of educational systems in shaping youth into citizens capable of facing global, national, and personal challenges has been associated with students' ability to develop human values and competencies. This study, therefore, maps the extent to which key human values associated with the three levels of consciousness—namely, open-mindedness, responsibility, and the collaborative collective—are present in the Mauritian education population. A quantitative epistemological approach was used to analyze the Mauritian data derived from the worldwide Advancing Education in Muslim Societies (AEMS) report Mapping the Terrain (2019–2020). *The demographic factors*

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influencing the attitudes of the Mauritian participants were analyzed using cross tabulations of the underlying constructs for each theme. Findings revealed that values were found to differ among the various subgroups of participants, in particular across gender, religion, age group, and occupation. The findings also suggest the importance of the inclusion or sustainability of teaching and inculcating moral values within the secondary and tertiary curricula.

Keywords: values, open-mindedness, responsibility, collaborative collective, curricula

INTRODUCTION

Education systems in different countries around the world, including Mauritius, place much emphasis on the acquisition of knowledge and skills in line with the main objective of education provision, which is considered to be instrumentalism (Mellin-Olsen, 1981; Nussbaum, 2010). However, the focus of the most recent educational reform in Mauritius, namely the Nine Years Continuous Basic Education (NYCBE), goes beyond the mere development of content knowledge and skills, targeting the holistic development of every child in line with the Sustainable Development Goals 4 (SDG4), which ensures inclusive and equitable quality education and promotes lifelong learning opportunities for all. The NYCBE reform lays much emphasis on the development of knowledge, skills, values, and attitudes in line with the perspective of the four pillars of education Delors (1996), stating that the concept of "learning to be" is important in modern society.

The NYCBE reform makes provision for the integration of values in the curriculum to facilitate the individual's holistic development at all levels, from pre-primary to primary and secondary school levels. One of the objectives of the NYCBE reform is "to have an informed and empowered citizen endowed with the right attitudes and values for sound and healthy living in diversified multicultural settings and societies" (Ministry of Education and Human Resources, Tertiary Education and Scientific Research, 2016, p. 12). The NYCBE aims to enable young individuals to develop the knowledge, 21st-century skills, attitudes, and values that are important if they are to thrive in modern societies characterized by innovation, globalization, and scientific and technological advances (Varma, 2019), which again aligns with Delors's four pillars of education approach.

However, a deeper analysis of the literature and the policy documents guiding the implementation of the NYCBE reform revealed that though the focus of the current educational reform remains the holistic development of

every child, the reality is quite different. The education system is still based on elitism and cut-throat competition, a banking education, knowledge-oriented with a lack of soul-compatible pedagogy and automatic promotion, and institutionalized private tuition (Ministry of Education and Scientific Research 1997; Pane et al., 2013; Belle, 2021). The NYCBE-based curricula are still too examination oriented, reflecting the national quest for quality results at exams rather than quality education (Belle, 2021).

A limited development of human values has shown many implications for the culture of learning and teaching among the youth in educational institutions of the country. There is a rise of indiscipline among students, ranging from stealing, physical assaults, violence, drug trafficking, bullying, truancy acts, missing classes, and lateness to synthetic drug abuse, use of abusive language, and pornography, which are manifested both outside and on the school premises (Ramharai et al., 2006; Beebeejaun-Muslum, 2014; Belle & Seegopaul, 2020). Though the National Curriculum Framework (NCF) includes provisions for value education through the teaching of "life skills" and "values and citizenship education" in the curriculum, it does not answer the necessary fundamental value questions, such as (a) what is the meaning of human life, (b) how shall we live together, (c) what is a good society, what is a good life, and what is a good person? (Macdonald, 1977). In fact, values education is about introducing ethics and morality teaching in order to give young people knowledge such as relating to other people, and the ability to apply the values and rules intelligently and to have the settled disposition to do so (Aspin, 2000). According to Taylor (1994), "[V]alues education, in its various forms, encourages reflection on choices, exploration of opportunities and commitment to responsibilities, and for the individual in society, to develop values preferences and an orientation to guide attitudes and behaviour" (p. 3). Taylor uses the term *values education* as an overarching concept, including terms such as *moral education, civic education,* and *citizenship education.*

From these perspectives, there is a need to examine the extent to which some particular values underpin the attitudes, behavior, and life of individuals in Mauritian society. Thus, this study uses the data from the Advancing Education in Muslim Societies (AEMS) "Mapping the Terrain" project to map the level that human values such as forgiveness, individualistic orientation, collectivistic orientation, self-efficacy, problem-solving, meaning making, sense of belonging, religiosity and spirituality, teacher self-efficacy, hope, life satisfaction, gratitude, emotion regulation, namely, empathy, and self-regulation are inculcated in Mauritian

students, teachers, and lecturers/instructors. The AEMS project aims to contribute field-based knowledge to advance education in Muslim-majority societies by contributing results on psychosocial wellbeing, including values and competencies, and filling a neglected area of research in human development and growth in both informal and nonformal/informal education settings and curricula and/or policy. The AEMS project has been used in this study because it (a) presents a wide exploration of values within selected communities, including Mauritius; (b) provides data from a statistically viable sample of 971 participants; (c) uses convenience sampling to include Muslim participants; (d) focuses on values necessary for transformation that are grouped into three clusters, namely, open-mindedness (adaptability and ability to think critically), responsibility (social responsibility orientation), and the collaborative collective (taking the collective to a collaborative state); (e) maps the specific values in the different clusters of the sample; (f) depicts the existing direct and indirect correlations between the specific values, mediating factors, and different groups of participants; (g) has important implications for researchers, educators, and policy makers. "For more information on the *Mapping the Terrain* report, see Nasser et al., 2021".

The objectives of this study are to

(a) examine the different values that underpin the life of students and teachers/instructors in Mauritius, and

(b) analyze the views and attitudes of students and teachers/instructors around the values and competencies related to the three classes of consciousness, namely, open-mindedness, responsibility, and the collaborative collective.

