

*An Exploratory Study on the Perceptions of Life*  
*among*  
*Hong Kong Primary Students*  
*for*  
*Enhancing Life and Values Education*

by

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## **Statement of Originality**

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## Abstract

Life and Values Education (LVE) should be student-centered, life-oriented and culture-based towards the holistic development of the young generation, especially for primary students who are at the most crucial and foundational stage for their psychosocial, cognitive and moral developmental stage of values formation and independent behaviors. To facilitate the delivery of LVE as a life-transforming journey in love, it is essential to connect students' prior knowledge to attain new insights for reinforcement and consolidation of positive values in life. This preliminary study is endeavored to explore their perceptions of life so as to broaden the knowledge base for designing and implementing LVE activities for the primary students in the local context.

The design of this study has undertaken a mixed methods approach in convergent parallel design for data collection and analysis. 'Draw and Narrate Approach' and 'Semi-structured Questionnaire' have been respectively adopted in the qualitative and quantitative parts of this study as the major research tools.

This study has contributed to fill up the research gap by collecting the firsthand information for generating preliminary insights to explore the perceived perceptions and values of life with aspirations from the local primary students for enhancing LVE. This is an exploratory study rather than a correlational study. The research findings collected from a total number of 606 participating students have demonstrated that their perceptions of life are multi-dimensional to address different areas of human needs while their proposed ways in cherishing life are oriented towards various types of relationships.

By the sociocultural review of the major findings, this study also sheds light on understanding how sociocultural factors have profoundly affected the perceptions and anticipations of our

local primary students. They have developed the awareness of ecological senses even though they live in a highly urbanized city. Students from upper academic levels have a yearning to explore the essence of their existence by living in a multi-faiths community with diverse cultures. Nevertheless, death is still a cultural taboo.

Simultaneously, the traditional collectivism-oriented cultures in the East and the teaching of Confucius have fundamental impacts on our students to be inculcated with strong family-oriented values to foster social harmony. Besides, the general over-emphasis of academic achievement in the competitive society with rapid-changing rhythm of new challenges may undermine their holistic development and lead to a comparatively low level of self-satisfaction.

The implication of the study is to encourage educators to put greater emphasis on involving our students' active participation in the design and implementation of LVE. It is noted that the interactive learning model with mutual sharing is a significant pathway to lead out students' potentials to attain the learning goals of LVE for enhancing their wellbeing with holistic development.

For the future development of LVE, the formation of self can be considered as the cornerstone. The synthesis of the four components including 'Stewardship' and 'Authorship' for developing intrapersonal relationship with self, whereas 'Partnership' and 'Citizenship' for enhancing interpersonal relationship with others for integration are recommended as the foundational dimensions of LVE.



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## List of Abbreviations

Abbreviation	Definition
LVE	Life and Values Education
QoL	Quality of life
NDI	Narrative and Drawing Intervention
SPSS 28	Statistical Package for the Social Sciences Release 28
WHO	World Health Organization



## **I. Introduction**

Life is a mystery. Life can be understood with a wide range of complex and dynamic concepts which can be explored from multiple dimensions. In the general sense, it is a journey from birth as its beginning towards death as its completion. All living things have a basic instinct to strive for survival, growth and development. Nevertheless, we human beings are different from other living things since we have aspirations towards life fulfillment with free will, consciousness and strengths besides satisfying our biological needs. Each individual has an inner yearning to cherish life for oneself and to build up satisfying relationships with others. Thus, the continuous formation of positive value systems from childhood is fundamental and essential for individual and social development. This can also be considered as the integral core of Life and Values Education (LVE) to inspire our students to explore the meaning, value and goal of life as well as the ways in cherishing life.

In view of a mission to enhance the holistic development of our young generations, this exploratory study is aimed at collecting firsthand information from local primary students for the further development of well-structured, student-centered and life-oriented curricula for LVE in the social context of Hong Kong. It is focused on exploring the perceptions of life as well as the proposed ways of cherishing life based on the direct feedback of the participating students recruited from different local primary schools.

This introductory chapter is comprised of five sections. The first section briefly describes the research background about the existing situations of the youths in the context of Hong Kong society. In response to the challenging reality faced by the local youths, the essence and significance of LVE is discussed in the second section. The research statement with research questions is formulated in the third section. The fourth section is a summary of the objectives and significance of this research. The fifth section is an outline of the structure of this research.

## **1.1 Situations and Challenges for the Young Generations in Hong Kong**

### ***1.1.1 General Social Circumstances in Hong Kong***

We are living in the 21st century with tremendous advancement in technology and newborn babies are brought up with many more material resources and ample opportunities in comparison with our parents or grandparents. The drastic technological, social and economic changes have not necessarily reduced the difficulties faced by our young generations or brought them greater meaning and happiness in life.

The youths of this age are living in a time overwhelmed with different sorts of unprecedented struggles like the international politics, the global pandemic devastations, the economic deteriorations and instability, the ecological disasters, the confusion of moral and ethical values and many other life-threatening risks which are not known to us. The situations are worsened with the universal permeation of the destructive culture of death. Apart from the legalization of abortion and euthanasia in an increasing number of countries, it is reported that one person commits suicide in every 40 seconds across the world (World Health Organization, 2019) and there is an average of more than 20 suicide attempts for each suicidal case (World Health Organization, 2022).

For most children, life is too incredible to associate with death. Loss of life seems to be too far away for them as they are generally energetic and lively. Regretfully, the reality is somehow in contradiction with this proposition. It is indicated that suicide has globally become one of the second fatal causes among the youths aged 15-29 in recent years (World Health Organization, 2019). In Hong Kong, the life of a total of 58 young people aged below 24 is also reported to be tragically cut short by committing suicide in the year of 2019 (The Hong Kong Jockey Club Centre for Suicide Research and Prevention, 2020). It is also noted

that the suicide rate for children under the age of 15 has hit a historical high with 11 victims in the year of 2021 (Li, 2022). It is reported that 7 students committed suicide in the month of May 2022 after the resumption of face-to-face class in Hong Kong (The Standard, 2022). These figures have definitely alerted us to have more serious concern for our youths.

Suicide can be considered as an extreme approach or final step to leave unfavorable circumstances. To have some understanding of the causes of suicide will help us to understand about the risk factors which will threaten the healthy living for people especially the more vulnerable groups like the youths and the elderly. Suicidal risk is caused by a wide range of contextual and cultural determinants including psychopathological factors, family background and negative impacts of social media (Ackerman & Horowitz, 2022). There are some prevalent risk factors associated with suicide among children and adolescents. The identified issues are psychological problems like depression, family and environmental dysfunction, imitative or disruptive behavior, low self-esteem, interpersonal difficulties among peers, impulsivity, feeling of entrapment, confusion, school failure, thwarted belongingness, pessimism for the future and perceived burdensomeness (Greydanus & Calles, 2007; Hawton et al., 2012; Siu, 2019). Individuals who have weaker motivations to live are at an increased risk of suicidal thoughts or attempts (Zhang et al., 2011).

Contrariwise, it is highlighted that some protective factors do exist which can help to reduce the suicidal risk, including positive self-esteem, enhanced social and school connectedness with sufficient social support, satisfaction with life, etc. (Kim et al., 2023). Thus, it is strongly recommended to strengthen the protective factors against suicide for our young generations through the delivery of school-based awareness programs. It is anticipated that the general survival skills of our youths including their positive psychosocial attributes, cognitive competence and problem-solving capacities can be further developed and improved (Siu, 2019).

### ***1.1.2 Characteristics of Hong Kong Context***

Hong Kong has been rapidly developed from a fishing village to a metropolitan named as ‘the Pearl of the Orient’ in the previous seven decades (1950s-2022). It is an international city with a rich Chinese traditional cultural heritage blended with the western way of thinking and lifestyles. People from various parts of the mainland China as well as from many different countries who keep their own traditions, languages and cuisines have migrated here to live and work in this expatriate community (Xue et al., 2012). Owing to its distinctive historical background and geographical location, Hong Kong has become a meeting point of the East and the West in which cross-cultural influences are widely and deeply nurtured in our value systems. A broad spectrum of different life values in the West and the East due to their particular religions, philosophies and cultures, can be identified in this small community. Hence, different sets of life value systems have contributed to shape the socio-cultural context and subsequently the educational system in Hong Kong. Living in a complex international city, our young generation may be exposed to various degrees of confusion, perplexities or conflicts unless they have received adequate proper guidance through the socialization process for their healthy development.

In the traditional Chinese culture, education orientates towards an integral human development composing of five dimensions: the moral (德), intellectual (智), physical (體), social (群) and aesthetic (美) aspects (Cheng et al., 2017). Nevertheless, it has been somehow overridden by academic, or rather intellectual, achievement while the areas of emotional management, psychosocial competency, resilience building and positive self-concept have not been developed with a similar emphasis in family or school setting.

### ***1.1.3 Academic Achievement as an Overriding Element in School Education***

Owing to the scarcity of resources and the dense population, Hong Kong people live and grow up in a highly competitive and task-oriented social environment. Since kindergarten level, we are trained to adapt to our educational system to attain high scores as the major goal of schooling so as to struggle for the limited opportunity of subsidized university quota. Under these circumstances, both students and parents are inclined to place exaggerated emphasis on the academic results which are considered as the principal criterion to assess and decide the future prospect and even the personal worth of the youngsters. Echoing the universal trends to face great challenges of globalization, advanced technology, economic transformation and international competitions in the recent decades, inter-school competition for raising the school's academic performance is catalyzed among the schools for survival. This is due to the rapid decline in the school-aged population leading to reduction in student enrollment together with an increase of student's withdrawal in spite of waves of educational reforms being established in recent years (Cheng, 2009; Ho & Lu, 2019).

It is satiric that some local schools may be too concerned about their school rankings and reputations which are hinged to their overall academic performance. Consequently, spoon-feeding with model answers to attain high scores has become the mainstream of pedagogies which will discourage the development of critical thinking, problem-solving skills and creativity among our youths.

### ***1.1.4 Family Upbringing***

The overemphasis of academic achievement has also been reinforced in the upbringing of our youths in the family context. Like most Asian families, the authoritarian parenting style with over-protection is commonly found among the Hong Kong parents. They tend to train their



children to be self-disciplined and hard-working (Gao et. al., 2015). In view of the keen competitions, they make great efforts to provide their children with all the related learning opportunities and skill training to achieve the best academic results. They believe that good academic performance means a brighter career path, more economic security and greater social prestige (Othman & Leng, 2011).

The over-emphasis on academic excellence in schools and families has upsurged the stress level of the children and has hampered their holistic development (Shek & Siu, 2019). The youths who cannot get high scores in academic examinations tend to identify themselves as vulnerable or failure especially if they do not have sufficient social or economic support from their families. Some others in a state of intense helplessness and hopelessness may go astray, get lost or become indifferent in their personal and social engagements.

### ***1.1.5 Mental Health of the Young Generations***

In view of the particular social contexts as discussed above, we can understand that our youths are exposed to many stress factors which can exert tremendous negative impacts on their mental and social well-being. Living in the highly competitive, materialistic, utilitarian and instant-ready cultural environment, our new generations are prone to be infiltrated with distorted or unhealthy values like pragmatism, materialism and egocentrism (Shek & Siu, 2019). It is sad to see that some youths value success, financial gains or personal rewards to the extent that they show very little concern for mutual respect or social responsibility.

Some statistics have demonstrated that our young generations do not feel satisfied with their life. The World Happiness Report 2020 indicates that Hong Kong has been ranked 114th among 186 cities in 156 countries in the global subjective well-being rankings. The mean score of how positively the inhabitants of Hong Kong currently evaluated their livelihood was

5.44 out of 10 within the period from the year of 2014 to 2018. In addition, a negative change (-0.002) was also shown in the index of how they anticipate their subjective wellbeing in their future. These figures implied that people living in our community are not optimistic about their future (De. Neve & Krekel, 2020). Further information has indicated that about 40% of Hong Kong people have developed symptoms of depressions and their mental health has deteriorated to its worst level in the previous eight years, from the year of 2010 to 2018. 18.5% of the respondents exhibited moderately severe to severe symptoms of depression (Choy, 2019).

Another similar local research conducted in 2019 has illustrated that the overall happy index was 6.16 out of 10 while the relevant index among the youths in Hong Kong was lower than those in 2015 (The City University of Hong Kong, 2019). It is also reported that students aged 12-18 were the unhappiest group with an index of 5.87 in 2019 (So, 2020).

A telephone survey conducted by the Chinese University of Hong Kong in September 2020 has shown that the average rating for the livability in Hong Kong was 49.6 which is significantly lower than that of 54.4 in the year of 2019 (The Hong Kong Institute of Asia-Pacific Studies, 2020). It is also indicated that 43.9% of the respondents chose to emigrate abroad if they had the opportunity. Apart from all the political factors, the respondents had expressed that the stressful living environment (19.4%) and the poor economic prospect (13%) have induced their intention of emigration. These perceived instabilities among the local families will also negatively impact the holistic development of the young generations.

## **1.2 Essence and Significance of LVE**

LVE as a far-reaching and lifelong holistic human developmental process has generally been considered as impractical or overshadowed by the materialistic orientation to compete for

economic gains and social prestige. However, our young generations who live under stressful social circumstances are prone to feel more confused or perplexed in facing their future. Thus, it is of vital importance to strengthen LVE in our existing educational system so as to inculcate positive values of life among our youths as well as to build up and consolidate their capacities to cope with all different sorts of unprecedented struggles and new challenges.

LVE is the combination of life education and values education. It is introduced to embrace the ‘ultimate concern and practice’, ‘ethical thinking and reflection’ as well as ‘exploration of integrity’ (Sun & Lee, 2021, p.43). Life education can help students to explore the true meaning of life from anthropological perspectives with an in-depth outlook of life and based on thanatology for building up a comprehensive view of life process. Simultaneously, values education can help the students to reconstruct a proper value system as well as to internalize the virtues for living by critical thinking and ethical reflection. By integrating the various dimensions of life with ethical values, the learners are enhanced to develop a more holistic perspective about the truth of life within their social contexts (Sun & Lee, 2021). In this process, our young generations learn to actualize the concept of ‘unity of knowledge and actions’ with competencies so as to live a flourishing life with self-cultivation, self-realization and self-transcendence.

LVE is a lifelong learning process to explore and deepen the understanding of meanings and values of life which is mutually enriching to both the teachers and the students. It embodies both the personal and social dimensions to nurture human consciousness of the precious values of life. It is personal because all individuals are unique, valuable and irreplaceable. Meanwhile, it is an important process to awaken the inner potentialities and sensibilities of each individual to participate consciously in establishing, strengthening and sustaining a mutually caring social milieu with respect for human rights and dignity as well as social justice.

Thus, it involves an integrative approach to foster the development of wholeness, including cognitive, physical, spiritual, emotional, social and aesthetic aspects for individuals as well as for the whole society (Miller et al., 2005).

LVE is not only person-oriented but basically life-oriented. It focuses on cultivating positive values in life and moral concepts of general well-being. It provokes the awareness of respect for the dignity and the well-being of all living things with the collective responsibility for advancing humanistic civilization. It helps individuals to be responsible and caring people so as to contribute to the social cohesion of a harmonious society.

In order to cultivate LVE as a foundation in an individual's life span, it is advocated that a comprehensive set of course materials in a well-designed curriculum from primary school levels is highly recommended. It is essential for all members of our community to be aware of the innate dignity and value of basic human nature and to respect all living things. It is utmost important for each person to learn to cherish our own life and to nurture the life of others with empathetic understanding, compassion and mutual sharing.

LVE embodies two dimensions of learning. Horizontally, we need to understand our inner self and our families as well as our roles of being a responsible citizen in the local, national and international contexts. Vertically, self-actualization is the highest level of human desires to fulfill an individual's unique potential, according to Maslow's Hierarchy of Needs (Hanley & Abell, 2002) and Frederick Herzberg's Two Factor Motivation Theories (Ihensekien & Joel, 2023). It can be attained by the holistic development of an individual with a well-balanced growth in the physical, mental, emotional and spiritual aspects. Nobody can truly actualize oneself without cultivating the self-awareness to develop one's integral wholeness, including self-identity, self-esteem, self-respect, self-understanding and self-care. The provision of LVE as an essential core of education is indispensable for our young generations.

### 1.3 Statement of the Research Questions

LVE is included as part of the primary school curriculum in Hong Kong with an attempt to foster the holistic development of our primary students to have a comprehensive understanding about values and life. It focuses on helping our students to develop positive values and attitudes, interpersonal skills as well as a sense of responsibility towards themselves, others and society. Nevertheless, the effectiveness of LVE in Hong Kong has been long debated. It is remarked that the education system of Hong Kong is still under pressure to develop more personal and social values among its students for the tripartite framework of citizenship with the local, national and global dimensions (Law, 2004). It is also commented that there has been little effort in developing LVE programs which focus on enhancing the wellbeing of students by exploring their character strengths and cultivating their life skills for overcoming different sorts of challenges in their existing and future life (Cheung & Ho, 2019). There is also no comprehensive or integrated course outline and materials in LVE conducted in the local primary schools. Our students learn about life values in a fragmented way as the fundamental concepts like ethical senses, values, beliefs and attitudes are disseminated indirectly in various subjects of Chinese language, English language as well as Moral and Civic Education or delivered informally in different school activities (Halstead & Xiao, 2010).