LITERATURE REVIEW

This section provides an overview of (a) some key values and competencies, (b) the Mauritian education system, and (c) the "Mapping the Terrain" study of AEMS, which captures key information on the fundamental values and competencies among participants.

Values and Competencies

Values are the fundamentals that guide our attitudes and motivate our actions and our lives. They are our inspiration to act, and they guide our decisions concerning everything from our personal to our professional lives (Toker Gökçe, 2021). They are the core of who we are and what we want to be, thus influencing the way we treat and interact with others in society and the world at large.

Shealy (2015) states that values are of different types, including personal, relationship, social/societal, organizational/workplace, and cultural values. Personal values are directly related to our own beliefs about right and wrong, while cultural values, which vary by place and context, are those that are accepted by the societies in which we grow up. Personal values comprise individual and group/family values, whereas cultural values have to do with organizational and religious values. Some examples of human values are love, brotherhood, respect for others, including plants and animals, honesty, sincerity, truthfulness, nonviolence, gratitude, tolerance, sense of responsibility, cooperation, self-reliance, secularism, and internationalism.

Human values generate a sense of purpose, help to strengthen relationships between colleagues, and promote commitment to the organization. They guide us in our daily actions, foster motivation, and drive us toward our objectives. However, it is important to highlight that values alone are not sufficient for human action. Values go along with competencies, which are related to knowledge, abilities, and the different skills people use to carry out their daily tasks.

Values Associated With the Three Levels of Consciousness

The AEMS "Mapping the Terrain" project has grouped values under three levels of consciousness that are identified to be important for personal transformation, namely, open-mindedness, responsibility, and collaborative collective. The key values falling under these three groups include the following: "Forgiveness," "Individualistic orientation," "Collectivistic orientation," "Self-efficacy," "Problem solving," "Meaning making," "Sense of belonging," "Religiosity/spirituality, "Teacher self-efficacy," "Hope," "Life satisfaction," "Gratitude," "Emotion regulation", "Empathy," and "Self-regulation." This does not mean that the three groups are not related but that each value can fit and promote any of those three groups.

This section describes some of these key values. Forgiveness is viewed as a virtue (Peterson & Seligman, 2004) and its importance for humankind is highlighted in the Qu'ran as follows:

> We have not created the heavens and the earth and everything in between except for
> a purpose. And the Hour is certain to come, so forgive graciously. (Quran 15:85).

When an individual forgives, it provides a sense of happiness to both parties. Forgiveness encourages positive thinking and emotions in the person who forgives and hence, they feel happier (McCullough et al., 2001; Fordyce, 2005).

Gratitude, another human value, has been positively correlated with forgiveness (Satici et al., 2014). Aricioglu (2016) even stated that there is a positive mediating effect of gratitude in the relationship between forgiveness and the life satisfaction of students. Besides, it was also found that students of the Islamic faith regard forgiveness as an important value and Muslim students are more likely to forgive others in Jordan. They manifest greater efforts to overcome the desire to revenge or to avoid those who hurt them (Alaedein-Zawari, 2015). However, Turkish university students are more likely to forgive than those in Jordan, and female Muslim students are more inclined to forgive than their male counterparts as they are less vengeful (Ayten & Ferhan, 2016).

Another key human value is religiosity. Some previous studies suggest that a religious individual can better cope with problems and risks (Lavric & Flere, 2008; Maltby, Lewis & Day, 1999; Lucchetti et al., 2020; Thomas & Barbato, 2020). However, their capabilities to face problems depend on their degree of religiosity. People with high religiosity are less affected when they encounter negative events and feel affected when they abandon their prayers (Pargament et al., 2003). Besides, Piritunsky et al. (2012) found that positive religious adaptation improves psychological adjustments and the quality of life of people. Torralba et al. (2021) explained that with time young persons grow in age and in religiosity, helping them in their secular studies and ability to face the challenges of life.

Self-efficacy is closely associated with critical thinking and problem-solving skills, which are two main 21st century skills that students need to be successful in their education, complex modern life, and society. These skills refer to the ability of the students to identify, analyze, and evaluate situations and ideas in an attempt to find the most appropriate responses to problems (Wongsila & Yuenyong, 2019). Wismath et al. (2014) asserted that students demonstrate a higher level of confidence and efficacy in their problem-solving abilities when they have increased communication skills and when they understand the importance of problem-solving skills toward their achievement.

Self-efficacy is the determination of the individual to use their abilities to complete some task (Sharma & Nasa, 2014). It is concerned with how well they believe they will be able to reach the desired outcome in a particular situation (Bandura, 2001). Antaramian (2016) posits that there is a relationship between academic self-efficacy and life satisfaction. Students with a high level of life satisfaction achieve better in life as they manifest more engagement in their learning. With high self-efficacy, they approach

their goals with a focus on achievement and they develop a low level of stress in difficult situations. On the other hand, Manzano et al. (2018) found that when students have low self-efficacy, they have difficulties adapting to the academic field as they are less committed to their learning tasks, and they may face psychological problems like anxiety, depression, and stress. Students with a high level of academic self-efficacy show a lower level of difficulties when dealing with examination anxieties (Mendez & Pena, 2013). So, depending on the academic and personal experiences of the students, self-efficacy is pivotal to their success in life.

Emotion regulation, another important human value, has implications on the behavior as well as the thinking process of an individual. Thus, it may affect the academic achievement and the daily life of students. Self-efficacy is related to emotion regulation and academic performance. Positive emotions have a positive effect on the student's ability to properly organize their academic study time and do self-regulated learning (Pekrun et al., 2011). They also develop a positive perception of their learning abilities and their confidence in their intelligence (Mega et al., 2014). As a result, they have a higher academic achievement (Efklides, 2011). On the other hand, those who experience negative emotions may find it difficult to learn and therefore they procrastinate (Patrzek et al., 2012). Bytamar et al. (2020) added that when procrastinators face difficult or aversive situations, they prioritize regulating their negative emotions rather than pursuing their goals. Procrastinating may be a strategy to regulate their negative emotions, but it prevents them from achieving their long-term goals (Gross, 2015). Therefore, students should develop emotional intelligence skills for them to adapt to the most appropriate goal achievement strategies.

Life satisfaction is another important human value as it gives any individual a sense of meaning in life that would give them the comprehension and purpose of life, as well as what, matters to them. The Qu'ran reminds us that we should not fear anyone or anything in this life:

> And from wherever you go out [for prayer], turn your face toward al-Masjid al-Haram. And wherever you [believers] may be, turn your faces toward it so that the people will not have any argument against you, except for those of them who commit wrong; so fear them not but fear Me. And [it is] so I may complete My favor upon you and that you may be guided. (Qu'ran 2:150)

Martela and Steger (2016) define the meaning of life from the tripartite view of comprehension, purpose, and mattering. George and Park (2016) consider this view as the possible solution for human beings to understand better themselves, their environments, and how they interact with these environments. Bronk et al. (2009) highlighted that aspects of hope from a

person mediate the positive relationship between purpose and life satisfaction. When adolescents, emerging adults, and young adults have a purpose in their life, they have hope as they feel happy and motivated to strive toward their ultimate purpose (Bronk et al., 2009). To help these young adults or students to cultivate a sense of purpose in their life, Bronk (2012) suggested that they are encouraged to think about the far-reaching aims that matter to them most, how they may progress toward achieving these aims, and by providing them the opportunities to work with life mentors.

Our beliefs, principles, and values mold us into beings with the abilities and competencies needed to face current and future challenges. This study actually maps the extent that these values are present in the participants and provide key baseline data to stakeholders so that improvement on personal and community levels may be structured.

THE MAURITIAN EDUCATION SYSTEM

The development of values in a population is directly related to the type of education system that the country has developed. From this perspective, this section showcases how the Mauritian education system is associated with values and will give an overview of the evolution of the Mauritian education system over time and the grounding of the current Nine NYCBE reform on values.

Evolution of the Mauritian Education System

Since 1968, which marked the Independence of Mauritius, the education system has evolved from being a mostly private enterprise to a national education system that caters to the needs of the society in terms of increasing access to education and preparing the Mauritian workforce. This culminated in a revolutionary development in 1977, when secondary education was made free for all students, representing a giant leap toward access to education for all. By the end of the 20th century, the focus of the education system shifted from mere access to equity and inclusivity in line with the Sustainable Development Goal 4 (SDG4), calling for a system that ensures "'inclusive and equitable quality education and promotes lifelong learning opportunities for all." The Mauritian education system in its quest to reach the SDG4 has witnessed several educational reforms over time to eventually develop the latest and current NYCBE reform implemented in 2017.

With the vision of the Ministry of Education to create the next generation of forward-looking and innovative leaders contributing to the transformation of the Republic of Mauritius into a high-ranking, prosperous

nation, the main objectives of the current NYCBE reform are to (a) promote the holistic and integral development of learners, (b) provide learning opportunities to all students for high levels of achievement commensurate with their abilities and strengths, (c) inculcate in learners a set of values and sense of moral responsibility and belonging to the country, (d) give greater recognition to Technical and Vocational Education and Training (TVET) in building human capital for transforming the economy into one which is knowledge-based and skills-driven, (e) equip all students with the knowledge, foundational skills, and attitudes for future learning, and (f) achieve a smooth transition to and completion of secondary education. Figure 1 is a schematic diagram summarizing the available pathways that a child may have at different educational levels from early childhood, primary, secondary to tertiary levels based on the NYCBE reform.

VALUES-BASED EDUCATIONAL REFORM NYCBE

To shape the NYCBE reform, a new NCF was developed focusing on the holistic development of students with knowledge, 21st-century skills, life skills, and civic responsibility. The new NCF ensures that the NYCBE reform produces a Mauritian education system that is grounded on values. The NCF, which was designed to transform learners into responsible citizens, effective communicators, critical, creative, and innovative thinkers, well-balanced individuals, autonomous lifelong learners, and effective collaborators, paves the way toward the development of a value-based educational system. For instance, the NYCBE is grounded on the principles of individualistic orientation. It takes care of the learning disposition, learning pace, and abilities of students and caters to students who have not been able to develop the desired skills and competencies at the end of their primary schooling by providing an extended program of four years of lower secondary schooling instead of three years to complete the nine years schooling. The extended program adopts an individual-based approach where teaching and learning are needs-driven. The policy paper "Inspiring Every Child," which governs the implementation of the NYCBE reform, is based on scaffolding learners' needs based on the concepts of equity and inclusiveness. The reform also includes the involvement of support teachers who support the main teachers in designing and implementing individualized education plans for students with difficulties. The matter of individualistic orientation is also addressed by the current educational reform by providing alternatives to students after they have completed
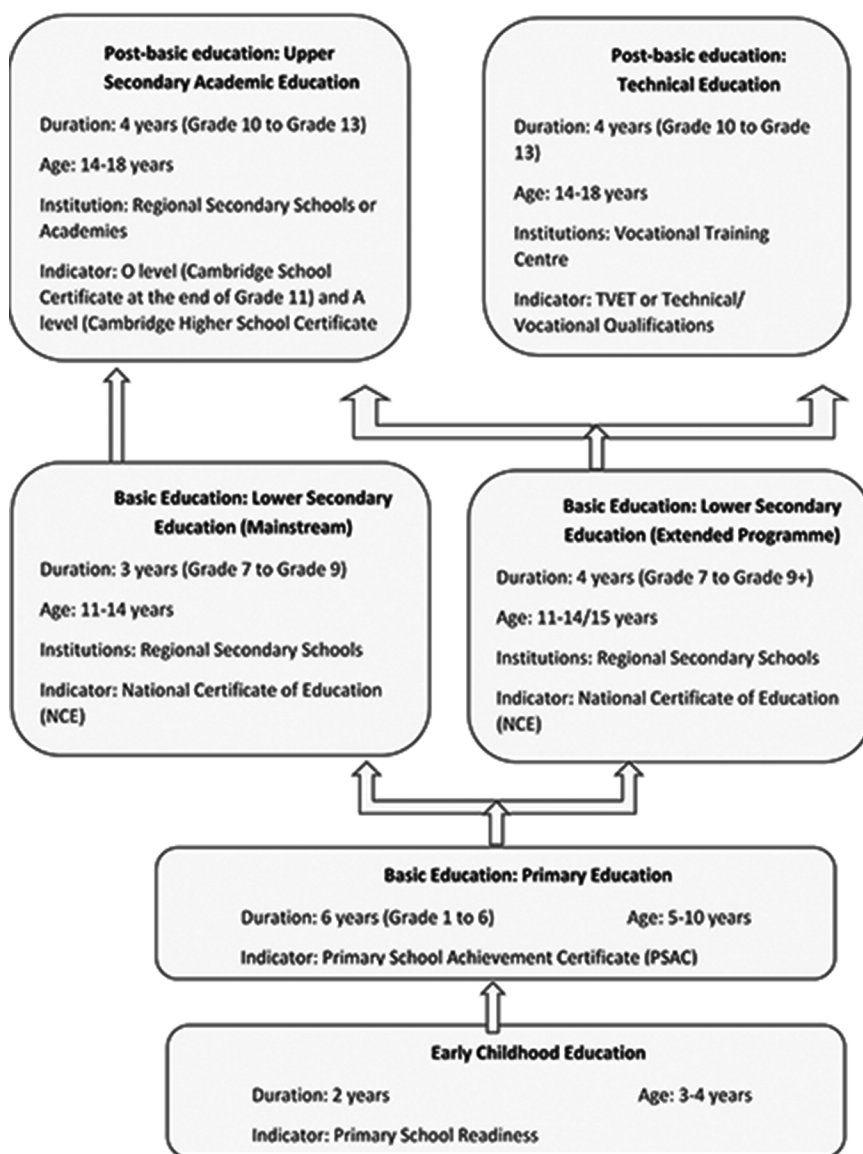
Figure 1. Framework of the NYCBE Pathway (Adapted by Rumjaun et al., 2022).