Teachers who are the main school personnel responsible to conduct LVE are not in a favorable situation to enhance the learning process for their students. It is reported that about a quarter (24.5%) of Hong Kong teachers rated themselves as either very stressful or extremely stressful in their teaching professions with a higher prevalence of psychosomatic symptoms like insomnia (Jin et al., 2008). Along with the teaching requirements, the heavy workload in sharing non-teaching tasks, the high teacher-student ratio, the keen expectation of parents, the demands of school curriculum embedded in the highly competitive educational system with a

strong emphasis on academic achievement, the continuous educational reformations as well as the recent threats of school closure (Cheng & Mok, 2008) have all accumulated tremendous pressures on the educators who are prone to suffer from burnt-out. In case the teachers are not backed up with sufficient support, their negative emotions which have generally been ignored and underplayed (Fried et al., 2015) may demoralize their motivation, deflate their attention and cognition, negatively affect their teaching enthusiasm and performance, weaken the working relationships with their colleagues and ultimately impact the learning outcomes of their students (Schuz & Lanechart, 2002). With limited supply of resources, most teachers will prioritize academic achievements over LVE to fulfill the expectations of the school managements and parents. Thus, the absence of well-structured curricula and inadequate course materials for LVE will become challenging for teachers to contribute more time and effort to effectively deliver student-centered program in LVE.

‘Life influences life’ can be considered as the core of LVE since our personal history is intertwined with those of others. Thus, LVE involves both levels of intrapersonal and interpersonal relationships in the process of teaching and learning. Education is not simply the transmission of knowledge from mind to mind. It is more important to cultivate the values and attitudes from heart to heart that embody empathetic understanding, mutual acceptance, respect and care for each unique human being. Similar to other disciplines of learning, LVE involves a spiral learning process of moving from simple to more sophisticated matters as well as encompassing views from the perceived knowledge to attain new insights as advocated by Hegel, the philosopher (Hoover & Hashim, 2016).

Owing to the significance of LVE, it is worthwhile to explore more alternatives to conduct LVE for our young generations so as to enhance continuously the effective teaching to fit in the learning needs of the students.

## 1.4 Goal and Significance of the Research

This research entitled ‘An Exploratory Study on the Perceptions of Life among Hong Kong Primary Students for Enhancing Life and Values Education’, involving both the qualitative and quantitative approach, serves as a preliminary study to understand the local primary students’ perceptions of life, including their personal viewpoints of the meanings and values of life as well as their proposed ways of cherishing life.

This research aims to collect firsthand information from the primary students who are the foundational group of recipients of LVE within the school system. Both parents and teachers always try their best to optimize the living and learning environment for our young generations. However, they may not truly understand their children’s feelings, thoughts and behavior. We adults are sometimes trapped in the self-centered subjectivities to define and judge children’s needs and their benefits solely from our perspectives without listening to them. We do want and try hard to love our young generations. However, love without understanding will wilt like flowers without water. It may result in unmet needs and dissatisfaction or even trigger negative emotions with rebellious behavior in the receiving party. Hence, the researcher would like to listen to the research participants directly through personal interactions or individual responses. It is envisioned that these research participants will contribute their ideas in the upgrading of LVE curriculum for future service recipients.

To have students’ involvement in LVE research is in line with the international trend of shifting from the traditional teacher-centered approach to student-centered approach. This change focuses on the active participation of students to achieve their learning goals in the process of teaching and learning. It provides more opportunities for students to connect their prior knowledge and experiences in the interactive learning processes so as to enhance their reflective and critical thinking as well as their problem-solving skills (Bada & Olusegun, 2015)

by increasing their autonomy and engagement (Arif, 2021; Jones, 2007).

Motivation plays a crucial role in education by fostering students' engagement (Coates, 2007), learning performance and outcomes (Gopalan et al., 2017). Students can be effectively motivated to learn with their interests, perceived knowledge and cognitive ability at their academic levels (George, 2005; Tomlinson, 2005). Incorporating students' perceived knowledge into what they are learning can reinforce their active learning and spontaneous exploration (Freeman et al., 2014). With their prior knowledge, students are more likely to feel confident to share their creative ideas as well as to be actively engaged with their curiosity in the learning process. Their learning outcomes can thus be reinforced by encouraging cognitive processing of the perceived knowledge with the new information for improving their memory retention.

The student-centered approach is also adopted for data collection in this research. It is particularly important for the researcher to have openness in understanding the perceptions, interpretations and anticipations from the research participants' personal outlook of the theme of Life. A wide range of complex multi-dimensional constructs including the in-depth insights from the qualitative study and the generalizable information from the quantitative study are collected from the research participants to provide valuable first-hand responses with a consolidated evidence base. The collected data can be used as reference materials to portray a route map to further investigate and incorporate some appropriate and interactive contents to fit in the learning needs of the local primary students. In the long run, it is aimed at designing the student-oriented curricula in LVE for local primary schools to enhance our children's potential and abilities to cherish life with positive life values.



## 1.5 Structure of the Research Thesis

To facilitate a comprehensive and systematic presentation with clarity and greater readability, this research thesis is composed of seven chapters, namely (I) Introduction, (II) Literature Review and Theoretical Framework, (III) Design of the Study, (IV) Qualitative Part of the Study, (V) Quantitative Part of the Study, (VI) Discussion: A Synthetic Analysis with Cultural Reviews as well as (VII) Conclusion.

Chapter I provides an overview of this study which comprises the importance of LVE in the context of Hong Kong, the theme of the study with its aim and scope as well as the structure of this research thesis. Chapter II is a systematic literature review which provides the theoretical framework of this study and discusses the relevant debates in the study. Chapter III explains the research design of the study which outlines the mixed-methods approach applied in this study as well as the ethical issues. The methodologies, procedures of data collection, analytical framework and findings of both the qualitative and quantitative research of this study are presented in the following two chapters, Chapter IV and Chapter V respectively. Chapter VI summarizes the synthetic findings in line with the research questions for an integrated in-depth discussion and interpretation with cultural reviews. Chapter VII is composed of the conclusion of the study.

## **II. Literature Review and Theoretical Framework**

This chapter contains six sections to review the literature for establishing the consolidated theoretical framework of this study. The first section draws upon the literature on the conceptual understanding of the three constituents of LVE, including education, life and values. The second section focuses on the different theories of human development to illustrate that primary school level is the crucial and fundamental stage for the delivery of LVE. The third section introduces the close relationship between human cognitive development and the sociocultural contexts. The fourth section provides a synthesis of the human developmental theories to demonstrate that development involves stages and processes which have to be properly addressed in delivering LVE to the young generations. The fifth section reviews the existing situation of the implementation of LVE in Hong Kong which is characterized with a top-down approach. The sixth section gives an account of some previous research findings as references to recommend the ‘student-centered’, ‘life-oriented’ and ‘culture-based approach in conducting LVE. It is utmost important to have a basic understanding about the perceptions, values and anticipations of life among the local primary students as a foundation to develop ‘student-oriented’ materials for LVE with a goal to nurture them to respect life and live with positive meanings, values and directions.

### **2.1 Conceptual Understanding of LVE**

‘Life influences life’ with inspirations and enlightenment through the two-way processes of teaching, learning and mutual sharing can be considered as the core of education. This is especially true in LVE which refers to the ‘education’ of ‘life’ and ‘values’ as denoted by its name. LVE is directed towards inspiring and enhancing students to explore and deepen their understanding of meanings and values of life. The theoretical explanations of these three

constituents are illustrated as follows to provide a conceptual context for the research design.

### **2.1.1     *Constituents of LVE: Essence of Education***

According to etymology, the word ‘Education’ is originated from two Latin words: ‘Educare’ and ‘Educere’. ‘Educare’ means ‘to nourish’, ‘to bring up’ and ‘to raise’ with certain aims while ‘Educere’ refers to ‘bringing forth’, ‘leading out’ the already existed or innate qualities of the learner. Nowadays, education is usually conducted with a systematic schooling and training process which aims to equip or improve the learners with knowledge, skills or capabilities (Harper, 2019). Actually, the initial letter ‘e’ of the word ‘education’ has already implied the meaning of ‘out’ to denote that education is a process of ‘pouring out’ instead of ‘filling in’ which is an attempt to lead out children’s potentialities for developing their individualities (Aggarwal, 2010). Hence, education is not simply the transmission of knowledge by ‘spoon-feeding’. Rather it is an interactive living experience with mutual understanding and exploration to foster the growth of virtues and problem-solving skills (Kotsonis, 2019).

Education has both retrospective and prospective dimensions. It is an ongoing life journey which integrates the acquired perceptions with new inspirations through experiences and activities for continuous enrichment. It helps to broaden our perspectives, deepen our understandings, refine our emotions and stimulate our thoughts.

Education is also both conservative and progressive. Education is conservative because it is an interactive process between teachers and students within a particular social setting with its existing and prerequisite culture, value system, language, beliefs and lifestyles. Nevertheless, it is also a progressive process of living which involves social engagement of learning experiences for the preparation of future living (Williams, 2017) through the development of

physical, intellectual, aesthetic, social and spiritual potentials of human beings (Andreotti, 2011) for self-actualization towards the realization of one's individualities and contributions for social improvement.

Becoming the main actors in future, the young generations go through different levels of the educational system for preparation to face the complexities of life and the diversities of challenges in the rapidly changing socio-economic contexts with the advancement of knowledge, development of skills and acquisition of values (Gamage et al., 2021). School education has played a vital role in developing positive values to enhance our intellectual depth, communicative competence, empathic characters, capacities for reflection, self-management and self-knowledge in various aspects of life (Lovat & Toomey, 2009). Thus, to inculcate positive life values with innovations from the primary school level is essential and crucial in education.

### **2.1.2     *Constituents of LVE: Perspectives of Life***

Life is diverse and complex with magnificent configurations. There are a multitude of theoretical perspectives in understanding about life and death which are deeply intertwined and mutually illuminating, including the etymological, scientific, biological, psychological, religious, philosophical senses and many other aspects.

The word 'life' is etymologically originated from an old English word which signifies the state of being a living thing. It denotes the history of an animated corporeal existence from birth to death (Harper, 2019). According to the Chinese vocabularies, the meaning of 'life' is expressed by the term with two combined Chinese characters, 'birth (生)' and 'destiny (命)'. The Chinese character of 'birth' pronounced as 'Sheng' is figuratively represented as the shoot of a plant sprouting out from the ground or soil with the meaning of 'being born'. It refers to

all forms of living beings that can grow to give life in a continuing cyclical manner. The interpretation of the meaning of life is completed with another character of ‘destiny’ which is pronounced as ‘Ming’ with the symbolic meaning of ‘order’ or ‘mission’ (Sears, 2017; Dainian & Zhang, 2002). Thus, the traditional Chinese perspective of life can be understood as a new life with an order for existence which is embodied with missions.

Scientists explore the origin, nature, characteristics and developmental stages of a variety of living things. It is stated that each living creature is unique with its intricate and systematic structures. According to the First Law of Thermodynamics of Energy, life begins when energy first serves. Energy is always conserved. It can never be created or destroyed but it can be transformed (Tatar & Oktay, 2011). It is speculated that the chemical energy formed from alkaline of water is changed by the acidity of ocean which has initiated the spark for the existence of the first living thing (Haynie, 2008). Nevertheless, the Second Law of Thermodynamics of Energy states that energy changes constantly from a higher order to a lower order, degrades and loses out in disorderly manner during the process of deterioration (Films for the Humanities and Sciences and Infobase, 2013). Thus, death becomes the termination of the once very lively existence (Obayashi, 1992) and is the final destination for all living things without any exception.

Biologists study specifically living organisms and their relationships to the surrounding environments. They define life from its characteristics as a metabolizing material object and informational system with the ability of self-reproduction with variations (Trifonov, 2011). It is advocated that life expresses itself in several complementary and entangled compositions: individual and collective, synchronic and diachronic. It can be examined in the form of individualized and cohesive system as well as physically unbounded networks to identify multiple life characteristics for differentiating between living things and non-living things as

well as the various types of living organisms. It can also be explored in the actual material sense like the basic needs of life or in the causal correlation in the chronological order of life (Amilburu et al., 2021).

Biologists have also proposed that living things can be classified into three domains, including Bacteria, Archaea and Eukarya. Eukarya can also be categorized into four kingdoms, including Protista, Fungi, Plants and Animals (Bailey, 2020). It is also suggested that the following seven life characteristics can enable us to differentiate living things from non-living things, including growth and development, organization, reproduction, nutrition, metabolism, response to the environment and movement. It is further explained that all living things can grow in size and develop into maturity. Living things are capable of asexual or sexual reproduction to produce offspring for passing on their characteristic traits and increasing the population of their species. Through the process of nutrition, living things absorb nutrients, air and water from their surroundings to carry out metabolism which involves a series of biochemical reactions to generate energy for sustaining life and growth (Hamed & Abu-Naser, 2017; Hakan, 2013).

In addition, all living things can detect changes in the environment with their senses and feelings so as to respond to these stimuli for survival. They can adapt to the changes by maintaining a more or less constant internal environment through homeostasis, like adjusting their body temperature or skin colors to keep themselves more stable regardless of the external conditions. Simultaneously, they are also capable of responding to environmental changes with movement which is a dynamic force of response for approaching the sources of life or escaping from the external risks and dangers. Therefore, the roots of plants move down into earth to absorb water and nutrients from the soil whereas their branches and leaves move towards the sun for photosynthesis. (Hamed & Abu-Naser, 2017; Hakan, 2013).

All living things are organisms composed of atoms to form molecules which produce cells. Cells gather together to make up tissues for organs while series of organs are constructed into systems. Different systems collaborate with one another to exhibit their functions to allow the organisms to survive and to actualize their existence (Hamed & Abu-Naser, 2017; Hakan, 2013).

Animism perceives that everything possesses a distinct spiritual essence or living soul and thus is alive (Hornborg, 2006). It has been further elaborated that spirit is the spark of life which is found throughout the natural world. It is claimed that all natural things such as plants, animals, even rocks and thunder, possess spirits which can influence human activities (Cambridge Dictionary, 2023). The spiritual soul leaves the physical body of a living thing at the end of its earthly existence and lives on like an afterlife within the world. Animists believe that spirit is the fundamental but invisible element of the cosmos that makes living things alive. It is the life force that animates the world and makes the transformational process of life possible (Films for the Humanities and Sciences and Infobase, 2013).

In psychological sense, the four alphabets of the word 'HERO' symbolize four proposed types of psychological attributes and the possible orientations for a person's life journey. 'H' stands for 'Hope' as the goal for direction. 'E' denotes 'Efficacy' as the efforts to succeed in tasks or to achieve the goals. 'R' represents 'Resilience' to show that a person has certain capabilities and strengths to bounce back after meeting adversities in life. 'O' refers to 'Optimism' as the positive attitudes to anticipate and move on towards future successes (Luthans et al., 2007).

In philosophical senses, life is the most precious resource we human beings are embodied with. Philosophers have spent a long time and great efforts to deliberate over the purposes, values and quality of life. They have been trying to search for answers and meanings of how human

beings should spend their lifetime and how to live with fulfillment and satisfaction within the limited lifespan. All the answers can be personalized for each unique individual and dependent on the different perceptions of life meanings as well as the available resources for the attainment of a greater good or one's ultimate life goals.

In the Eastern societies, Confucianism (儒家) and Daoism (道家) are the two prominent branches of ancient Chinese philosophical thoughts. Both have similar interpretations of life to define one's well-being as a person who lives a good life with balance, harmony and beauty. Balance is the state of equilibrium between two interlinked phenomena in paired relationships, like simplicity and complexity, immediate emotional reactions and cultivated prudent responses etc. Harmony is an aesthetic integration of diversities (Neville, 2019) as well as the state of stable and peaceful existence involving balance and flexibility (Kjell et al., 2016) among the relationships with self, others and the natural world (Neville, 2019). Beauty is the aesthetic integration of harmonies with rhythms (Weik, 2019). These qualities are not only found in the appreciation of aesthetic elements in our life but are also revealed in the patterns, proportions and images portrayed with spiritual and intellectual freedom (Lai et al., 2018)

The two classical representatives of Confucianism, Confucius (孔子) (551-479 BCE) and Mencius (孟子) (371-289 BCE) have advocated that happiness is a critically essential component of good life. According to their beliefs, happiness is constituted with the three salient aspects: ethical pleasure, ethical desire and moral innocence. A good life is a happy life rich in ethical pleasure sustained with rituals and virtues. It is a life in which ethical desires override moral constraints by observing the virtue of prudence since the source of greatest happiness is the cognizance and realization of one's moral innocence. According to the *Analects* 《論語》, if an individual can regulate every aspect of one's life with rituals as



ethical desires, he or she would be morally innocent with no regret and would be able to obtain ethical pleasure from one's daily practice of reflection (Luo, 2019). In other words, happiness is to enjoy the harmony resulted from daily practice of ancient cultural norms among human relationships which consequently will guide us to the balanced, good and right way (Lobel, 2017).

In traditional Confucianism, the ontology of life with unceasing creativity is linked to the universal human feeling of mutual empathy which is manifested in the concept of humaneness with the inherent goodness. It emphasizes on dealing with social matters to achieve the welfare of society for human flourishing and moral excellence. Thus, rites and justice are conducive to a better life (Dainian & Zhang, 2002).

The cosmological perspective of life in Daoism can be interpreted as everything in the universe changes according to its Way, that is the *Dao* (道). It is believed that *Dao* (道) is the ultimate truth of the universe, which is the origin of everything, generating the forces between *yin* (陰) and *yang* (陽), light (明) and shadow (暗) within the natural and complementary order of movement (Wu & Lee, 2021). 'Coming into life and going out of death' (出死入生) is advocated as a natural sequence of changes during the life span of an organism. This can be summarized succinctly with the traditional paradigmatic expressions as shown in the *Dao De Jing* 《道德經》, the classical book written by Laozi (老子, 770-476BC): 'Humans model themselves on Earth while Earth models itself on Heaven. Heaven models itself on the Way whereas the Way models itself on Nature' (Dong & Wang, 2003; Moeller, 2015). Daoism advocates the path of multiplicity, plurality and harmony (Lai, 2017) and has great respect towards the diversity of life. It embraces Nature and believes that humanity will flourish only if we can reach the state that the human way is harmonized with the Way of the cosmos through

the practice of *wu-wei* (無為), that is the virtue of being serene and not taking impulsive actions (Huang, 2010). Modesty and regulation of human desires is considered as the way to attain the genuine pleasures of life. It is recommended that not chasing after material enjoyment can enhance the upholding of the wholeness of life (Dainian & Zhang, 2002).