nine years of continuous schooling. These students are allowed to opt for a purely academic orientation culminating with a Cambridge Higher School Certificate, or for a vocational orientation in TVET centers. Moreover, the Mauritian government is currently working on a third option, namely, the Mauritian SC Technical paving the way toward HSC-Pro, which focuses on career development based on industry requirements.

Another example showcasing the grounding of NYCBE on values is that the focus of the evaluation is beyond the mere assessment of formal education and includes assessment of nonformal education. In fact, with such disposition, the students are not be perceived as failures or labeled strictly performance-wise, as admission in secondary schools is based on the Primary School Achievement Certificate (PSAC), which caters to both the academic and nonacademic development of students. Rather, the system is providing evidence of different gains as well as setting the parameters for gauging learning needs and thereafter making provisions for meeting them.

One of the main prongs of this educational reform was to revisit the previous curricula to produce more comprehensive and well-balanced curricula, which cater to the holistic development of learners. It also provides a more flexible curriculum, adapted to different abilities and learning paces . The new curricula emphasize problem-solving, critical thinking, and collaborative learning. The other prongs of the reform are (a) transformed pedagogies, (b) meaningful assessment and evaluation, (c) transformed teacher education and professional development of educators and school leaders, (d) transformed learning environment, and (e) accountability for learning outcomes. The NYCBE is designed to provide the condition and context for every child to climb the ladder of opportunity.

METHODOLOGY

The data used for this article were collected during the study on Advancing Education in Muslim Societies (AEMS; Nasser et al., 2021). The sampling strategy, coding, cleaning involved, and datasets used in the *Mapping the Terrain 2019–2020* report are available at https://iiit.org/en /mapping-the-terrain/.

Participants

The main instrument involved was a face-to-face questionnaire, which was administered to secondary and tertiary school students and teachers to collect information on their views, attitudes, beliefs, values, and opinions.

Procedure

The data collected through the implementation of the questionnaires were grouped based on factor loadings. The items of the questionnaire were grouped to represent key values and competencies, such as "Forgiveness," "Individualistic orientation," "Collectivistic orientation," "Self-efficacy," "Problem solving," "Meaning making," "Sense of belonging," "Religiosity/spirituality," "Teacher self-efficacy," "Hope," "Life satisfaction," "Gratitude," "Emotion regulation,""Empathy," and "Self-regulation." These values and competencies were further grouped into three clusters, namely, open-mindedness, responsibility, and the collaborative collective (Nasser et al., 2021), which are all relevant to personal development and social change (Nasser et al. 2019: p. 23).

Open-mindedness refers to the adaptability and ability to think critically, to adapt and maneuver in solving problems with critical thinking skills, to examine all sides and perspectives, and to promote wisdom and knowledge making, grouped values and competencies such as Empathy, Problem Solving, Meaning Making, Life Satisfaction, and Hope. Responsibility refers to skills needed to act in a socially responsible manner, grouped values and competencies such as Self-Regulation, Emotion, Self-efficacy, and Gratitude. The Collaborative Collective, which refers to taking the collective to a collaborative state, grouped values and competencies such as Collective Orientation, Sense of Belonging, Religion, and Forgiveness.

Data Analysis and Statistical Considerations

Variables that were numerical in nature were summarized using measures of central tendency, such as the mean and measures of dispersion and the standard deviation. For categorical variables, frequencies and percentages are provided. Whenever more than three items had missing data within a specific construct, the average score was considered as missing data. The derived variables from each construct were cross-tabulated with the demographic characteristics, and the means and SD were compared for the assessment of possible differences between the various subgroups.

For the comparison of two groups, the Mann-Whitney U-Test was used to assess for the significance of the difference, while for more than two groups, the Kruskal-Wallis test was used. These nonparametric alternatives were preferred given that the normality assumption was often violated.

RESULTS

In this section, the results are presented in terms of the (a) demographic analysis, and (b) exploration of the values and competencies of the Mauritian sample.

Demographic Analysis

The demographic analysis was focused on the distribution pattern of the sample from Mauritius in terms of participants' voices, gender, age distribution, education level, religion, and ethnicity.