Both Confucianism and Daoism advocate that the cosmos is in an open-ended progression of inestimable processes with numerous entities interweaving, attracting or repelling, affecting or being affected by each other. Confucianism is concerned with leading our life based on the aesthetic order and focuses on interpersonal harmony while Daoism emphasizes on intrapersonal harmony and individual concern with the search for the Way and its meanings (Li, 2006). The former stresses that true happiness of an individual is founded on conformity to a set of socially established practices whereas the latter suggests that a good life implies a personal journey of spiritual cultivation of mind-heart excursion and detachment to attain inner emptiness and freedom. Confucianism recommends a process of harmonizing an individual's body, mind and heart to become an organic and integrated whole. It advocates the education of virtues and morals for personal growth and nurturing harmonious relationships within human societies and the natural world (Wu & Lee, 2021). Daoism proposes that a good life is built on the path of enlightenment by aligning with the origin of life and living in harmony with it (Lai et al., 2018). It stands for nurturing and maintaining a quiescent attitude in the harmonious relationships with people and the natural world (Wu & Lee, 2021).

Apart from the two ancient Chinese philosophies, Buddhism originated in India has also contributed great impacts on the perspectives of life among Hong Kong people. The philosophy of Buddhism states that every life is in the cycle of death and re-birth and nothing is lost eternally. Everything works according to the Law of Cause and Effect. Individuals should be conscientious about death and the life-after-death with wisdom and compassion.

By examining one's inner self, a person needs to develop a clear conscience about one's heart and be aware of the orientation of one's own life through daily personal reflection. Buddhism promotes the attainment of a peaceful mind and the promise of eternal happiness as the goals for a good life (Wu & Lee, 2021).

Life and death are inter-connected with each other. Being the inescapable final destination of each living thing, death however is generally regarded as a negative event or variant of misfortune (Xu, 2007) in Chinese cultures. Many Chinese are inclined to treat death as a taboo for various cultural considerations. They choose to ignore it or refrain themselves from the discussion of death-related issues. Confucius has philosophically stated that 'how one can know about death before he or she figures out the meaning and purpose of living' (未知生焉知死) (Analects 11:12).

In Western societies, the ancient Greek philosophies and Christianity have made tremendous impacts on the perspectives of life. Socrates, a Greek philosopher who was the founder of the Western philosophy, has claimed that a good life is the 'examined life' of an individual whose actions and way of living are guided by knowledge through the process of questioning with a rational mind (Hardy, 2010). Plato, a predominant ancient Greek philosopher, has concerned about the path of truth-seeking with logical reasoning. He has suggested that life undergoes various stages of productive transformations, and a good life implies a process of cognitive development towards the appreciation of beauty with the power and courage of love to instill into the desire so as to move beyond the sensational experience towards the intellectual fulfillment (Lai et al., 2018).

Aristotle, another renowned ancient Greek philosopher, has claimed that people who can lead a life based on logos, the 'reasoned discourse', to exhibit human excellences or virtues with

the sense of happiness can enjoy a good life. It is the life in emergence when one considers his or her life as a whole and the relationships among one's goals are hierarchized to the highest good. A good life is the most desirable life which involves the interactions among the good, happiness, virtue, pleasure, welfare, society and political constitution. A person can live a life well with on-going activities which help to actualize the virtues of the rational part of the soul (Kraut, 2022). Both the philosophies of Plato and Aristotle have brought forth great significant impacts on interpreting the belief of Christianity as well as the development of the socio-political systems of the western societies.

John Cottingham (2003), a modern British philosopher, has claimed that a meaningful life should be 'achievement-oriented' which directs a person to make efforts towards some goals with some focus of energy, concentration or rhythm in its execution. Thus, life needs to be genuinely open to others since people always need mutual support and help to attain one's goals. Susan Wolf (2010), another modern moral philosopher from the United States of America, has argued that the meaning of life is recognized and realized with love. Engaging with somebody in a loving relationship with positive attitudes will yield fulfillment in life. Thus, it is further noted that the meaning of life does not equal to happiness. Life can be fulfilling even if it is vulnerable to pain, disappointment and stress since all these negative emotions or painful experiences can help individuals to grow and mature.

Apart from the above school of thoughts, there are continuous and numerous explorations into the meaning of life throughout human history. Human life is a vital process beginning from the conception in the mother's womb and destined to the end point of death lying peacefully in the tomb. As introduced by Obayashi (1992), there is a three-folds structure with regard to a human life, including the organic-biological life, the social-cultural life and the ideal dimension of life. In other words, a human being is born with an organic-biological self, an existence

formed and socialized by people and environment into a social-cultural life and is inspired to strive for achieving one's personal life goal to become an ideal self. As a biological entity, human beings need to struggle for the conservation, preservation, prolongation, enhancement, perpetuation and continuation of life. As a social being, each individual experiences to be shaped with life values through our socialization. Ultimately, it is good to develop oneself with qualities to cherish one's own life and to nurture others so as to live a life of fulfillment (Obayashi, 1992).

Owing to our individual uniqueness and varied life experiences, each person may have different perspectives of life developed along our continuous life stages. Most people may only identify living things as life, including human beings, animals, plants and micro-organisms. Nevertheless, children tend to perceive their favorite toys like Teddy Bear as alive too and treat them as their playmates or buddies whom they chat, share and play with (Philo, 2018; Pearce & Bailey, 2011). Indeed, some anthropologists have long argued that objects can be or act like human beings with personality in certain circumstances (Hoskens, 2006). Toys may even share their social roles in the lives of their owners (Nieuwenhuys, 2011). All these are determined by each individual's value systems which assign the degree of importance of something to us and subsequently influence our life patterns. Hence, the development of values will be the principal foundations and guidepost to form our personal attitudes, beliefs, behaviors and even emotions throughout our life journey of growth.

### **2.1.3      *Constituents of LVE: Dimensions of Values***

'Values' plays a significant role in the cognitive and psychosocial functioning of human beings and constitute the essence of human beings as proposed by many developmental theories. Our personal value systems can fundamentally influence the senses, beliefs, personality, feelings and behaviors of an individual. The word 'value' comes from its old French word referred as

‘worth’, ‘price’, ‘standing’ and ‘reputation’. It is rooted in the Latin word ‘valere’ with the extended meaning of ‘importance’, ‘degree of excellence’ or ‘of something precious’ (Harper, 2019).

‘Values’ are grounded in three universal requirements for human survival, including an individual’s needs as a biological organism, requisites for coordinating social interactions and concerns for the common good of others (Schwartz et al., 2012). Values are beliefs that have great impacts on one’s cognitive processes of attention, perception and memory. Values can also emotionally influence one’s attitudes, well-being and behavioral acts (Cieciuch et al., 2015) which may socially affect one’s intrapersonal and interpersonal relationships with oneself and others (Schwartz, 2016).

‘Values’ are served as a core element in an individual’s subjective choice of ‘good’ which generalizes one’s preferences of desirable goals and provides criteria of judgment for self-direction, self-regulation, self-enhancement, self-actualization and self-transcendence. Adaptation to different life experiences and circumstances may lead to changes in one’s value orientations. Socialization can shape life experiences by instilling different values among individuals and groups (Schwartz, 2016). Thus, it is advocated that ‘values’ are guiding principles of life which are closely associated with one’s physical, psychological and social wellness. They are the inner realities of an individual which are reflected through our patterns of thinking and ways of acting (Gamage et al., 2021). ‘Values’ are the motivating force to determine behaviors and thus can be considered as one’s moral compass to decide what to do or what not to do.

Ignacimuth (2004) has further proposed that there are four types of values in human life, including personal values, social values, moral and spiritual values as well as behavioral values.

Personal values indicate an individual’s own desires while social values are values adopted by

us in relating to others, including family, neighbors, friends, colleagues, any types of acquaintance or even strangers. Moral and spiritual values refer to an individual's personality, characters and moral judgment while behavioral values refer to all good manners for success and happiness. Goldman (2018), an American philosopher, has pointed out that well-being is the all-inclusive category of personal values which involves pleasure, happiness and meaning. Referring to the four different types of values, personal values or self-values can be considered as the fundamental and significant element for situating oneself in the horizontal and vertical dimensions of daily living throughout our lifespan. Horizontally, self-values help to locate the social position of a person and to define his or her commitment and identity in a collective entity so as to become an autonomous citizen by maintaining a good balance between the individual and the common value systems (Cheng et al., 2006). Vertically, self-values enhance a person to value his or her own self-concept which can influence one's interaction patterns with others in different types of interpersonal relationships as well as to cherish his or her own life with others.

Self-concept can be defined as an individual's personal perception of his or her own strengths and weaknesses based on the reactions and comments of others (Pasqual, 1989). Gross (1987) has further suggested that self-concept is composed of one's self-image, self-esteem and expectation of one's ideal self. Self-image is the self-description of his or her roles in society while self-esteem is one's overall evaluation of oneself. The ideal self refers to the kind of person one would like to be as each individual has an innate striving towards self-actualization (Roger, 1980; Kim, 2018).

In short, 'values' significantly influence all aspects of an individual's life since they determine the set of desirable goals which will consequently motivate all kinds of actions. 'Values' are not a standardized and stagnant package of entities since they can be cultivated, nurtured,

strengthened and modified in various developmental life stages to adapt with the unpredictably changing environment. It can consciously direct or subconsciously influence an individual's life orientations in all spheres of daily living. The formation of values from childhood is an exceptionally significant lifelong construct for all individuals. Values can generate very long-term impacts throughout our life whereas the acquired knowledge or skills may be lost or outdated along the timeline. Thus, it can be concluded that our 'values' are the core element that contribute to defining the quality of life as well as to determining our ways of cherishing life.

#### **2.1.4 Goal of LVE: Cherishing Life**

To cherish life is closely related to living a life with fulfillment for oneself and for others whom we encounter in our life journey. A number of philosophers have inspired us in understanding, searching and experiencing the essence of cherishing life.

Ruth Cigman (2018), a modern British philosopher, suggests that 'cherishing' can be defined in terms of attitudes, feelings, commitments, beliefs and aspirations. Cherishing life can then be interpreted as cultivating and maintaining one's life with care and affection. It embraces an intimate attitude as well as the positive ethical concepts applied in human relationships and with the surrounding environment. Everyone is worthy to be cherished with transformational potentials to achieve happiness, harmony and fulfillment in flourishing life.

Diana Lobel (2017), another modern American philosopher, advocates that a flourishing life needs to have objectives, worths and directions. It is fulfilled with meanings, significances and values. It is a life of happiness grounded on attentive awareness of the mental and physical movements of an individual as well as the larger external world in which we all have a share of participation since each of us is interconnected with others. We do not only relate



to others with our mind, but also affectively in connection with our heart and spirit. We enjoy sharing insights of awareness, appreciation of values, fulfillment of our personal being as well as the common good of living with others. With intuitive wisdom, we can fully participate in our life journey with engagement, vitality and efficacy to connect with a much wider social context of beings.

There are two dimensions of ‘cherishing life’, including the physical nature and the passionate nature. It is a truth-seeking and unwaveringly balanced attitude to be intensely aware of the fragility and vulnerability of reality. It involves all the positive and essential ethical values in our daily life with the deepening of wisdom and interpersonal connections. It can also be extended to express an extensive sense of enthusiasm in life which consists of a broader scope to enhance the quality of life of all living things including animals, plants and even our cosmos with its etymological reference (Cigman, 2018). Cherishing life can also be interpreted in three facets: understanding the meaning and values of life; having the awareness and abilities for self-protection against natural hazards and social insecurities; as well as developing healthy and civilized habits and lifestyles (Tan et al., 2021).

Cherishing life can be summarized as a concept, a belief and a way of living for personal growth, social sustainment and humanistic civilization. It helps to enhance the quality of our life by treasuring it with passion, respect, openness and positivity as well as to live proactively with resilience for optimizing our future. With the basic understanding of cherishing life, we move on to look into the ways of cherishing life.

Ways of cherishing life are generally determined by how one defines quality of life. It is the multidimensional construct about an individual’s perception of one’s position in life in the contexts of culture and value system in which human beings live with goals, expectations, standards and concerns (WHO, 1995). It consists of the subjective and objective dimensions

of the wellbeing from different perspectives, including the physical, mental and social aspects of life with compliance to the universal standards of human rights (Wallander et al., 2001). The hierarchy of needs of an American psychologist Abraham Maslow is chosen as a theoretical tool to explore the different ways to cherish life as Maslow has portrayed a comprehensive overview of human needs.

According to Maslow's Hierarchy of Human Needs, there are five levels of human needs for our survival and well-being. Level 1 is the 'Physiological needs' which can be operationally referred to the concrete and essential materials that are consumed on a daily basis including water, air, food and clothing. The extended absence of these basic needs can lead to psychological distress or physical death. Level 2 is 'Safety-security needs' including both the concrete and abstract substances which are necessary for protecting us from different types of threats, like physical shelter from environmental dangers, financial security for basic consumption or medical insurance for health and protection. Level 3 is 'Belongingness needs' which are required to fulfill the inner yearning to develop pleasant interactions for affectionate interpersonal relationships. Level 4 is 'Esteem needs' involving the in-depth human aspiration for self-esteem, self-worth or respect received from others. Self-esteem or self-worth ascribed to oneself is defined as the attitudinal evaluation of an individual about his or her own nature, character or ability. The respect or appreciation expressed by others in terms of words, emotions or behavior refers to the attitudinal evaluation given by others to an individual who is the receiving party. Level 5 is 'Self-actualization needs' at the highest level of the hierarchy indicating the desire of realizing an individual's inherent potentials to fulfill his or her ultimate life goals as becoming what one idiosyncratically aspires to be (Taormina & Gao, 2013). Level 1 and Level 2 can be considered as the basic needs for life sustainment. Level 3 and Level 4 can be categorized as psychological needs for life development while

Level 5 can be denoted as the needs for self-fulfillment and transcendence.

Similar to the existence of various philosophies of life and multi-dimensional perspectives of values, there are also diverse ways of cherishing life to satisfy different levels of needs. Confucianism emphasizes human flourishing is grounded on ethical self-cultivation with self-mastery through the practice of rituals as the moral development is rooted in humaneness. Daoism focuses on the uncontrived behavior (*wu-wei* 無為) by following the rhythms of the Nature to discover tranquility, harmony and contentment within oneself. Buddhism recommends people to live in a state of awakening so as to realize the beauty from the ordinary life and to attain the perfection of the world for integration (Lobel, 2017). Christianity believes that human beings are created in God's image (King James Bible, 2017, Genesis 1:27) and are called to respond actively in witnessing His unconditional love (Oord, 2010) to enrich personal relationship, to build up a mutually caring community and to fulfill social responsibility and harmony (Hollerman, 2009).

Human beings live in multiple social networks with various types of interpersonal relationships. No matter which ways of cherishing life are adopted by us, it is proposed to bring full awareness to our experiences in relationships with a deeper sense of being (Siegel, 2007). It is also advocated that a cherished life is characterized by enjoying moment-to-moment experiences of ethical contribution, mutual sharing and participation to nurture a relationship of vital engagement to the community with connection and love (Csikszentmihalyi & Nakamura, 2009).

### **2.1.5     *Significances of LVE***

The above explanations of 'Life', 'Values' and 'Education' have demonstrated that LVE plays the quintessential role in holistic education. LVE is comprised of life education and values education to explore the meanings and values of life through the integration of knowledge,

skills and attitudes. Life education focuses on the philosophical senses of life to explore the purposes, meanings and ultimate concerns of life, ethical reflection as well as the integration of physical, mental and spiritual aspects of a holistic wellbeing (Sun & Lee, 2021). Values education strives for excellence with life virtues and promotes the ‘acquisition of the dispositions of act’ (Aspin & Chapman, 2007). It emphasizes on nurturing the positive attitudes and the pursuit of humane values to live a flourishing life under the limitations of natural laws and the social constraints. It embodies individual autonomy, independent judgment and self-motivation for social commitments (Aspin & Chapman, 2007).

Based on the concept of ‘unity of knowledge and action’, LVE is endeavored to enrich students’ learning experiences with knowledge and skills to explore fundamental issues of life, to nurture meanings and goals of life with positive values as well as to encourage responsible behaviors for integrating the learned values into their daily living (Chen & Lee, 2021). Through experiential learning like observation and mutual sharing, LVE aims at promoting students’ awareness of humane values and their holistic development so that they can search for ways to live the elegance of life in their individual social contexts (Feng et al., 2021).

LVE also involves students to develop relationship with oneself, others and our environment including the Nature (Centre for Religious and Spirituality Education, CRSE, 2013) since human beings and other living things are co-existing and interacting with one another on earth. It is an ongoing journey of holistic education to foster the development of wholeness, including cognitive, physical, spiritual, emotional, social and aesthetic aspects for individuals as well as for the whole society (Miller et al., 2005). It embodies both the personal and social dimensions to nurture human consciousness of the precious values of life and the significance of cherishing life. It is personal because all individuals are unique, valuable and irreplaceable. It facilitates the development of a holistic and healthy self-concept. Meanwhile, it is also an

awakening process of each individual to participate consciously in the building up, strengthening and sustainment of a mutually caring social milieu. It helps to enhance our collective responsibility for advancing the humanistic civilization as well as the well-being of all living things. It endeavors to empower human beings to live a happy and meaningful life with fulfillment. Hence, LVE is intrinsically life-oriented. It focuses on cultivating the positive values of life and moral concepts for both the individual and the general well-being.