Table 1 shows the distribution of respondents, by category, n=971. Counts and percentages exclude missing values. This analysis is restricted to the data captured in Mauritius only; capturing the voices of four groups of respondents, namely, secondary school students, schoolteachers, university instructors (lecturers), and university students. Though the sample included the four targeted distinct groups of respondents, the ratio of the representative voices was not uniform. The sample distribution remained in line with the current distribution of the educational population in Mauritius with a larger proportion of secondary school students, followed by university students, secondary school teachers, and lastly university students.

Further analysis of the groups of respondents revealed that the sample was indicative of a representative distribution of voices at different levels. Respondents included secondary students of different grades and university students of different years of study, respectively. Moreover, the sampled teachers and university tutors represented voices with different working experiences.

The largest category reported as less than 18 years old and the second largest category was 18–24 representing the school and university students, respectively, who make a greater proportion of the sample. The other age categories primarily include schoolteachers and university instructors.

The distribution of respondents by religion shows that most respondents are Muslim, followed in number by Hindu and Christians. The dominant ethnic group among the respondents remains the Indo-Mauritian, followed by the Afro-Mauritian.

Values and Competencies Among Participants

This section reveals the main findings where the values and competencies of the respondents are analyzed with their demographic characteristics.

Table 2 shows the mean average and standard deviation of the overall respondents regarding each construct (values and competencies).

On the Likert scale attributes of 4 points, the mean values greater than 2 for all the constructs indicates that the Mauritian sample is mostly agreeable with or has the necessary values and competencies falling under the three classes of consciousness, responsibility, and the collaborative collective. Moreover, Table 2 shows that ratings are on the higher side, with a mean value greater than 3 for the constructs collectivistic orientation, self-efficacy, religiosity/spirituality, hope, and gratitude.

Tables 3 to 6 show the mean values and standard deviation related to the different constructs, by some of the key demographic characteristics, such as gender, voice, age, and religion.

Table 3 shows that considering males and females separately, the mean values remain greater than 2 for all constructs, indicating that both males and female respondents have the necessary values and competencies falling under the three classes of consciousness, which are open-mindedness, responsibility, and collaborative collective. Analysis of the data presented in the table shows that males with larger mean values compared to females are more skewed toward values and competencies such as forgiveness, individualistic orientation, problem-solving, and emotion regulation, compared to females. Females, with greater mean values compared to males, are more skewed toward values and competencies such as collectivistic orientation, meaning making, sense of belonging, religiosity/spirituality, teacher self-efficacy, hope, gratitude, empathy, and self-regulation.

Table 4 shows the mean values and standard deviation related to the different voices, namely, school students, schoolteachers, university students, and university instructors. Analysis of the table revealed that excluding the missing values and mean of school students related to the construct forgiveness, all mean values are greater than 2, indicating that the four discrete groups of respondents showcased a high likelihood for the other values and competencies. Moreover, with means greater than 3, (a) school students showed high skewness toward values and competencies such as collectivistic orientation, self-efficacy, religiosity/spirituality, and gratitude; (b) schoolteachers showed high skewness toward values and competencies such as collectivistic orientation, religiosity/spirituality, hope, and gratitude; (c) university instructors showed high skewness toward values and competencies such as forgiveness, and religiosity/spirituality; and (d) university students showed high skewness toward collectivistic orientation only.

Moreover, when comparing the mean values of the different groups, it was observed that school students have higher mean values compared to the other groups for most of the values and competencies, including

collectivistic orientation, self-efficacy, problem-solving, meaning mak-
ing, sense of belonging, religiosity/spirituality, gratitude, empathy, and
self-regulation. Schoolteachers showed greater skewness for individual-
istic orientation, teacher self-efficacy, hope, and life satisfaction, whereas
university instructors showed greater skewness for forgiveness only and
university students for individualistic orientation and emotion regulation.

Table 5 shows the mean values and standard deviation related to age
distribution. Analysis of the table revealed that (a) excluding the missing
values and mean of school students related to the construct forgiveness,
all mean values are greater than 2, indicating that respondents of all age
groups showcased high likelihood for the other values and competencies,
and (b) mean values greater than 3 showing higher skewness toward values
and competencies are distributed in the age groups less than 18, 25–34,
and 55–64 years old.

Table 6 shows the mean values and standard deviation related to reli-
gion. Analysis of the table revealed that all mean values are greater than 2,
indicating that respondents of all religious groups have a high likelihood
for all the constructs (values and competencies). However, when comparing
the mean values, it was observed that the Muslim participants in this study
from Mauritius had a greater likelihood and were more agreeable toward
most of the values and competencies compared to the other communities.
For instance, greater mean values are noted for the Muslim community for
most (10 out of 15) of the constructs, including collectivistic orientation,
meaning making, sense of belonging, religiosity/spirituality, teacher self-
efficacy, hope, gratitude, emotion regulation, empathy, and self-regulation.
Christian participants showed higher means for forgiveness and life satis-
faction; Hindus, for individualistic orientation, self-efficacy, and problem-
solving; and other grouped religions, for life satisfaction.

DISCUSSION

This study explores the attitudes and views of school students, school-
teachers, university students, and university instructors toward values in
three classes of consciousness, namely, open-mindedness, responsibility,
and the collaborative collective, where each class comprises a set of values
and competencies. The findings revealed that the respondents showcased
a significant level of open-mindedness, responsibility, and sense of the
collaborative collective as suggested by high scores on the values and com-
petencies that belong in each.

The respondents demonstrated a high level of open-mindedness, measured through their views and attitudes toward a specific group of values and competencies, namely, empathy, problem-solving, meaning making, life satisfaction, and hope. Though analysis of these constructs revealed some discrepancies in respondents' attitudes and views when considering age, gender, educational level, roles, and religion, most respondents showcased empathy, life satisfaction, and hope in addition to the adaptability and ability to think critically, to adapt and maneuver in solving problems, to examine things with different perspectives, and to promote the wisdom and knowledge making. The combination of these values and competencies, as reflected in the construct open-mindedness and as highlighted by Proyer et al. (2011), is needed to transform or empower individuals to move in the developmental progression. A similar study conducted by Bronk et al. (2009) reported that a purpose in life is related to a higher level of life satisfaction among college students, but not for university students.

The respondents also showcased a high level of responsibility, measured through their views and attitudes toward self-regulation, emotion regulation, self-efficacy, and gratitude. Despite some discrepancies noted between respondents of different ages, genders, educational levels, roles, and religions, most demonstrated the presence of the necessary skills needed to act responsibly toward others in different social settings. Bandura (2001) situates the importance of responsibility by explaining that human beings are not passive creatures controlled by their environments and able to react only to their contextual and social cues; rather, they have agency and the capability to proactively manage and control their functions and actions. This characteristic gives individuals the ability and responsibility both to thrive and grow and to influence their social environment and other individuals. Here again agency and responsibility, as with open-mindedness, empower individuals to move in the developmental progression. This is in parallel with the finding of Lau et al. (2018), which reported that vicarious experience, social persuasion, and mastery experience significantly impact the student, as do self-efficacy and the ability to take responsibility for completing tasks or dealing with life problems.

The respondents also showed a high sense of the collaborative collective, which was measured through respondents' views and attitudes toward values and competencies such as collective orientation, sense of belonging, religiosity, and forgiveness. The respondents demonstrated the adaptability and ability to take the collective to a collaborative state, which builds on the sense of community and shared values that drive the understanding

that it is not sufficient to rely on the clan and immediate collective but rather encourages wider interdependence to the betterment of life for all. Thus, the collaborative collective, as with open-mindedness and responsibility, empowers individuals to move in the developmental progression and human transformation in values from one state to another (Nasser et al., 2021; Nasser et al., 2019). Previous studies have found that a sense of belonging provides students with a feeling of security, identity, and community, and this helps them develop positive and healthy attitudes toward others (McGinn et al., 2005; OECD, 2017; Li et al., 2021). Collaboration is, therefore, essential in building healthy relationships among students.

The high level of open-mindedness, responsibility, and sense of collaborative collective demonstrated by the respondents positioned the participants as having high views on most of the values under investigation which aligns with previous studies that have shown that students care for others when they are very much aware of the benefits of forgiving others: forgiveness is considered the outcome of the salutary effect of religiosity on the psychological well-being of the students (Alaedein-Zawawi, 2015). By forgiving, the students consider themselves to be showing empathy toward others and the ability to care for them.

Though we may conclude that the Mauritian educational population positioned itself relatively high on open-mindedness, responsibility, and sense of collaborative collective, a detailed analysis of the discrepancies when considering gender, educational level, roles, and religion revealed some key considerations. For instance, (a) females, as compared to males, show higher adaptability and ability toward most of the values and competencies associated with the categories or clusters; (b) school students and schoolteachers show higher adaptability and ability toward most of the values and competencies associated with collaborative collective and responsibility, as compared to university students and instructors showing a net inclination toward collaborative collective as suggested by higher means. Further analysis is needed to establish levels of significance of these differences. The results are important to share and be used by concerned stakeholders in designing improvement, monitoring, and evaluation plans as well as designing learning experiences based on values.

CONCLUSIONS AND RECOMMENDATIONS

Based on the findings of this current study, it is highly recommended that human values under the three themes of open-mindedness,

responsibility, and the collaborative collective should be inculcated into the students from their early years. The school curriculum must be reviewed to teach values. Dhunnoo and Adiapen (2013) found that schoolteachers and leaders are conscious and interested in shifting to value-based education, but the lecturers and curriculum developers at the Mauritius Institute of Education are sceptical to include values-based education in the secondary school curriculum. Indeed, moral values are taught in the private confessional colleges, as additional classes, but they are mostly nonexistent in the school curriculum of the state colleges because the school curriculum is too examination oriented and content driven (Belle, 2021). This does have negative implications for the behavior and attitudes of the students in the Mauritian schools. There should be an urgent shift in the curriculum approach by emphasizing a value-driven curriculum that would promote the holistic development of the student. Universities in Mauritius, more than secondary schools, have to incorporate open-mindedness, responsibility, and a sense of the collaborative collective as part of learning, shaping classrooms that enhance and encourage these values. This is essential, as university students should feel free and be comfortable in challenging and answering questions/suggestions. In this approach, students have to be open to a range of answers rather than stick to one "correct" response. It is in this way that the learners will feel and become comfortable in challenging and answering questions/suggestions. The Ministry of Education of Mauritius, in the context of the education reforms, should integrate these values in every sphere of the university life so that students' actions and learning attitudes are guided by these fundamental human values. This is urgent as there is, surprisingly, an increase in children's lack of positive discipline, especially in universities (Pownall et al., 2022). This should be a national orientation toward teaching values and creating opportunities for students to live such values. This approach helps to create a compassionate and accepting environment. From this perspective, some of the didactic methods and creative approaches that help to expand the learning vistas of students are brainstorming, cooperative learning, and mind mapping. Indeed, a creative pedagogy involves an interplay between creative teaching and creative learning to develop open-mindedness in the classroom.

In addition, as school internal stakeholders, the school leaders and the teacher leaders have to embed the value of responsibility at all levels and layers of the school. Good teaching is not limited to learning alone but includes all para-teaching features. Apart from being the "main source of knowledge"—questionable in this era of knowledge explosion—and

facilitator of learning, a teacher works endlessly to mold desirable characteristics and qualities in their students. The duties and responsibilities of a teacher, all along the teaching and learning process, are to ensure that all students develop the following desirable characteristics or moral values, which include honesty and integrity, responsibility, self-efficacy, emotional intelligence, hope, happiness, caring for others, forgiveness, gratitude, and empathy. However, the study revealed that Mauritian Muslims have a lower tendency to forgive others as compared to participants of other faiths. It is therefore important to investigate the reasons why there is lesser propensity to forgive among Mauritian Muslims, as this is not aligned with other Muslim communities such as the Turkish (Ayten, 2012), Arab (Nasser et al., 2014), and Indian (Monteiro, 2005) communities where significant correlation has been found between forgiveness and religiosity. The schools need therefore to inculcate the value of forgiveness to students of all faiths, but particularly, the religious institutions of the different communities must ensure that students are taught these values. This will enhance the role of religious institutions in Mauritius in terms of the teaching of religious values, which are indeed human values.