LVE basically provides opportunities to explore the meanings and values of life for the holistic development of an individual, involving intellectual, affective, intentional, volitional and behavioral growth (Wong et al., 2016). It is recommended to deliver LVE with a ‘student-oriented’ approach in fostering caring relationships which involves being cared for, self-care as well as caring for others (Fang, 2008). It helps to stimulate and guide students in reflecting upon the origin and destiny of life, the meaning of life as well as the feasible ways to become a holistic and integrated person (Lee, 2020) with their perceived knowledge of positive life values. Students are encouraged to participate actively in the learning process through social interactions with others in a cultural context. However, it is reported that the local primary school education has typically emphasized too much on the behavioral changes mainly for tackling the practical learning problems and has not adequately catered for the holistic human development at the more existential level (CRSE, 2014). Thus, to broaden the scope of learning and to strengthen LVE from the primary levels are both substantial and essential for holistic education.

To encourage the young generations to vitalize and cherish life, it is advocated to implement LVE with a systematic and localized curricula for the students to explore and experience life philosophy, life and death issues, religious and cultural beliefs, positive values, moral judgment and spiritual development (Chen et al., 2021). It is envisioned that the learning experiences

of our young generations will be more enriching if they have the opportunities to participate more fully through mutual sharing in a ‘student-oriented’ learning process of LVE.

## **2.2 Theories of Human Development: Implications to LVE for Primary Students**

LVE can be implemented in all different stages of life through family upbringing, school education and community involvements to enable an individual to develop his or her own value systems so as to make independent and responsible decisions (National Curriculum Council, 1993). Nonetheless, it is signposted that primary school level is the most crucial and foundational stage for LVE with reference to the different theories of human development, including the Theory of Psychosocial Development proposed by an American psychoanalyst, Erik Erikson (1902-1994); the Theory of Cognitive Development introduced by a Swiss psychologist, Jean Piaget (1896-1980); the Theory of Moral Development advocated by another American psychologist, Lawrence Kohlberg (1927-1987) as well as the Theory of Role-taking in the Development of Moral Judgment stated by Robert L. Selman (1942-present), a modern American educational psychologist. The suitability of delivering LVE for primary students at the age around 6-12 years old will be demonstrated with reference to the following theories of human development.

### **2.2.1 *The Eight Stages of Psychosocial Development of Erik Erikson***

According to the Theory of Erik Erikson, primary students (6-12 years old) are in the fourth stage of psychosocial crisis involving the conflict between industry and inferiority. Children of school-age (5-12 years old) have exercised a certain degree of independence to master their physical skills and to build up interpersonal relationships in comparison with their previous stage (Batra, 2013). Schooling provides them with more chances to encounter life challenges. They begin to develop some abstract concepts about values of life with basic moral senses as

well as social senses. They are more curious in exploring about life and their external world. They learn to be less egocentric and develop their interpersonal skills to set off from their families to discover a much bigger world. Peer groups and social interactions are increasingly important and relevant in the development of their self-esteem and ego-identity. Success leads to the virtue of competence while failure results in a sense of inferiority (Gonzalez-DeHass & Willems, 2013). Therefore, it is recommended that the basic goals in this stage are to develop competence, especially in the areas of understanding, differentiating judgment and internalizing (Batra, 2013). Simultaneously, learning to face failures with resilience is also crucial at this stage.

### **2.2.2     *The Cognitive Developmental Stage Theory of Jean Piaget***

Referring to Jean Piaget, primary students are basically in the third stage of cognitive development: concrete operational (7-11 years old). Children in this stage start to acquire concrete logical operations that enhance them to cognitively learn how to practice problem-solving skills through a trial-and-error approach (Moschini, 2018). They are capable of incorporating inductive reasoning and also struggle with deductive logic. They begin to learn how to deal with practical problems and life issues like separations in human relationships. They learn to recognize the various perspectives of different people so as not to indulge in their egocentrism (Gonzalez-DeHass & Willems, 2013).

### **2.2.3     *Jean Piaget's Theory of Moral Development***

Piaget has stated that moral development is a constructivist process with the interplay of action and thought. Children construct actively the moral concepts from their learning experiences. He has suggested that primary students are in the two stages of moral thinking: Heteronomous Morality (5-9 years old) and Autonomous Morality (9-10 years old). The former is also

known as moral realism while the latter is called moral relativism. Children under the age of 9 consider the rules imposed by their authority figures as absolute and unchangeable. They learn how to make judgment through observable consequences and obey the rules to avoid punishment. When children reach 9 years old or above, they gradually understand that there is no absolute right and wrong as denoted as moral relativism. They start to develop their personal moral judgment depending on their intentions and the circumstances. They follow the moral norms considered as valid for them with subjective interpretation of facts and their senses of internal responsibilities (Carpendale, 2009; Mcleod, 2023).

#### **2.2.4      *Lawrence Kohlberg's Stages of Moral Development***

Based on Piaget's Theory of Moral Development, Lawrence Kohlberg has further developed a comprehensive Stages Theory of Moral Development. He indicates that primary students are situated at both stages of pre-conventional level and conventional level. Primary students at junior levels focus on the direct consequences of their behaviors. Children under 9 years old can hardly differentiate various viewpoints with their cognitive capacities. They believe that rules are fixed and must be obeyed. They feel obliged to follow the authority figures who represent the reference or criteria of moral judgement. Their behaviors are generally determined by heteronomous morality to avoid punishment. When they become older, their moral standards and behaviors are determined by instrumental exchange. They concern more about receiving rewards or satisfying personal needs to determine whether or not to obey the rules. They will gradually realize that rules are not absolute since people can have different perspectives. By then, they have progressed to the conventional level to develop mutual interpersonal relationship in a social context. They begin to internalize their moral standards based on the social norms as they become adolescents at the conventional level (Gonzalez-DeHass & Willems, 2013).



### **2.2.5      *Theory of Role-taking in the Development of Moral Judgment by Robert L. Selman***

A modern educational psychologist, Robert L. Selman has identified role-modeling and role-taking as significant elements in the human development process of moral judgment. He claims that children at the age of 6-8 can recognize that different people have their own perspectives by reviewing information collected from the various role models encountered in their daily life. At the age of 8-10, they are becoming more independent to consider various viewpoints and will anticipate the reactions of other people towards their behaviors by self-reflective role-taking. They can further consider both their personal points of view and those of others simultaneously by mutual role-taking at the age of 10-12 (Yeates & Selman, 1989).

Summarizing from the aforementioned theories of human development, it is ascertained that children at the age ranging around 6-12 years old have reached the level of maturity in the intellectual, psychosocial and moral dimensions of their life stage to start developing their values systems. Thus, primary students are ready to get involved actively in the delivery of LVE.

## **2.3      Theories of Cognitive Development: Implications of Social Contexts to LVE**

Lev S. Vygotsky (1896-1934), a Russian psychologist, advocates that education is a progressive process of helping students to attain knowledge, skills and values from simplicity to complexity through social interactions within the cultural context (Shabani, 2016). He has contributed to exploring the significance of social interactions with people in one's specific cultural environment which is essential for human cognitive development according to his Sociocultural Theory and Theory of Social Constructivism.

### **2.3.1      *Vygotsky's Sociocultural Theory***

Vygotsky emphasizes the social and cognitive processes in education and human development.

He designated that human cognitive development is inseparable from the sociocultural contexts since an individual's mental ability is learned, exercised and improved in a concrete social environment (Alkhudiry, 2022). It is a collaborative and creative 'work-in-progress' aligned with a desirable future from each individual's unique viewpoints, agenda and commitment (Bidell, 2017). The construction of knowledge should be sought in the social interaction which is co-constructed between a more and a less knowledgeable individual (Lantolf & Pochner, 2008).

Vygotsky advocates that students learn in partnership in the dialectic process of 'scaffolding' under the supervision or with the mediated support from a more knowledgeable or competent individual in the Zone of Proximal Development (ZPD) to complete a task for accomplishing the desired learning goals with students' potential preference. It is believed that students can perform better with the assistance of others as scaffolding in the ZPD which emphasizes the interdependence of persons and the critical importance of social processes in the development of all types of knowledge (Sarmiento-Campos et al., 2022).

Social interaction is considered as the basis of learning and development which involves apprenticeship and internalization. Meanwhile, one's behavior is integrated with his or her consciousness for the unification of one's mind and social interactions (Shabani, 2016). To advance from students' present developmental level to their prospective developmental level, teachers should ascertain the students' perceived knowledge and existing degree of competence for the learning tasks by fostering mutual encouragement and support as well as by sharing intelligence and insights with the crucial acts of solidarity and mutuality (Peters et al., 2022).

### **2.3.2     *Vygotsky's Theory of Social Constructivism***

Referring to the Theory of Social Constructivism of Vygotsky, students play an active role as

the constructor of information in the interactive processes which engage them to deepen their learning (Foldnes, 2016). Vygotsky reiterates that the cultural-historical and personal factors are the basic elements of human development. He accentuates the importance of interactions among individuals in the construction of information (Scrimsher & Tudge, 2003). In this cooperative teaching-learning model, knowledge transfer is implemented by interactive activities within an interactive learning environment (Berrett, 2012). Thus, educators and students are encouraged to exchange ideas to decide what to learn and how to achieve the predetermined learning goals. In the process, students are enhanced to play an active role of structuring information for their learning (Munir et al., 2018).

Vygotsky's theories have remarked that learning and development are collaborative since contributions of individual learners play a central role in the whole process of development (Stetsenko, 2016). Education can be considered as the pathway to exploring and establishing oneself and one's identity with the unity of being-knowing-doing through internalization to integrate one's internal biological traits with the cultural inheritances accumulated historically from the external world. Education can also be understood as externalization to transform any inappropriate social practices through co-creation with others in the ongoing historicity of the world (Eun, 2019).

Vygotsky's insights in the significance of social interactions on learning are valuable advice for educators to reconsider the tremendous impacts of the social contexts in which their students are situated. This is especially important in the construction of life-long values and attitudes of life. LVE is not only for acquiring knowledge but an active project of cultivation of human character by exploring self-identity through asking the questions of 'who am I', 'who do I want to become' as well as committing to achieve future improvements by asking 'how do I want the world to be' and 'how can I contribute to it' (Stetsenko, 2016). It is a collectively

explored and collaboratively implemented process of co-construction, co-creation and co-discovery of wisdom for life, rather than the passive transmission of knowledge.

## **2.4 Synthesis of Developmental Theories**

Human learning involves stages and processes as described in all the above theories of development. The learning experiences of primary students are founded on the level of cognitive development at their corresponding age range as described by Piaget. Considering the general characteristics of the different age groups with an understanding of the students' acquired knowledge and skills, teachers can formulate reasonable expectations, relevant teaching goals as well as appropriate curriculum to attain meaningful learning experiences and fruitful achievement for their students. It is anticipated to have well-designed teaching materials and learning activities to help students to construct their own worldview and to develop skills to cope with challenges at their developmental stage (Copple & Bredekamp, 2006).

To encourage children's industry as proposed by Erikson, the sense of industry and feelings of competence can be facilitated by posing realistic tasks for students to accomplish and by nurturing them with successful experiences (Gestwicki, 2011). Kohlberg has suggested that children at the pre-conventional stage can anticipate the immediate consequences of making moral decisions and taking relevant actions. Thus, primary students can learn to develop prudence for discernment of their intentions and the possible consequences with a sense of reciprocity to make proper judgement of their behavior. It is important for them to understand and appreciate the principles of obeying rules as well as to aware the impacts on others in breaking rules (Gonzalez-DeHass & Willems, 2013). These proposed ideas are in line with Jerome Bruner's Theory of Spiral Curriculum (1976) which recommends that a topic is taught

repeatedly at different developmental stages since learning is portrayed as a spiral process with accumulated experiences. The cognitive capacities of the students can be enhanced with further explorations and trails to reach the level of mastery. Vygotsky has inspired us about the significance of social interactions in learning. Hence, it is essential to contextualize the curriculum and teaching materials of LVE for the local primary students whose active participation is encouraged with the interactive learning approach.

It is remarked that primary school level is the foundational stage to develop students' cognitive capacities, physical motor skills, reflective ability, moral senses, social roles and interpersonal relationships. It is also a crucial timeframe of LVE for nurturing their values and attitudes of life to become healthy and positive people. It is a developmental stage of social construction for children to explore themselves and their external environment through their interactions among people and their discourses in daily life (James & James, 2008). They are psychologically and cognitively ready to embark a significant journey moving towards achieving certain goals and building up their own identities in their sociocultural contexts.

To emphasize the delivery of LVE for primary students is valuable and significant to enhance their holistic development to become responsible citizens with positive values. In order to involve the school-aged children to participate actively in the delivery of LVE, it is recommended to have some basic and personal understanding of their perceptions and anticipations about the two key domains of life and values. Hence, this research has selected primary students as the target research participants with the objective to collect their first-hand information for facilitating the future formulation and design of LVE for local primary students. Before we go into the details of the research design, an overview of the current implementation of LVE in the local community is presented below as a background for further exploration.

## **2.5 Existing Circumstances of the Implementation of LVE in Hong Kong**

### ***2.5.1 Characteristics of the Local Environment***

Hong Kong is an international metropolis in which Chinese constitute over 91% of its population (Hong Kong Census and Statistics Department, 2022). It has been colonized by British until the official transfer of its sovereignty to China in 1997. Similar to other Chinese societies around the world, Confucian heritage has profoundly cultural impacts on the majority of its population. Owing to its distinct historical background and geographical location, Hong Kong has become the junction point of international trade, finance and communication between the East and the West at which cross-cultural influences are widely and deeply penetrated in its overall development including our value systems. Life tends to be generally perceived and valued as a gift from God from the Western perspectives which is based on the humanistic philosophy and Christianity to focus on individual's fulfillment and social responsibility. People are developed with logical reasoning, evidence-based knowledge and ethical values through education and socialization for personal achievement and social contribution. Simultaneously, life philosophies from the Eastern perspective emphasize more on interpersonal relationships, collective interests and social harmony. Thus, people of the Eastern culture tend to have a more intimate association with the historic reality and put greater emphasis on one's social role (Lodean, 2006). Both sets of life values have contributed in shaping our educational systems. The overall society is also characterized with cultural diversities.

Situating in the multicultural context of Hong Kong, it is important for our young generations to learn how to live together in harmony regardless of the diverse cultures blended with different values of the Eastern and the Western social systems (Lee, 2020). Under these circumstances, LVE is tremendously significant to be well developed and refined by integrating

the positive life values and attitudes from the East and the West to foster a far-reaching holistic human developmental process to nurture the personal potentials of our students to live a flourishing and happy life in both the intrapersonal and interpersonal dimensions with integrity for self-fulfillment and social harmony. LVE is the cornerstone and essence for facilitating human development and realizing the foundational meanings of education. Thus, it is of vital importance to reinforce LVE in our existing educational system so as to inculcate positive values of life among our new generations to strengthen and consolidate their capacities to cope with all sorts of unprecedented struggles and new challenges.

Nonetheless, the existing educational system of Hong Kong is inclined to be task-oriented and achievement-oriented to achieve efficiency and instrumental effects in school performance. It is observed that both the students and their parents have generally placed exaggerated emphasis on the academic performance which is basically considered as the most fundamental criterion to assess and decide the meaning, values and contribution of their future life. Thus, LVE can easily be ignored or downgraded as it will not entail any high-score academic result and its positive impacts on an individual's development may not be so visible, measurable or appreciated by the students or their significant others.

### ***2.5.2 Current Implementation of LVE***

In reviewing the official publications on the school curriculum reform and educational policies of the local Education Bureau (EDB) as well as the recent academic literatures about the delivery of LVE, it is noted that our children have been learning life values in a diffused model. Valuable concepts like ethical senses, values, beliefs and attitudes are disseminated and taught indirectly in a fragmented way in the curriculum and they are scattered without any focus in various subjects or school activities of the local primary schools (Halstead & Xiao, 2010). Standardized and integrated course outline with comprehensive learning materials of LVE

conducted in the local primary schools can hardly be found.

Under the local school curriculum reform in 2001 for all primary and secondary schools, ‘Reading to Learn’, ‘Project Learning’, ‘Information Technology for Interactive Learning’ and ‘Moral and Civic Education’ are the four identified key focuses to be launched (The Curriculum Development Council, 2014). As a subcategory of ‘Moral and Civic Education’, LVE has been implemented in schools to foster students’ lifelong learning to develop positive values and attitudes. Five priority values and attitudes, including ‘Perseverance’, ‘Respect for others’, ‘Responsibility’, ‘National Identity’ and ‘Commitment’, have been highlighted as the principal cores in the basic education for Primary 1 to Secondary 3 students since 2002. ‘Integrity’ and ‘Care for others’ have been included into the list in 2008 (EDB, 2019) while ‘Law-abidingness’ and ‘Empathy’ are recently added in 2021 (EDB, 2021). All schools are obliged to guide their students to develop healthy lifestyle and personality according to the nine designated principles with the schools’ discretion to conduct various sorts of learning activities in their own curricula (EDB, 2021).