Finally, this study adds to our understanding of the values that are fundamental to the development of human beings in general, but to the development of students, in particular, who are often lost in their perceptions, views, or attitudes to these values that we adults, believe that they should demonstrate positively in their personal and social relationships. The values have been considered from a cognitive perspective in this study of a multireligious nation, and therefore findings are limited to the Mauritian context. Yes, the findings may be transferable to other countries with the same profile, or they may provide insights into the different attitudes of students in a multicultural country like Mauritius. It has become obvious that the attitudes of students reflect their profile in terms of their gender, age, religion, and other factors that have not been considered in this particular study.

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APPENDICES

Table 1. Distribution of Respondents, by Category. N=971. Counts and Percentages Exclude Missing Values

	Category	n	%
Gender	Male	324	33.5
	Female	642	66.5
Age	<18	537	55.6
	18–24	231	23.9
	25–34	67	6.9
	35–44	76	7.9
	45+	54	5.6
Ethnicity	Indo-Mauritian	799	83.3
	Afro-African	79	8.2
	Sino Mauritian	18	1.9
	Other	63	6.6
Religion	Muslim	559	58.4
	Hindu	240	25.1
	Christian	112	11.7
	Atheist	15	1.6
	Other	13	1.4
	Nothing in particular	9	0.9
	Buddhist	5	0.5
	Jewish	3	0.3
	Agnostic	2	0.2
Voice	*School student*	*595*	*61.3*
	Grade 9	33	5.6
	Grade 10	268	45.8
	Grade 11	147	25.1
	Grade 12	57	9.7
	Other	80	13.7
	University student (Bachelor's)	*170*	*17.7*
	Level 1	44	25.6
	Level 2	90	52.3
	Level 3	33	19.2
	Level 4	3	1.7
	Other degree/year	2	1.2
	University Instructor/School teacher	*206*	*21.0*
	No. of years on the job		
	<1 year	1	0.5
	1–3 years	16	8
	4–6 years	48	23.9
	>6 years	136	67.7

Table 2. Summary Statistics for Each Construct in the Overall Sample

Construct	n	Mean	SD
Forgiveness	965	2.14	0.59
Individualistic orientation	968	2.81	0.44
Collectivistic orientation	967	3.16	0.47
Self-efficacy (School Student, University Student)	761	3.00	0.37
Problem solving (School Student, University Student)	759	2.90	0.49
Meaning making	966	2.93	0.41
Sense of belonging (School Student, University Student)	757	2.90	0.43
Religiosity/spirituality	960	3.39	0.73
Teacher self efficacy (Teacher/Instructor)	199	2.88	0.45
Hope (University Student, Teacher/Instructor)	375	3.07	0.48
Life satisfaction (University Student, Teacher/Instructor)	374	2.88	0.51
Gratitude	961	3.09	0.42
Emotion regulation	957	2.94	0.42
Empathy	957	2.82	0.38
Self regulation	941	2.79	0.37

Table 3. Summary statistics for each construct, by gender

Construct	Gender				p-value (significance)
	Female		Male		
	Mean	SD	Mean	SD	
Forgiveness	2.08	0.54	2.27	0.67	<0.001 (S)
Individualistic orientation	2.78	0.43	2.87	0.45	0.008 (S)
Collectivistic orientation	3.19	0.43	3.10	0.52	0.021 (S)
Self-efficacy (School Student, University Student)	3.00	0.37	3.00	0.38	0.676 (NS)
Problem solving (School Student, University Student)	2.88	0.47	2.95	0.53	0.039 (S)
Meaning making	2.94	0.39	2.91	0.43	0.420 (NS)
Sense of belonging (School Student, University Student)	2.91	0.42	2.87	0.44	0.054 (NS)
Religiosity/spirituality	3.42	0.70	3.33	0.78	0.198 (NS)
Teacher self efficacy (Teacher/Instructor)	2.97	0.49	2.78	0.38	**0.002 (S)**
Hope (University Student, Teacher/Instructor)	3.12	0.47	3.02	0.47	0.060 (NS)
Life satisfaction (University Student, Teacher/Instructor)	2.88	0.54	2.88	0.48	0.969 (NS)
Gratitude	3.14	0.40	2.99	0.43	**<0.001 (S)**
Emotion regulation	2.93	0.42	2.96	0.43	0.058 (NS)
Empathy	2.83	0.39	2.79	0.36	**0.006 (S)**
Self regulation	2.81	0.38	2.75	0.36	**0.002 (S)**

Note. Significant values are shown in boldface.

Table 4. Summary Statistics for Each Construct, by Voices

Construct	Voices								p-value (significance)
	School Student		School Teacher		University Instructor		University Student		
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	
Forgiveness	1.93	0.48	2.50	0.64	3.33	0.38	2.26	0.44	<0.001 (S)
Individualistic orientation	2.79	0.46	2.85	0.39	2.66	0.27	2.85	0.42	0.046 (S)
Collectivistic orientation	3.23	0.45	3.05	0.48	2.67	0.36	3.15	0.45	<0.001 (S)
Self-efficacy (School Student, University Student)	3.03	0.36	NA	NA	NA	NA	2.87	0.39	<0.001 (S)
Problem solving (School Student, University Student)	2.95	0.44	NA	NA	NA	NA	2.73	0.59	<0.001 (S)
Meaning making	2.99	0.42	2.91	0.39	2.82	0.25	2.77	0.35	<0.001 (S)
Sense of belonging (School Student, University Student)	2.92	0.44	NA	NA	NA	NA	2.82	0.38	<0.001 (S)
Religiosity/ spirituality	3.51	0.69	3.49	0.58	3.34	0.49	2.88	0.82	<0.001 (S)
Teacher self efficacy (Teacher/Instructor)	NA	NA	2.92	0.47	2.71	0.27	NA	NA	0.022 (S)
Hope (University Student, Teacher/Instructor)	NA	NA	3.21	0.44	2.89	0.26	2.98	0.51	<0.001 (S)
Life satisfaction ((University Student, Teacher/Instructor))	NA	NA	2.99	0.47	2.81	0.42	2.78	0.55	<0.001 (S)
Gratitude	3.18	0.41	3.00	0.39	2.86	0.29	2.90	0.39	<0.001 (S)
Emotion regulation	2.92	0.43	2.97	0.45	2.88	0.32	2.98	0.39	0.140 (NS)
Empathy	2.86	0.41	2.77	0.32	2.75	0.28	2.74	0.35	<0.001 (S)
Self regulation	2.84	0.37	2.82	0.37	2.74	0.25	2.59	0.35	<0.001 (S)

Note. Significant values are shown in boldface.