In the local educational system, there are many schools established and run by different religious and charitable organizations to live out their own missions and core values. Consequently, it is remarked that diversified levels and modes of teaching LVE have been conducted in all local schools through the integration of cognition, affection and action by cultivating the prescribed thematic values and attitudes across various subjects in a multitude of school-based curricula. Apart from the nine guiding principles for direction, the standardized syllabus, teaching manual, modules and multi-media resources are not provided to the schools for implementation. Each school has to contribute great efforts to design LVE curricula for its students. This has led to a highly diversified spectrum of thought flourishing among different schools which can be considered as a positive outcome for the schools can



exercise their autonomy and creativity in their specific contexts. However, even the individual schools have allocated adequate resources to launch its ‘Moral and Civic Education’ programs, the effectiveness of their curricula and whether the curricula can be coordinated and integrated well are still in need of further study.

To consolidate LVE in both primary and secondary school education, the ‘My Pledge to Act (MPA)’ campaign has been initiated by the EDB since 2003. Schools are advised to empower students by setting goals for their holistic human growth (EDB, 2021). However, it is observed that the annual themes of the ‘MPA’ for the academic years from 2011-2021 were formulated randomly without a comprehensive and systematical structure. As shown in Appendix 1, the themes were chosen neither in the order of moving from the core of inner self outwardly to the external environment, nor moving inwardly from the external world to the inner depth of self with a gradual cyclical movement.

### ***2.5.3 Reflection on the Implementation of LVE***

According to the Cognitive Load Theory of an Australian psychologist John Sweller, human memory can be categorized as long-term memory and short-term memory. The former type of memory can store large amounts of permanent or semi-permanent information while the latter type can only keep temporarily small amounts of visual and phonological information as working memory for processing and performing cognitive functions (Yuan et al., 2006). It is suggested that learning will be hampered if it requires too much cognitive capacity in working memory (Jong, 2010). Hegel, the German philosopher has advocated that education is a process of helping students to learn by moving from simple to more sophisticated matters as well as encompassing views from the perceived knowledge to attain new insights (Hoover & Hashim, 2016). Jerome Bruner’s Theory of Spiral Curriculum (1960) has further explained that new concepts and ideas should be learnt from revising students’ foundations or

fundamental knowledge to achieve a higher level of formal or operational objectives and a broader level of abstraction and comprehension (Lohani et al., 2005). Thus, a spiral learning process is recommended to reinforce and consolidate students' understanding of the same topics over time by utilizing and re-engaging their prior knowledge repeatedly with a gradual increase of depth and complexity.

To achieve a holistic and coherent learning sequence by integration and collaboration, 'spiral' curricula are recommended to be designed and conducted in school education, especially in the delivery of LVE which is a lifelong and ongoing transformational journey involving multidimensional perspectives. Hence, it is recommended that the annual themes of 'MPA' can be formulated with a three-years plan with a designated core theme like 'Love' and the related annual themes including 'To Love and Care for our family'(2013/2014), 'Love our home and Clean Hong Kong'(2015/2016) and 'Love and Care—from self to others'(2016/2017). By adopting the Confucian Philosophy of Moral Development in a predominantly Chinese society of Hong Kong, the Confucian's pathway of 'Cultivate the Self (修身)', 'Regulate the Family (齊家)', 'Rule the State (治國)' and 'Lead the World to Peace (平天下)' (Li, 2008) can be consecutively rearranged as the annual themes with a spiral sequence of 'Love' as: 'Love and Care – from self to others'(2013/2014), 'Love and Care for our family'(2014/2015) and 'Love our home and Clean Hong Kong'(2015/2016) (Appendix 1).

The 'MPA' has been carried out with a top-down approach adopted by the EDB to disseminate the guidelines to all schools for implementation. The content design of the 'MPA' campaign is generally based on the perceptions and interpretations of the adults about the needs of the young generations. To enhance the suitability and effectiveness to fit in the needs, aspirations, developmental stages and life circumstances of the receiving party who is the students, their input in the process of planning and implementation of LVE as an essential element is highly

recommended. The active participation of students and adoption of the student-oriented approach in the delivery of LVE are greatly encouraged to anticipate a positive and enjoyable learning process with fruitful learning outcomes.

## **2.6 Reformation of LVE in the Local Context: Student-centered, Life oriented and Culture-based**

Owing to the significance of LVE for human development as discussed in the preceding sections, it is recommended to embody the needs and aspirations of students in the local sociocultural context into the design of LVE curriculum and implementation so as to enrich both teachers and students throughout the learning process. It is essential to develop a comprehensive set of courses in a well-designed and coordinated curriculum at least for the twelve years of universal education from primary school level to secondary school level. Each member of our community needs to learn to respect the basic human nature and all living things by cherishing our own life as well as those of others. Horizontally, we learn to understand more about the different dimensions of our existence as valuable human beings. We are taught to relate with others in our family, school, workplace, neighborhood as a responsible person in the local, national and international contexts. It is utmost important to cultivate the sense of citizenship for Hong Kong people under the political milieu with ‘One Country, Two Systems’ after the handover of its sovereignty in 1997 (Cheng et al., 2006). Vertically, according to Maslow’s Hierarchy of Human Needs (1943), ‘self-actualization’ is the highest level of human desires to fulfill an individual’s unique potential. ‘Self-actualization’ can be attained by collective awareness, shared responsibility and persistent dedication to strive for holistic development of every individual with a well-balanced maturing process in physical, mental, emotional, social and spiritual aspects. It further requires a person to have self-

awareness, self-acceptance and self-appreciation of one's integral wholeness, including self-identity, self-esteem, self-respect, self-understanding and self-care. Thus, the development of the self can be considered as a foundation for LVE.

Children are unique individuals with physical, rational, emotional, social and spiritual dimensions of needs (de Souza, 2016). They learn about the different perceptions of 'life' from the multidimensional perspectives which are determined by personal traits, social milieu and cultural factors as well as their perceived cognitive knowledge and concrete life experiences. It is significant to have an in-depth understanding of our primary students' thoughts and feelings, so that it is more feasible for us adults to teach to their hearts and nurture their minds and souls.

It is advocated that LVE entails four dimensions, including intellectual, emotional, volitional, and practical areas (Wong et al., 2016) with the four respective aspects of holistic life, namely the spiritual transcendence as spirituality, the inter-relationship with others as sociality, the human nature of one's inner self as the mind or heart as well as the physical health with environmental harmony as the body (Lee, 2020).

Persistent and effective behavioral changes have to be cultivated from the heart as the most inner core of a person. Growth can be further facilitated and sustained by upholding one's life orientation and will power. Thus, it is inadequate just to deal with any misbehavior of our children as it may only be an expression of the signs or symptoms of a deep-rooted issue. In order to properly change or eradicate their misbehaviors, it is necessary to explore the fundamental causes and to motivate our children or even their significant others to realize and to participate in the ongoing development of the positive values as well as to treasure and cherish life.

In reviewing the available literature in LVE for primary students, there are various international research exploring their perceptions of life which are mostly health-related (Morita et al., 2021; Sharp et al., 2017; Malter et al., 2015; Panepinto et al., 2005; etc.) and are analyzed from the parental perspectives (Yilmaz, 2020; Haukedal et al., 2018; Grimaldi et al., 2016; Tekin, 2016; Haraldstad et al., 2011; etc.). There is research reviewing the perceived social life and family life experiences from children's angle (Hedegaard, 2012) while Cummins (2009) has investigated specifically about the rural children's perceptions of life in Canada. Cummins has suggested that children living in rural areas are more sentient to the processes of life and death in the uncontrollable and structural living conditions in the natural environment. This finding has highlighted the significance of social context on human development. Nevertheless, it is noted that all the findings of these overseas research may not be applied properly to our local children due to the different socio-cultural contexts and thus they can only be taken as a secondary reference. This remark is well supported by Lev. Vygotsky who has advocated that cognitive development is shaped by various cultural factors as well as parental scaffoldings (Bruner & Watson, 1983) in different historical and social contexts.

It is noteworthy to realize that there are very limited relevant references found among the research in LVE for local primary students. There is only one documented research of interviewing some famous young adults who were born in the 80's and 90's to explore the youngsters' viewpoints of life and the report was published in the Year Book 2013-2014 of the CRSE (CRSE, 2014). Meanwhile, another similar research has been documented to understand the Chinese children's perceptions of school life (Wong, 2018), which is focused on examining the relevant positive and negative outlook of those students who transit from pre-school to primary school level. Up to the present time, no other local research can be located to provide relevant data about the perceptions, meaning and values of life as well as the

perceived ways of cherishing life among primary students. Thus, there is a great research gap in Hong Kong to investigate in the area of LVE among our young generations.

LVE involves a systematic, interactive and in-depth process of intellectual exploration and experiential learning in the fields of life philosophy, moral thinking, spiritual development and social integration which is recommended to be implemented as an independent foundational course for school education. As stated by the EDB, well-structured curricula with a complete set of localized course materials should be contextualized with socio-historical and cultural factors of the local community and students' daily life experiences so as to provide a more comprehensive learning experience conducive to their holistic growth (EDB, 2021). Most of the LVE programs of Hong Kong are conducted through the school-based curricula designed by school-sponsoring bodies of religious or charitable backgrounds. The delivery of individual LVE programs may not be well-supported with adequate social recognition and sufficient evidence-based research (Lee et al., 2021). Thus, more alternatives in designing and implementing LVE for our students are in anticipation. There is a great need to conduct local research for enlightenment and enrichment in the continuous development of LVE for our local community.

'Life influences life' is the core element of LVE at both the interpersonal and societal levels. A set of well-structured curricula and course materials for primary students can help in nurturing students' rational mind to explore the meanings, values, goals and cherished ways of living. Effective LVE can affectively attract students' attention, raise their consciousness and strengthen their memory to consolidate their volitional will for behavioral changes by teaching and learning from heart to heart. In view of the lack of primary source of data to understand our children's ideas or feelings about LVE, this study is served as a preliminary endeavor to explore and collect the perceptions of life among our primary students in Hong Kong as well

as their ways in cherishing life based on their personal views of the definition, values and quality of ‘Life’. With the key research questions to understand the required attributes as a starting point in the process of designing the student-centered curricula, it is envisioned that all the collected data can help to draw a route map of ideas to navigate further to best fit the learning needs of our children so as to achieve the desired educational goals for holistic human development.

In exploring the ‘student-centered’, ‘life-oriented’ and ‘culture-based’ approach of LVE, two fundamental research questions are formulated as shown below:

1. What are the perceptions of life among Hong Kong primary students?
2. How do they view about the meaning of life and the major life values for cherishing their life as well as for nurturing others?

The design of this study is based on these two research questions and further information of the overall design will be discussed in the next chapter.

### III. Design of the Study

This chapter is focused on the methodology of the study. It consists of six sections, namely the ‘Specific Concerns for Children-based Research’, the ‘Ethical Concerns’, the ‘Implementation of the Qualitative Part of the Study’, the ‘Implementation of the Quantitative Part of the Study’, the ‘Pilot Study’ as well as the ‘Sequence of Implementation of the Qualitative and Quantitative Parts of the Study’.

This exploratory study aims to gather personal ideas and feelings about the definition, meaning and values of life as well as the perceived ways to cherish life among the local primary students. It involves complex multi-dimensional constructs which may generate a possibly wide range of responses as each research participant is unique and comes from diversified backgrounds even though they are all within the age range of 6-12. To facilitate the collection of both in-depth insights and the generalizable information with a consolidated evidence base, a mixed-methods approach was adopted. The originality of the participants’ responses and the size of collected data were taken into consideration. This study consists of the qualitative and quantitative parts in data collection and *analysis*.

As discussed in Chapter I about the significance of delivering LVE for our young generations from the foundation at primary school level, the subject and sample of this study were focused on the local primary school students. Thus, special concerns for children and general ethical principles are pre-requisites in undertaking the research design process.

#### 3.1 Specific Concerns for Children-based Research

It is necessitated to respect and protect the dignity, rights and welfare of people or all living beings involved in all studies. In comparison with adult-based research, conducting children-based research requires more consideration in both the ethical and practical aspects. Children



are characterized as weaker, more dependent and vulnerable in their developmental stages rather than adults who are generally more capable for self-protection. Thus, the consent, confidentiality, personal safety, psychological wellness and intellectual capacity of the participating students have all to be carefully taken care of during the whole research process.

### **3.2 Ethical Concerns**

‘Ethics’ can be defined as a complex construct imbued with particular values and beliefs. It involves both procedural ethics and ethics in practice. The former one refers to following a series of codes of conduct for the ethical review laid down by the Human Research Ethics Committee of the University whereas the latter one has to be strictly observed during the process of research implementation (Graham et al., 2015).

Irrespective of the research objectives, the rights of all research participants should be protected according to the three basic ethical principles: respect, beneficence and justice (Kanner et al., 2004). The human dignity of each research participant must be respected. Their free will of determination to participate or not cannot be deprived, their ideas and feelings cannot be distorted, as well as their personal background cannot be disclosed. The benefits of the research participants can never be overshadowed or overridden by the achievement of the research goals. All the research participants have to be treated justly as equal counterparts in their participation. Researchers should endeavour to safeguard the wellbeing, dignity and rights of all participants who are assured of a shared paramount interest throughout the research process. Thus, researchers should be inevitably responsible to maintain considerable awareness with heightened sensitivity to any potential threats or harms caused to the research participants in the physical, emotional, mental or social aspects (Duncan & Tolfrey, 2018). Privacy and confidentiality should be absolutely upheld with proper handling and limited

access to all the sensitive personal information of the research participants. All these guidelines have to be closely observed in all types of research, especially those which involve children who are entitled to the fundamental human rights for care and protection as minors (Graham et al., 2015).

### **3.3 Implementation of the Qualitative Part of the Study**

#### ***3.3.1 Recruitment of Participants***

In the recruitment process of the qualitative parts of this study, parents were the significant persons to enable the researcher to get in touch with the potential research participants. Challenges can be anticipated in recruiting primary students to participate in research (Campbell, 2008), especially due to the authoritative and overprotective parenting styles in Chinese societies (Eisenberg et al., 2009). It is noted that Chinese parents tend to be more restrictive and less flexible to encourage self-determination for their children (Ngai et al., 2018). They are more likely to take over children's personal judgment (Liu et al., 2011) and children are socialized to be less autonomous and less independent to make their own decisions (Eisenberg et al., 2009).

The participants of the qualitative part of this research were recruited randomly by referral from the social circles of the researcher, including friends, schoolmates, colleagues, volunteers and parishioners. All the local primary students were welcome to participate in the study. The only exclusion criterion was those who could not draw and communicate in either Chinese or English. It was crucially based on the trust, support and availability of the parents that a number of primary students from various academic levels, different schools, families with varied social, cultural and religious backgrounds were successfully recruited to join the research.

To facilitate communications and collaborations, the researcher had provided the written materials including a briefing note for the participants' parents with the information sheet and consent form (Appendix 2) supplemented with verbal explanations. Follow-up communications and readiness for clarifications or enquiries were also catered for them.

To encourage greater participation, the participants were not required to disclose a lot of personal information. Basic demographic information directly relevant to the research questions, including age, gender and academic levels of the participating students had been anonymously collected for data analysis.

It is understandable that parents are eager to protect their children from any speculative and sensitive issues involved in the research besides considering the meaning of the research or their children's interests, competencies and readiness of the participation. Even though it was not an easy task in recruiting participants, it is still worthy and valuable to hear the voices of our new generations. It is important for us to listen more attentively and patiently to their spoken or unspoken insights and feelings to understand their individual views, so as to identify their perceived meanings and aspirations of life as well as their interpretations of both the inner world and the external environment.

### ***3.3.2 Data Collection, Sample Size and Data Analysis***

Since the research problem is LVE for the primary school students, the methodology for collecting data was carefully chosen to fit in this specific group of research participants. Four research tools which had been applied in this study for data collection, sample size determination, and data analysis will be discussed in the following sections. Owing to the special circumstances of the pandemic of COVID-19, the process of data collection of the qualitative part of the study had to be conducted via electronic means in the participants' home-

setting instead of face-to-face direct and individual encounters.

### **3.3.2.1 *‘Draw and Narrate Approach’ for Data Collection***

Referring to the teaching experience of the researcher in a primary school, it is observed that some children, who are introverted, shy or with linguistic limitations may encounter different levels of difficulties in sharing freely their ideas and thoughts in front of an unfamiliar interviewer especially when the process is audio-recorded. Thus, the ‘Draw-and-Narrate Approach’ is appropriate to be applied in data collection.

It is recommended that drawing has the strength to assist children to express themselves through this art form which entails no definitive notion of right or wrong. Drawing is an effective and simple medium to create a comparatively relaxed atmosphere (Kirk, 2007) as well as to encourage children to illustrate their conceptual thoughts regardless of their verbal skills and literacy levels (Angell et al., 2015). It can be served as a mirror image of their representational development (Cherney et al., 2006) and a reflection of their inner world (Malchiodi, 2016). It can also help children to reconstruct their ideas (Salmon & Lucas, 2011) at their own pace without much pressure. It is expected to provide a favorable environment to motivate children to freely associate their thoughts, feelings, imaginations to portray their perceptions of ‘life’, their basic knowledge and ways to appreciate, affirm or cherish their life. The use of drawing as a visual-based research method can assist children to express abstract ideas with minimum requirement of linguistic ability, especially those who have lower levels of narrative competence which is associated with cognitive developmental stage. It is suggested that lower levels of narrative structure with lower frequency of emotional, cognitive and socio-relational expressions are expected in lower primary levels of students (Tarchi et al., 2019). In these cases, drawing provides the visible clues to the researcher for encouraging

children to further elaborate their ideas in the subsequent interview so as to capture more unspoken meanings from their perspectives (Liamputtong & Fernandes, 2015) and to confirm the accuracy of the collected information (Ashbrook, 2012). It is also demonstrated that drawing can enhance children to express their ideas in a more comprehensive way with minimum boundary or judgement (Otgaar et al., 2016).

The part of narration of the ‘Draw and Narrate Approach’ is part and parcel of the overall approach as a research tool. Without narration, drawing as a nonverbal data collection method may also elevate the risk of eliciting errant information since interpretations of the visual images are always dependent upon the viewer’s personal background, achieved knowledge, previous experiences as well as intellectual judgments. The standpoints of the researcher can also contribute to the varied interpretations (Lagattuta et al., 2010). Meanwhile, people may use the same or similar symbols, texts or gestures to represent different dimensions of contexts, ideas, perspectives or feelings. The same symbol may be used to demonstrate or interpret a wide range of meanings (Myers & Liben, 2012) as individuals are unique in their specific socio-economic and cultural backgrounds. To avoid the over-subjectivity of the researcher’s viewpoints and feelings in understanding the meanings of the pictorial images, a process of sharing, clarification and feedback between the researcher and the drawer is of utmost importance. The drawers are always the best and the most appropriate interpreters to elaborate their artwork by defining their own ideas and intentions being disclosed or implied with the representations of those visual symbols, figures or images.

To ensure the completeness and accuracy of the research outcomes, interactive interviews are essential to minimize the possibility of obtaining biased information due to the discrepancy in interpreting the drawn images (Armitage & Allen, 2015). Two-ways communications can offer opportunities for the children to clarify or verify their intended meanings of their drawings

so as to eliminate the researcher's misinterpretations and ensure the higher accuracy of the collected information (Angell et al., 2015).

### ***3.3.2.2 'Theory of Saturation' in Determining Sample Size***

It is illustrated that samples of twelve may be considered as a minimum number of cases in qualitative research where data saturation occurs among a relatively homogeneous population (Boddy, 2016). In the qualitative part of this study, eighteen participating students had been initially recruited as the minimum sample size.

Referring to the content of the drawings of the participating students, a number of pre-established conceptual categories were identified. By the 'Theory of Saturation' of Glaser and Strauss (1967), three more participants will be recruited if new ideas emerge beyond the pre-established conceptual categories. However, if no new conceptual categories can be identified from the newly added participants, then the sample size can be considered as reaching a saturation point. Thus, adding three more participating students each time has become the stopping criterion. Recruitment of participants will be continued until the thematic saturation is reached without any new conceptual categories coming up, that is the absence of new conceptual category of content and repetition of established conceptual categories is observed (Francis et al., 2010). Based on the 'Theory of Saturation', a total number of 30 research participants (Appendix A – DD) had finally been recruited for the qualitative part of this study.

### ***3.3.2.3 'Narrative and Drawing Intervention' (NDI) for Data Analysis***

'Narrative and Drawing Intervention' (NDI), a clinical psychotherapeutic tool was applied to analyze the drawings of the participating students. Apart from their consciously expressed narratives, NDI was used to explore the core values and inner world of the drawers through the

interpretations of the symbolic meanings of the images (Narrative Drawing Intervention Institute, 2020). To facilitate greater freedom and psychological space for the children to express their imagination and creativity, no guidance or intervention was given by the researcher or the children's parents during the drawing process. Each participating student was invited to draw a picture with the theme of 'Life' and they could draw freely with any symbol, colour, size of images about what they had immediately associated with the theme.

The basic knowledge and skills of NDI enable the researcher to explore both the expressed and unexpressed perceptions and emotions of the participating students from their drawings. Children's inner world of thoughts and feelings can also be reflected from the probable meanings disclosed by their use of colors, symbols, size and positions of the portrayed images. To safeguard the well-being of the participants, the researcher had prepared to seek some professional advice without revealing personal information of the students in case some abnormal signs were detected in either the drawings or in the process of the interviews. It was also an obligation of the researcher to care for the participants by contacting the parents or guardians of the relevant student or to recommend any follow-up actions if there was an identified need.

#### **3.3.2.4 *'Thematic Approach' for Data Analysis***

'Thematic Approach' was applied in identifying, interpreting and analyzing all the pictorial and verbal data collected from the drawings and the subsequent interviews in the qualitative part of the study. This approach was used to find out certain themes relevant to the research topic from a wide variety of explicitly manifested ideas or the underlying latent meanings of the participating students (Clarke & Braun, 2017). In the process of data analysis, both deductive and inductive reasonings were adopted. By deductive reasoning, which is considered as a top-down approach, some predetermined themes were generated from the process of literature

review for categorization. Meanwhile, inductive reasoning as a bottom-up approach helped to generate new themes from the pool of specific collected data. Codes and themes would be generated with the two-stage systematic review procedures for organizing and reporting the analytical observations of the researcher (Braun & Clarke, 2006) so as to explore the perceptions of life among primary students and their proposed ways in cherishing life for further analysis with the coded data.

### **3.4 Implementation of the Quantitative Part of the Study**

#### **3.4.1 *Recruitment of Participants***

Similar to the qualitative part, students from all the local primary schools were the target population for recruitment, and the only exclusion criterion was those who could not read and write in either Chinese or English. Both the school personnels and the individual parents were the major determining actors in the recruitment process. It is understandable that the school personnels need to play the role of a gatekeeper to protect the well-being of their students especially during the pandemic of COVID-19 when this study was in progress.

To facilitate efficient communication and further collaboration with the school personnels, an inviting letter (Appendix 3) with the full set of documents, including the soft copy of the self-administered questionnaire (Appendix 4), information sheet and parental consent form (Appendix 5) had been emailed to all the local primary schools as reference materials.

#### **3.4.2 *Data Collection***

Aligning with the qualitative part, a quantitative part of this study was conducted to collect first-hand data with the relevant themes in a measurable and statistical form. The self-administered questionnaire designed by the researcher was served for a tool for data collection. It is considered as a relatively simple, convenient and economical way to collect data from a



large population especially the collection process was conducted indirectly with the assistance of teachers. A printed hard copy instead of a web-based questionnaire was used which was expected to be easily managed by all levels of primary students. To encourage greater participation, only basic demographic information of the participating students had been anonymously collected for data analysis.

### **3.4.3 *Determining the Sample Size***

The sampling method of the quantitative part of the study was categorized as a non-probability sampling design. It is reported that a total of 348,994 primary students are studying in 591 primary schools of both the public sector and the Direct Subsidy Scheme in Hong Kong in the academic year of 2021/2022 (Education Bureau, 2022). Applying the sample size calculator of the Creative Research Systems (2012), the minimum ideal sample size was 384 by calculating from the population of local primary schools with a 95% confidence level and the plus-or-minus 5% margin of error as its confidence interval. The minimum sample size was then rounded up to 400 indicating that at least 400 primary students were required to be recruited for the quantitative part of this study. Thus, all the local primary students were considered as potential participants while 400 was the minimum required sample size.

### **3.4.4 *Design of the Questionnaire***

To ensure the effectiveness in collecting valid and reliable data from the local primary students, the questionnaire was designed with a series of preset questions based on the objectives of this study. The questionnaire was designed with the format of a worksheet which is very familiar to the participating students in their learning context so as to minimize their psychological barriers or resistance in answering questions. It is rather simple for the school children to select answers which fit in their thoughts or preferences. Each question was focused on a

single construct written in simple wordings which could be clearly understood by primary students of different academic levels.

The self-administered questionnaire was designed in a semi-structured format with both open-ended and close-ended questions. Participating students were encouraged to write down their ideas freely at the open-ended questions while the close-ended questions could provide nominal or ordinal measurements for their responses. Relevant graphic images were included on the questionnaire to increase their interest and motivation to complete the worksheet as well as to minimize their difficulties or confusion in interpreting the questions. This could be helpful in data collection especially for the primary students of lower levels considering their relatively short attention span.

It was envisioned that the questionnaire could be served not only as a tool to collect data, but also as a means for the primary students to have a preliminary reflection about the theme of ‘Life’. Anonymity was applied to protect the privacy and confidentiality of the participating students and thus only the basic demographic information including age, gender and primary levels was collected for statistical analysis.

#### **3.4.5      *Contents of the Questionnaire***

The questionnaire is attempted to obtain the statistical information about the primary students’ perception of life and their proposed ways of cherishing life. All the questions were set in correlation with the content in the qualitative part of the study. The two open-ended questions in the questionnaire asking the participating students to write down their immediate association with the word ‘Life’ as well as to propose their ‘Ways in cherishing life’ aim at facilitating them to express themselves with their creative mind. This is similar to the ‘Draw and Narrate Approach’ for data-collection adopted in the qualitative part of this study. The analysed

findings of the quantitative part were expected to broaden the evidence base and to serve as a supplementary source of information to understand the findings of the qualitative part of the study. The choices of words, item construction, format design and guiding instructions in the questionnaire were simplified as much as possible to adjust to the comprehension level of primary students.

It is stated that the ‘Three Fundamental Questions about Human Life’ of the great philosopher Immanuel Kant (1724-1804) have constructed a comprehensive knowledge base of life. However, these questions may not be applied directly as the conceptual framework of LVE for the primary students because they emphasize on the philosophical and theoretical perspective rather than the practical perspective of ‘unity of knowledge and action’ (Lee et al., 2021). With reference to the three complicated and abstract theoretical questions, the questionnaire was designed with three simplified and concise questions of ‘what’, ‘why’ and ‘how’. They were intended to be the modified simple versions of ‘What can I know?’, ‘What should I do?’ and ‘What may I know?’ from Kant to adapt to the level of comprehension and concrete life experiences of the primary students. The questionnaire containing questions with ‘what’, ‘why’ and ‘how’ was used to explore primary students’ perceptions about the meanings and values of life as well as their ways of cherishing life.

The semi-structured questionnaire is comprised of six parts. The first part is an open-ended question to enquire the participating students about their immediate association with the word ‘Life’. The second and the third parts of the questionnaire are designed to investigate the abilities of the primary students to differentiate between living things and non-living things by identifying the life characteristics as the measure of internal consistency. The fourth part is like a ranking scale for the participating students to self-evaluate how much they are satisfied with life, including ‘oneself’, ‘family life’, ‘school life’, ‘living environment’ and ‘friendships’.

The fifth part is to explore the participants' preferences in life by choosing 3 from 8 items including 'enjoyments', 'family', 'friends', 'health', 'moral conduct', 'academic performance', 'talents', and 'wealth'. The last part is another open-ended question to gather the primary students' ideas, aspirations or anticipations about cherishing life or enjoying a better life.

The questionnaire contains both types of open-ended and close-ended questions. Open-ended questions without providing any pre-set categories of answers are served to enable the participating students to give a free account in their own way with their preferred terminologies. The primary students were encouraged to use their creativity to share their original responses. The close-ended questions with choices of answers would help to generate frequencies of responses for statistical analysis and comparison.

All the distributed materials were prepared in bilingual form to suit the needs of all types of local primary schools. Thus, the questionnaire (Appendix 4), information sheet and parental consent form (Appendix 5) as well as other related information for the publicity and implementation of the study were available in both Chinese and English for the participating schools.

#### **3.4.6 Data Analysis by SPSS**

All the collected quantitative data were processed using the 'Statistical Package for the Social Sciences 28 (SPSS 28)' which is a common software package for the interactive and batched statistical analysis (Levesque, 2007). Only simple frequencies, percentages and correlations were calculated and the statistical analyses were performed by Chi-square statistic, G-test and Cross-tabulation of the system with the significance to be set as the p-value of 0.05.

### **3.5 Pilot Study**

A pilot study with both the qualitative part and the quantitative part of this study had been undertaken for the refinement and amendment of the materials for data collection. Three primary students had been invited from different levels, each student from Primary 1-2, Primary 3-4 and Primary 5-6 respectively to participate in both the qualitative and quantitative parts. Their responses and feedbacks had helped a lot to determine whether the content, methodology and requirement of both parts of the study were comprehensible to the primary students for their future participation in the study.

The semi-structured questionnaire of the quantitative part of the study had been refined to have the final version for its feasibility, reliability and validity. Before the pilot study was conducted, the content validity of the questionnaire was obtained and revised with the professional advice and precious comments from the two supervisors, Dr C. M. Lam and Dr S. W. Wu who are experts in educational research. Any other possible obstacles encountered during the implementation process were also identified for further improvement. The feasibility of the questionnaire as well as the response rate, the respondent's time of completion and the proportions of missing values of the quantitative part as well as the understanding of the primary students in the drawing and narration of the qualitative part were all included for evaluation to ensure the smooth implementation of the main study.

### **3.6 Implementation of the Qualitative and Quantitative Parts of the Study**

The qualitative part of the study is to explore the in-depth thoughts and feelings of local primary students about their perceptions of life and proposed ways to cherish life while the quantitative part of the study is to gather the generalized statistical information from the questionnaire as the consolidated evidence base. These two batches of collected information are served to

complement each other so as to provide a more complete and objective understanding of the research topic. From the pilot study, no contradiction, exclusion or collision had been observed between the collected data in both parts of the study. Therefore, this study is a convergent parallel design in which the qualitative and quantitative parts could be conducted concurrently.

With the ethical approval from the University, a series of logistic procedures had been carried out for the implementation of both the qualitative and quantitative parts of this study within the period commencing from September 2021 to the end of August 2022 which was in the COVID-19 pandemic. With the illustration of the design of this study as a background, the implementation of the qualitative and the quantitative parts of the study will be discussed in detail in the following two chapters.

## **IV. Qualitative Part of the Study**

This chapter describes the qualitative part of the study in four sections, including the methodology, implementing procedures, research findings as well as the analysis and discussion. The first section outlines the two major research tools including the independent drawing and individual interview used in the collection of qualitative data. The second section presents the pilot study and the overall implementation process. The third section is a detailed report of all the findings collected from the pictorial images and narrations of the participating students. The fourth section is the analysis and discussion of the research findings.

### **4.1 Methodology of the Qualitative Part of the Study**

Independent drawing and individual interview with semi-structured guiding questions were the two basic research tools adopted for data collection in the qualitative part of this study to identify the perceptions and interpretations of the meaning, content and values of life as well as the proposed ways of cherishing life among the local primary students. Four approaches namely the ‘Draw and Narrate’, ‘Theory of Saturation’, ‘Narrative and Drawing Intervention (NDI)’ as well as ‘Thematic Analysis’ had been applied in data collection, determining sample size and data analysis as discussed in the previous chapter: Design of the Study.

#### ***4.1.1 Independent Drawing***

Drawing picture was the primary means used to encourage the research participants to express their feelings and thoughts in a relatively free and relaxed atmosphere. Each participating student had been invited to draw a picture independently with the theme ‘Life’ before the individual interviews were conducted by the researcher. Meanwhile, all the participants would be invited to add something on their original drawing to share their proposed ways of

cherishing life at the later part of the interview. In case some participating students preferred not to add anything to show their proposed ways of cherishing life for any reasons, the researcher would try to understand the feelings and thoughts of the participants as well as to encourage them to try and continue with the drawing. However, their final decisions would be fully respected.

#### ***4.1.2 Individual Interview***

Through the interactive interview subsequent to the drawing activity, the researcher would try to obtain more in-depth and comprehensive understanding of the inner world of each participating student. It was anticipated that the individual interviews could provide sufficient time and psychological space for the participating students to reflect and present their ideas. It was an essential opportunity for the researcher to directly clarify or cross-check with the participants about their expressed responses.

To facilitate the implementation of the research during the outbreak of the pandemic of COVID-19, face-to-face interviews had been modified to be conducted online via the tool of virtual Zoom meeting. All the interviews had been audio-recorded with prior notification and consent from both the participating students and their parents or guardians. The audiotapes would be used for data analysis which could only be accessed and kept confidential by the researcher.

Each online interactive interview was anticipated to last for around 15-20 minutes or longer depending on the need of the interviewee. The interview would be postponed or cancelled immediately if any abnormal emotional responses from the participating students were observed or detected by the researcher. The researcher at that time would try the best to deliver verbal emotional support for the interviewee. The parents or guardian of the



participating student might also be involved to provide immediate support. Under this special circumstance, the researcher would keep in touch with the parent or guardian to see whether any follow-up advice or service could be offered for the benefits of the participating student.

The participation in the study was completely voluntary. All the participating students and their parents or guardians were free to choose to withdraw their participation from the study anytime without bearing any negative consequences. It would be highly appreciated if the reasons of withdrawal were notified to the researcher while the withdrawal rate and reasons would be recorded as a secondary reference for future research design.

## **4.2 Implementation of the Qualitative Part of the Study**

### ***4.2.1 Pilot Study***

After the ethical approval of this study had been granted by the University, a pilot study was conducted by inviting three primary students, including a girl in Primary 3 (Appendix A), a boy in Primary 1 (Appendix B) and another girl in Primary 1 (Appendix C) to participate in both the qualitative and quantitative parts of this study. A repetitive answer found in Part 3 in the Chinese version of the questionnaire was noted to be an editing error. Two more primary students, including a girl in Primary 5 (Appendix D) and another girl in Primary 4 (Appendix E) were invited to join the pilot study using the revised version. The supervisors of the researcher had also recommended some modifications for finalizing the questionnaire of the quantitative part of the study. With the approval from the research supervisors, the qualitative part of this study was undertaken in the period from December 2021 to August 2022.

### ***4.2.2 Process of Implementation***

All the 30 participating students of the qualitative part of the study were assigned with a name from A to DD. They were recruited randomly from different families composed of varied

social, cultural and religious backgrounds. In order to avoid the bias due to differences in gender or academic levels, both genders of primary students from different academic levels had been recruited.