Table 5. Summary Statistics for Each Construct, by Age

Construct	Age													p-value (significance)
	Less than 18		18 to 24		25 to 34		35 to 44		45 to 54		55 to 64		75 or older		
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	
Forgiveness	1.95	0.49	2.15	0.48	2.36	0.65	2.74	0.62	2.93	0.61	2.91	0.71	2.67	–	<0.001 (S)
Individualistic orientation	2.79	0.47	2.84	0.41	2.91	0.43	2.76	0.32	2.70	0.35	2.91	0.27	2.43	–	0.097 (NS)
Collectivistic orientation	3.23	0.44	3.16	0.46	3.04	0.50	2.99	0.49	2.88	0.39	3.07	0.48	2.29	–	<0.001 (S)
Self-efficacy (School Student, University Student)	3.03	0.36	2.92	0.40	3.09	0.63	NA	NA	NA	NA	NA	NA	2.25	–	0.001 (S)
Problem solving (School Student, University Student)	2.95	0.44	2.78	0.57	3.13	0.59	NA	NA	NA	NA	NA	NA	2.27	–	<0.001 (S)
Meaning making	2.98	0.42	2.86	0.39	2.88	0.35	2.86	0.33	2.75	0.35	3.16	0.44	2.80	–	<0.001 (S)
Sense of belonging (School Student, University Student)	2.93	0.44	2.85	0.42	2.66	0.21	NA	NA	NA	NA	NA	NA	2.53	–	0.003 (S)
Religiosity/ spirituality	3.51	0.70	3.05	0.79	3.35	0.64	3.56	0.50	3.28	0.72	3.54	0.46	2.80	–	<0.001 (S)
Teacher self efficacy (Teacher/Instructor)	2.88	0.18	2.76	0.32	2.92	0.54	2.85	0.40	2.79	0.30	3.17	0.52	NA	NA	0.82 (NS)
Hope (University Student, Teacher/Instructor)	3.17	0.24	2.99	0.50	3.21	0.43	3.11	0.44	3.05	0.40	3.23	0.53	NA	NA	0.042 (S)
Life satisfaction ((University Student, Teacher/Instructor))	3.10	0.42	2.80	0.54	2.98	0.43	2.89	0.45	2.91	0.55	3.15	0.49	NA	NA	0.028 (S)
Gratitude	3.18	0.40	2.99	0.43	2.99	0.44	3.01	0.36	2.86	0.34	3.00	0.34	2.83	–	<0.001 (S)
Emotion regulation	2.93	0.44	2.97	0.38	3.06	0.48	2.86	0.39	2.91	0.41	2.94	0.34	2.13	–	0.019 (S)
Empathy	2.86	0.42	2.77	0.34	2.78	0.35	2.75	0.33	2.77	0.24	2.91	0.25	2.14	–	<0.001 (S)
Self regulation	2.84	0.37	2.67	0.36	2.83	0.48	2.77	0.30	2.79	0.28	2.93	0.29	2.25	–	<0.001 (S)

Table 6. Summary Statistics for Each Construct, by Religion

Construct	Religion								p-value (significance)
	Muslim		Christian		Hindu		Other (Jewish, Buddhist, Atheist, Agnostic, etc.)		
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	
Forgiveness	2.10	0.59	2.23	0.66	2.18	0.58	2.21	0.57	0.100 (NS)
Individualistic orientation	2.80	0.44	2.79	0.41	2.88	0.45	2.66	0.41	**0.013 (S)**
Collectivistic orientation	3.22	0.45	3.14	0.47	3.08	0.47	2.91	0.45	**<0.001 (S)**
Self-efficacy (School Student, University Student)	3.02	0.35	2.91	0.40	3.03	0.37	2.78	0.44	**<0.001 (S)**
Problem solving (School Student, University Student)	2.89	0.50	2.77	0.47	3.01	0.43	2.81	0.45	**<0.001 (S)**
Meaning making	3.00	0.40	2.86	0.42	2.85	0.38	2.72	0.46	**<0.001 (S)**
Sense of belonging (School Student, University Student)	2.96	0.41	2.84	0.41	2.85	0.42	2.64	0.45	**<0.001 (S)**
Religiosity/ spirituality	3.61	0.53	3.39	0.67	3.03	0.83	2.57	1.07	**<0.001 (S)**
Teacher self efficacy (Teacher/Instructor)	2.94	0.49	2.80	0.23	2.84	0.43	2.77	0.22	0.435 (NS)
Hope (University Student, Teacher/Instructor)	3.17	0.39	3.06	0.40	2.97	0.52	2.72	0.68	**<0.001 (S)**
Life satisfaction ((University Student, Teacher/Instructor))	2.91	0.46	2.98	0.48	2.76	0.56	2.98	0.62	**0.048 (S)**
Gratitude	3.11	0.41	3.04	0.42	3.08	0.41	2.96	0.43	**0.048 (S)**
Emotion regulation	2.96	0.42	2.93	0.44	2.92	0.40	2.89	0.51	0.698 (NS)
Empathy	2.83	0.37	2.78	0.42	2.82	0.39	2.72	0.41	0.405 (NS)
Self-regulation	2.83	0.37	2.72	0.39	2.74	0.38	2.63	0.38	**<0.001 (S)**