After recruitment of the potential participants, the researcher had approached their parents or guardians to explain the purpose of this study and the implementation procedures of the qualitative part with an information sheet for reference. A consent form of participation in the study (Appendix 2) with the authorization of the publishing of the participants' drawings in the final research report had been signed by the parent or guardian of each participating student. Participants in the age range of 9-15 were also requested to sign the consent form (Appendix 2) as required by the University.

All the participating students had been invited to draw a picture with the theme of 'Life'. They were free to express their associations with the theme through independent drawing. Interventions from the participant's parents or guardian as well as from the researcher in the form of advice, encouragement, praise or comment were supposed to be avoided throughout the drawing activity with an advanced friendly reminder. After each participating student had completed the drawing, the picture would be sent to the researcher via email or other electronic communication channels. Then an individual interview would be scheduled for the participating student to share about the content and meaning of his or her picture with the researcher. The right of choosing to be accompanied by somebody or to be alone during the interview was reserved for the participating students. It was noted that some similar ideas were expressed among three pairs of siblings (C and D, F and G, S and T) who participated in the study and drew their pictures together. Nevertheless, there were also diverse ideas demonstrated among two brothers of the same family (W and V).

After sharing about the original drawing, each participating student would be invited to add

something on the picture to demonstrate how they would like to cherish life more or to live a better life. Since children tend to have unrestrained imaginations, the following guiding questions had been applied in the semi-structured interview for leading the participants to share in relevance to the research goals:

- 1) Who/ what are in the picture? Then, why do you put them in your picture?  
How do you understand about life as shown in your picture?
- 2) Are you in your picture? If yes, can you describe yourself? If not, can you tell me why you are not there? Which graphic element in your picture can be chosen to represent you? Why?
- 3) Now, can you please add something in your picture to indicate how you can cherish life more?
- 4) How can the added item(s) help you to cherish life more?

The participating students were invited to share about their original drawing with reference to the first two guiding questions. Then they were requested to add something in their original pictures about their proposed ways of cherishing life according to the latter two guiding questions.

According to the ‘Theory of Saturation’, the addition of extra participant will continue until no more new ideas can be collected from three successive participants. By then, the maximum number of participants has been reached. In this study, the thematic saturation was found to be reached at twenty-five and so a total number of thirty participating students had been recruited. All the pictures and interview notes of the thirty participating students were edited into the interviewing transcripts as enclosed in Appendix A-DD.

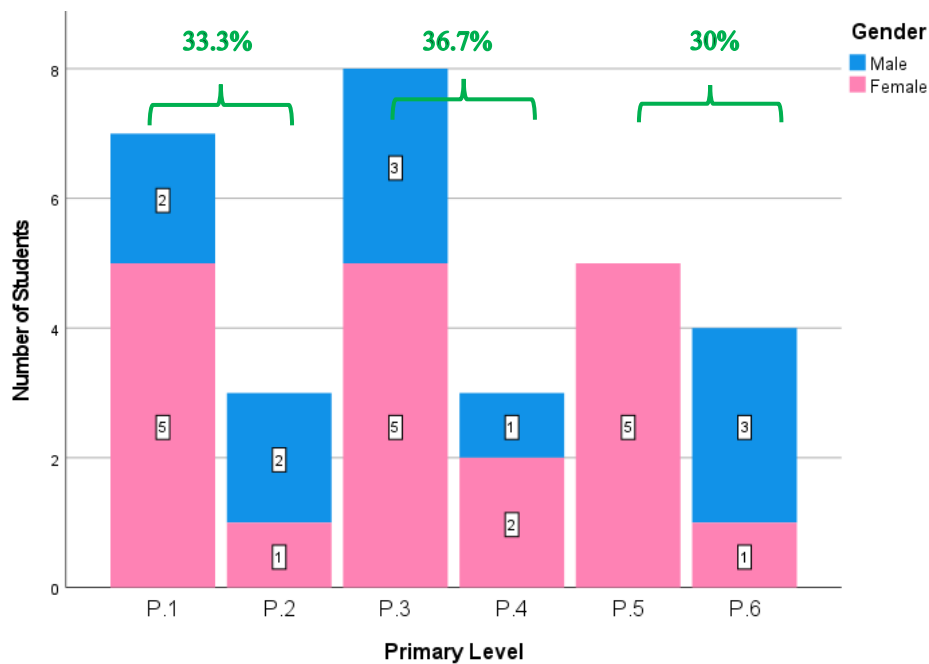
In the process of qualitative analysis, all the pictorial and narrated data had been re-read, coded, categorized and inducted by the researcher according to their focuses and contents. The

identity of all participating students would remain anonymous with their denoted names as A to DD.

### 4.3 Findings of the Qualitative Part of the Study

#### 4.3.1 Demographical Information of Participants

**Figure 1.** *Demographical information of participating students in qualitative part of the study by academic level and gender*



A total number of 30 local primary students (A-DD) had participated in the qualitative part of the study. They were aged from 6-12 years old, including 11 boys (36.7%) and 19 girls (63.3%). 33.33% of them were in the lower primary levels (Primary 1-2), 36.67% were in the middle primary levels (Primary 3-4) while 30% were in the upper primary levels (Primary 5-6) as shown in Figure 1.

#### 4.3.2 Collected Data from the Drawings and Interviews

It was observed that there were a diverse range of drawing results with unique contents constructed by the participating students' graphic orientations in mind, their strong

idiosyncrasies as well as their evolutionary characters. Pictures are symbolic systems with dual natures as they are things in themselves which may also refer to some underlying meanings. They can help us consciously or unconsciously to communicate information, ideas and feelings with aesthetic values (Jolley, 2010). All the pictures were vividly illustrated with their specific drawing styles, representational strategies, figures, weight and length of lines as well as the use of colors. Thus, it was recommended not only to focus on the content of the participating students' drawings, but also to explore their depiction strategies, features, drawing styles, etc. in the process of data analysis.

Both the concrete data and the projective data had been obtained from the qualitative part of this study. Concrete data refers to the thoughts or feelings of the participating students which were detailedly and remarkably demonstrated by the pictorial images in their drawings or in the subsequent interviews. This kind of data was expressed and collected at the conscious sense of the participants. Projective data was expressed in a more subtle form in the subconscious sense and could be gathered and analyzed with specific knowledge and skills. The 'Narrative and Drawing Intervention' (NDI) Approach and the 'Thematic Approach' were used for exploring the partially revealed inner world of each participating student.

#### **(A) Concrete Data**

##### ***4.3.2.1. Perceptions of Life:***

##### **4.3.2.1.1 Association with the Word 'Life'**

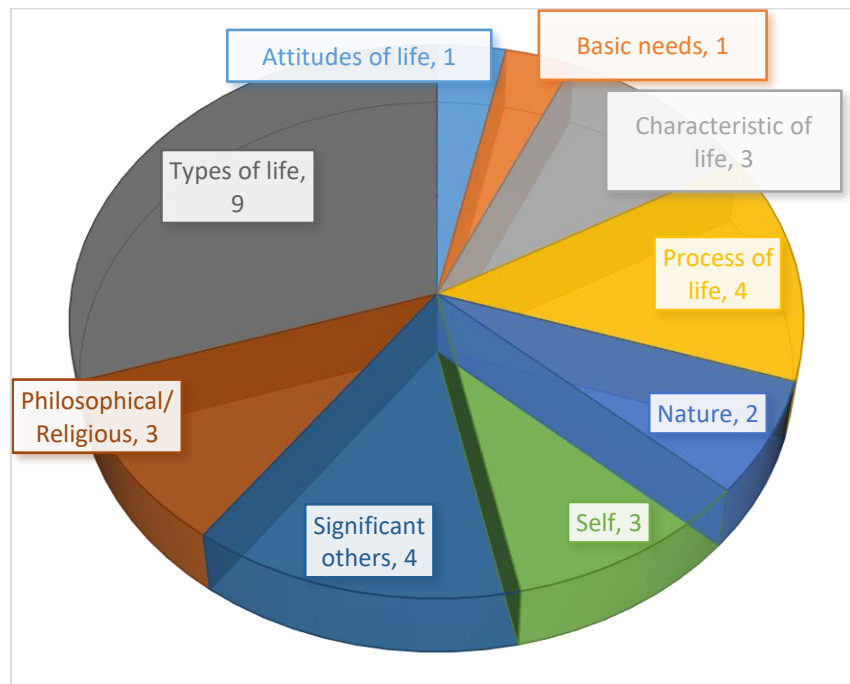
Among all the thirty cases, nine participating students (30%) as the majority had associated the word 'Life' with 'Types of life'. Four students (13.3%) had associated it with 'Process of life' whereas another four students (13.3%) had associated with 'Significant others'. Three groups of three individual students (10%) had associated the word 'Life' with 'Life

characteristics’, ‘Religious or philosophical concepts’ or ‘Self’ respectively while two students (6.7%) had associated with ‘Nature’. One student (3.3%) had associated the word ‘Life’ with ‘Attitudes of life’ while another student (3.3%) had associated with the ‘Basic needs of life’. All the aforementioned data was demonstrated in the following pie-chart (Figure 2). The relationship map (Figure 3) based on the distribution of items (Table 1) had provided more information about the distribution of the various codes of association with the word ‘Life’ among the participating students from different primary levels. The content of the thirty drawings (A-DD) according to the nine distribution items were briefly illustrated below for further understanding of the participating students’ perceptions of life.

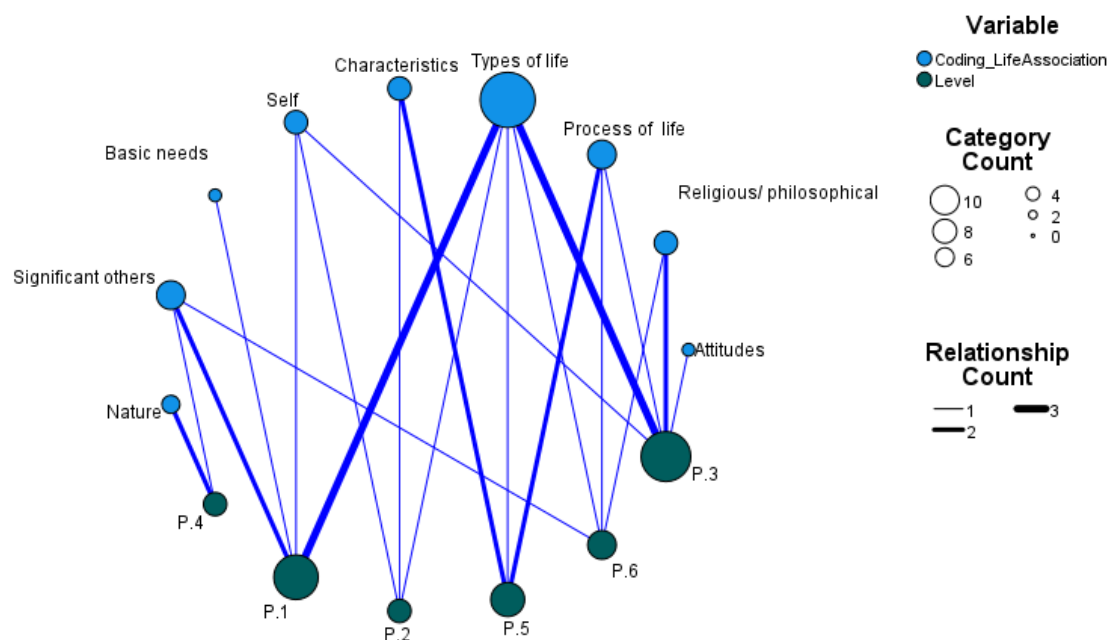
		Coding_LifeAssociation									Total
		Attitudes	Basic needs	Characteristics	Process of life	Nature	Self	Significant others	Religious/ philosophical	Types of life	
Level	P.1	0	1	0	0	0	1	2	0	3	7
	P.2	0	0	1	0	0	1	0	0	1	3
	P.3	1	0	0	1	0	1	0	2	3	8
	P.4	0	0	0	0	2	0	1	0	0	3
	P.5	0	0	2	2	0	0	0	0	1	5
	P.6	0	0	0	1	0	0	1	1	1	4
Total		1	1	3	4	2	3	4	3	9	30

**Table 1.** *Distribution of different associations with life in the qualitative part of the study by different academic levels*

**Figure 2.** Number of different associations with the word 'Life' in the qualitative part of the study



**Figure 3.** Relationship map showing associations with life among students in different academic levels in the qualitative part of the study



#### **4.3.2.1.1.1. ‘Types of Life’**

Among the nine participants (30%) who had associated the word ‘Life’ with ‘Types of life’, a Primary 1 girl had drawn different types of animals, insects and plants including a pig, a lion, a butterfly, a snail, some flowers and grass as shown in Appendix F. A cluster of different types of living things composing human being, rabbit, pig, tree, flower and fish are found in the picture drawn by a Primary 3 girl (Appendix G). A boy in Primary 6 had drawn a boy flying a kite, a tortoise, a butterfly and a tree on the grassland (Appendix H) while a girl in Primary 5 had drawn different types of sea animals, like fish, turtle, starfish, octopus, crab, jellyfish and seagrass as shown in Appendix R. A girl in Primary 1 had drawn a big tree with flowers, insects and a human figure (Appendix J). A boy in Primary 3 had drawn a cat in his picture (Appendix S) because he believed that it could have nine lives whereas another boy in Primary 2 had drawn a tortoise (Appendix T) which could be symbolized as ‘longevity’. A girl in Primary 3 had drawn a boy, a girl, a dog, a cat, some trees and an alien as shown in Appendix Y. Another girl in Primary 1 had drawn different types of living things, including a tree, some flowers and two butterflies in her picture (Appendix CC).

#### **4.3.2.1.1.2 ‘Process of Life’**

Four students (13.3%) had associated the word ‘Life’ with ‘Process of life’. A boy in Primary 6 and a girl in Primary 5 had drawn the life journey of a human being from birth to death (Appendix K & N). Another girl in Primary 5 had drawn the four different phases in the metamorphosis process of a butterfly together with the support of the various growing stages of the plants (Appendix P) while a girl in Primary 3 had drawn different patterns of the growing stages of a tree as shown in Appendix BB.



#### ***4.3.2.1.1.3 ‘Significant Others’***

Four students (13.3%) had associated the word ‘Life’ with ‘Significant others’. A girl and a boy in Primary 1 (C & V), a boy in Primary 4 (L) and another boy in Primary 6 (M) had drawn the happy moments with their families. The families of C, L and V were portrayed in the playground (Appendix C, L & V) while the image of M’s family was at home (Appendix M). V, a Primary 1 boy had also drawn his beloved toy Bunny Rabbit and considered it as one of his family members but he had excluded his domestic helper from the picture.

#### ***4.3.2.1.1.4 ‘Life Characteristics’***

Three students (10%) had associated the word ‘Life’ with ‘Life Characteristics’. A girl in Primary 5 had drawn some human organs and pulses to demonstrate the vital signs of life, including the heart for heartbeats, lungs for breathing, stomach for digesting food etc. (Appendix D). Another girl in Primary 2 had drawn an abstract image of the heart with the red arteries and the blue veins to illustrate that heartbeat as one of the most significant life characteristics. She had also drawn the skeleton of a hand to show the joints for movements (Appendix Z). A girl in Primary 5 had drawn two girls in similar styles of dressings but different hair styles located on the tops of two different highlands in her picture (Appendix U) to indicate their similarities but also with independent personhood and individual uniqueness. Both girls in the picture had their own favorite pets indicating their free will to make their personal choices.

#### ***4.3.2.1.1.5 ‘Religious or Philosophical Concepts of Life’***

Three participating students (10%) had associated the word ‘Life’ with ‘Religious or Philosophical concepts’. A girl in Primary 3 had drawn an image of the loving God who was present with the four children from different nations as shown in Appendix A. Another boy

in Primary 3 had drawn five groups of graphics including a cross to represent his God who had created and redeemed life, a heart to indicate life with love and kindness, four human figures of his family, four small circles to represent different expressions of feelings in life as well as a big circle with the word ‘an adventure of feelings’ and another human figure as shown in Appendix W. A girl in Primary 6 had drawn the creation story with multiple types of living things illustrated in the Bible to demonstrate that all kinds of life were created by God as shown in Appendix DD. She believed that every creature was initially beautiful in its own way.

#### ***4.3.2.1.1.6 ‘Self’***

Among the three participating students (10%) who had associated ‘Life’ with ‘Self’, a Primary 1 girl had drawn seven images of herself with long hair but in different styles of dressing. Five of them were standing in a line on the grassland with a flower. A ‘boy’ figure with wings had also been drawn in the center of the picture flying up with two other girls as shown in Appendix I. A boy in Primary 2 had drawn himself as a cartoon figure which was the main character of the storybook read recently by his mother at bedtime. He had also drawn a snail looking for food on the ground as shown in Appendix Q. Another boy in Primary 3 had drawn himself with his dog to indicate that he and his dog had different types of needs and desires (Appendix X). He had shared that he did not only require the basic needs of food and water like his dog, but he also wished to have academic achievements, entertainment and pleasurable experiences in life.

#### ***4.3.2.1.1.7 ‘Nature’***

Two girls (6.7%) in Primary 4 had associated the word ‘life’ with ‘Nature’. One girl had drawn some plants, including a tree, a branch and two flowers on the grassland with a big white

cloud (Appendix E) while the other girl had drawn a frog, a butterfly, two ducklings, some grass and lotuses in the pond (Appendix AA).

#### ***4.3.2.1.1.8 ‘Attitudes of Life’***

A girl (3.3%) in Primary 3 had associated the word ‘Life’ with ‘Attitudes of life’. She had drawn a curve-shaped rainbow to express that life is colorful and beautiful with ups and downs as shown in Appendix O.

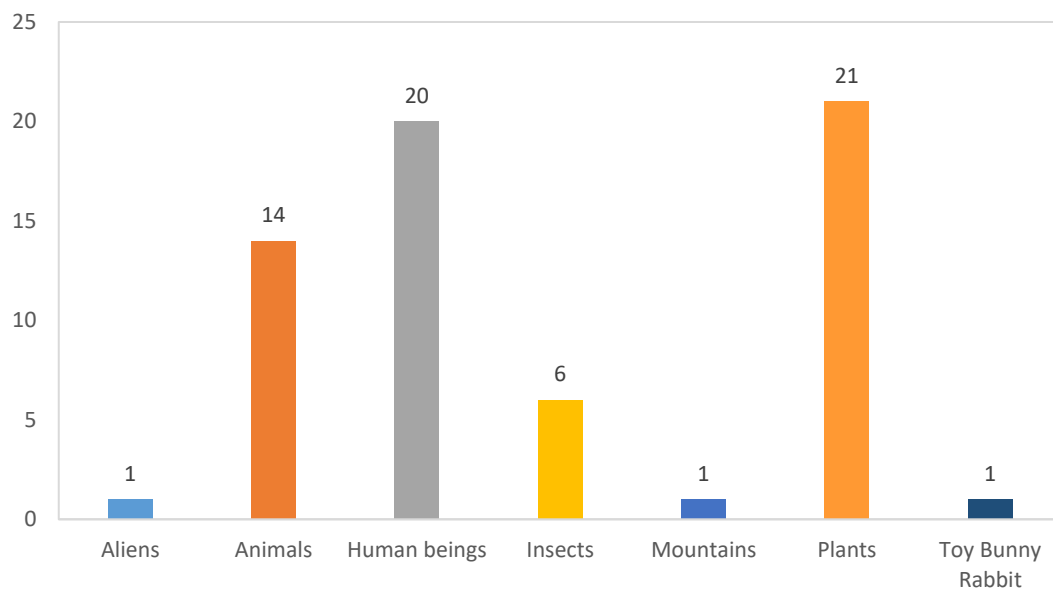
#### ***4.3.2.1.1.9 ‘Basic Needs of Life’***

A boy (3.3%) in Primary 1 had associated the word ‘Life’ with the ‘Basic needs of life’. He had drawn some decorations of his home with his toys because they were important in his life as shown in Appendix B.

#### **4.3.2.1.2 Variety of Living Things**

It was observed that twenty-nine participating students (96.7%) had drawn living things in corresponding to the theme of ‘Life’ even though their choices of living things varied in category or quantity. Among the thirty primary students, twenty-one students (70%) had included ‘Plants’ in their pictures. Eighteen students (60%) had included ‘Human figures’ in their pictures. Fourteen students (46.7%) had included or would like to add (Appendix BB) ‘Animals’ in their pictures while six students (20%) had included ‘Insects’ in their pictures. A boy in Primary 1 had included his favorite toy Bunny Rabbit as a living thing (Appendix V) whereas a girl in Primary 3 had even drawn an alien in her picture (Appendix Y) because she wondered if there were any other living things outside the earth in the cosmos. A girl in Primary 5 advocated that mountains were also alive as they could nurture different types of living things (Appendix U). All the aforementioned numerical data was shown in the following bar-chart (Figure 4).

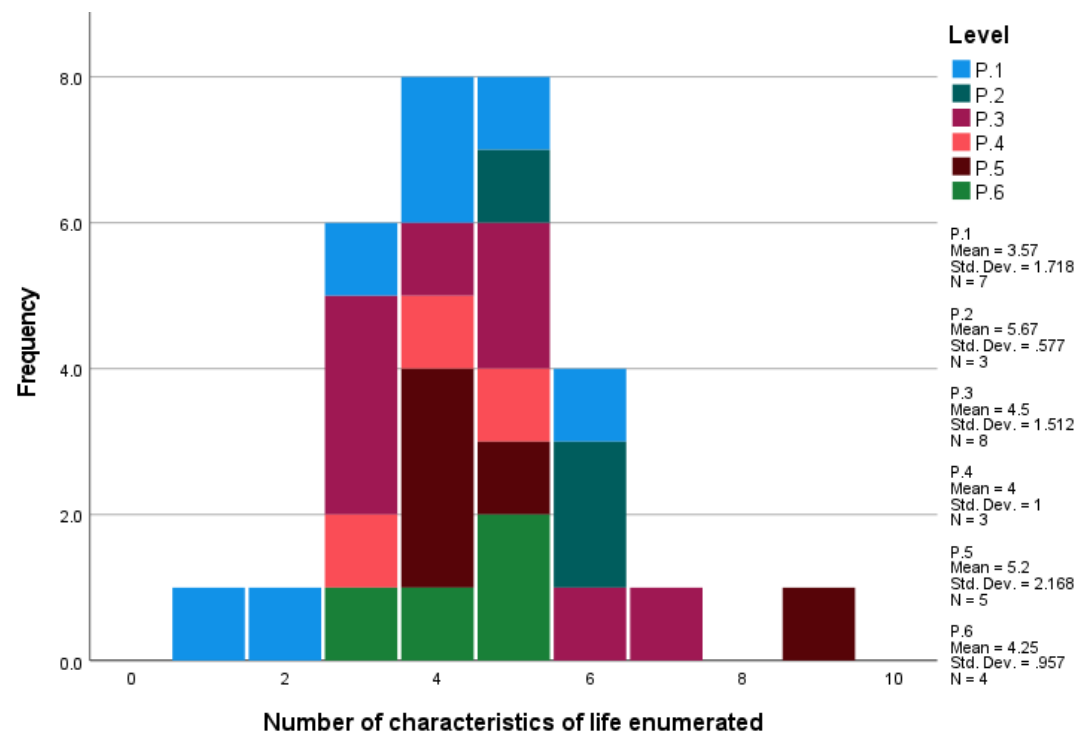
**Figure 4.** Bar chart indicating different types of living thing being implicated by students in the qualitative part of the study



#### **4.3.2.1.3 Enumerating Life Characteristics**

During the interviews to share about their drawings, a majority of the participating students had easily cited a number of life characteristics, ranging from one to nine (Table 2). As shown in the following bar chart (Figure 5), it was noted that one Primary 5 student (3.3%) had signposted nine life characteristics by herself (Appendix N) while another Primary 3 student (3.3%) had indicated seven characteristics (Appendix O). Four students (13.3%) had indicated six characteristics. Eight students (26.7%) had included five characteristics while another eight students (26.7%) had included four characteristics. Six students (20%) had counted in three characteristics. One Primary 1 student (3.3%) could name two characteristics (Appendix C) while another Primary 1 student (3.3%) had listed one characteristic of life (Appendix F).

**Figure 5.** *Number of life characteristics enumerated by different academic levels of primary students in the qualitative part of the study*



No. of Characteristics	1	2	3	4	5	6	7	8	9
No. of Participants	1	1	6	8	8	4	1	0	1

**Table 2.** *Distribution of number of life characteristics enumerated in the qualitative part of the study*

Academic Level	P.1	P.2	P.3	P.4	P.5	P.6
No. of Characteristics	1-6	5-6	3-7	3-5	4-9	3-5

**Table 3.** *Number of life characteristics enumerated by different academic levels in the qualitative part of the study*

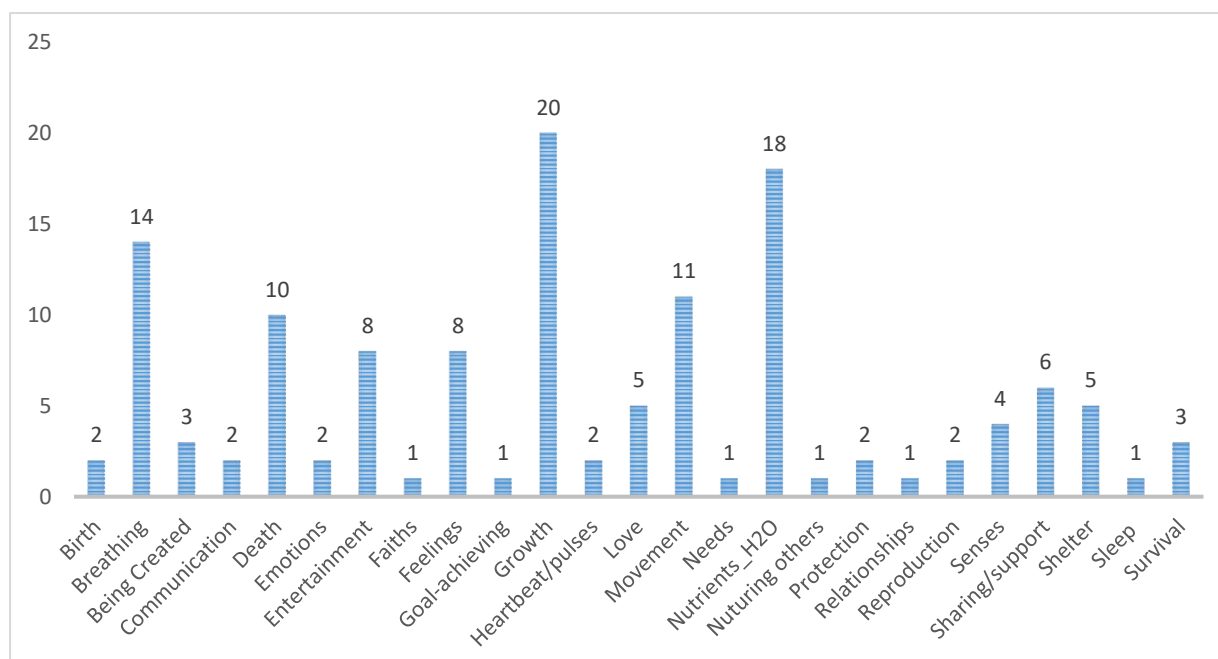
Referring to Figure 5 and Table 3, it was found that the ability to name the number of characteristics of living things was not directly correlated to the primary level of the

participating students. It could be implied that age or academic level is not a determining factor for the children to learn about life and students in Primary 1 were already able to grasp a broad scope of concept of life.

#### **4.3.2.1.4 Scope of Life Characteristics**

In the interviews, the participating students had shared a variety of life characteristics as shown in the following bar-chart (Figure 6). Twenty students (66.7%) had mentioned that ‘growth’ was one of the most critical characteristics. Eighteen students (60%) had indicated that living things required ‘nutrients and water for maintaining life’ while fourteen students (46.7%) had revealed that ‘breathing’ was a significant characteristic. Eleven students (36.7%) had expressed ‘movement’ as one of the characteristics whereas ten students (33.3%) had illustrated that ‘death’ was a typical characteristic of life. Eight students (26.7%) each had mentioned living things had ‘feelings’ or needed ‘entertainment’ while six students (20%) had considered that living things could ‘share or have mutual support’. Five students (16.67%) had showed that ‘love’ was essential for life while another five students (16.67%) had claimed that living things were in need of ‘shelter’. ‘Senses’ had been mentioned as one of the characteristics by four students (13.3%). ‘Being created’ and ‘survival’ had also been respectively considered as the characteristics by two groups of three students (10%). Two students (6.67%) each had linked up ‘birth’, ‘communication’, ‘emotions’, ‘heartbeats or pulses’, ‘protection’ and ‘reproduction’ as a characteristic of life. One student (3.3%) each had respectively indicated the following life characteristics including ‘faith’, ‘goal-achieving’, ‘needs and desires’, ‘nurturing others’, ‘interpersonal relationships’ as well as ‘sleep’.

**Figure 6.** Number of each different characteristic enumerated by primary students in the qualitative part of the study



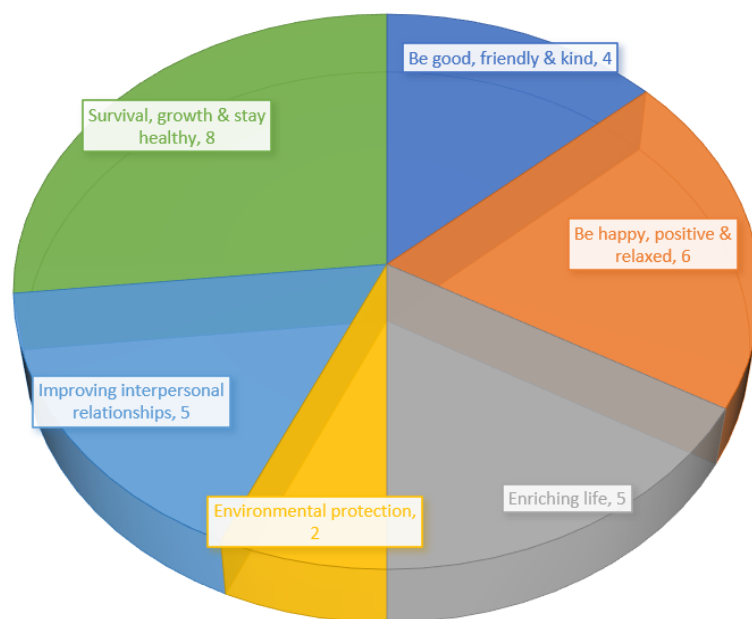
#### 4.3.2.2. Proposed Ways of Cherishing Life

The ways of cherishing life proposed by the participating students could be classified into six categories with details as shown in the following sections. Twenty-six participating students (86.7%) had added something onto their original pictures to illustrate how they would like to cherish life or live a better life. The remaining four students (13.3%), who had not added anything, had shared their ideas based on their original drawings.

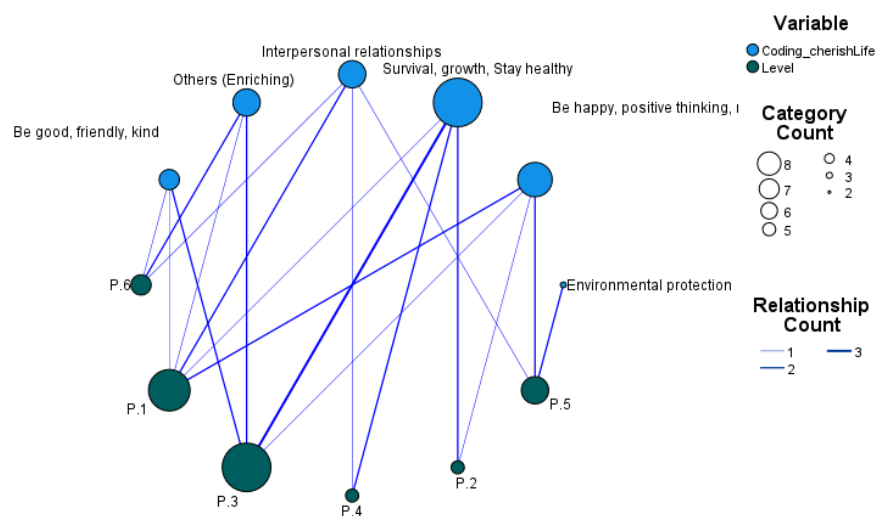
Among all the thirty cases, eight participating students (26.7%) as the majority had suggested cherishing life by ‘Survival, growth and stay healthy’. Six students (20%) had suggested ‘Be happy, positive and relaxed’ while five students (16.7%) had suggested ‘Enriching life’. Another five students (16.7%) had suggested ‘improving interpersonal relationship’ whereas four students (13.3%) had suggested ‘Be good, friendly and kind’. Two students (6.7%) had suggested ‘Environmental protection’ as a way of cherishing life. All the information was

demonstrated in the following pie-chart (Figure 7). The relationship map (Figure 8) based on the distribution of suggestions (Table 4) had provided more information about the distribution of the various codes of their proposed ways in cherishing life among the participating students from different primary levels.

**Figure 7.** *Distribution of the participating primary students in the six categories of their proposed ways in cherishing life in the qualitative part of the study*



**Figure 8.** *Different ways of cherishing life proposed by different academic levels in the qualitative part of the study*





		Coding_cherishLife						Total
		Be good, friendly, kind	Be happy, positive thinking, relax	Environmental protection	Interpersonal relationships	Survival, growth, Stay healthy	Enriching	
Level	P.1	1	2	0	2	1	1	7
	P.2	0	1	0	0	2	0	3
	P.3	2	1	0	0	3	2	8
	P.4	0	0	0	1	2	0	3
	P.5	0	2	2	1	0	0	5
	P.6	1	0	0	1	0	2	4
Total		4	6	2	5	8	5	30

**Table 4.** *Distribution of categories of ways in cherishing life by different academic levels in the qualitative part of the study*

#### **4.3.2.2.1 ‘Survival, Growth and Stay Healthy’**

Among the thirty cases, eight participating students (26.7%) as the majority had suggested cherishing life by ‘Survival, growth and stay healthy’. F, G, S and T had added different types of food and water for various species of living things for nurturing their growth and survival (Appendix F, G, S & T). Both L and AA had added the sun which gave out light and warmth for the survival and growth of life as shown in Appendix L and AA. Y added some trees and recreational facilities for human beings as shown in Appendix Y whereas Z had added some red blood cells to nourish human bodies for maintaining life (Appendix Z).

#### **4.3.2.2.2 ‘Be Happy, Positive and Relaxed’**

Six students (20%) had proposed to ‘Be happy, positive and relaxed’ to cherish life. B had added some Legos as his new toys and explained that he would be very happy if he could get them in hand (Appendix B). J believed that happiness was important in life while eating and playing could make her feel happier. She had also added three hearts with the sun and some clouds into her picture because the hearts symbolized happiness while both the sun and clouds could help the plants to grow (Appendix J). N had added some musical notes as shown in Appendix N because she believed music could help to release stress and to celebrate happy moments in achieving goals. Q had added a television set to show his way of cherishing life

because he could watch cartoons while he was waiting for his mother's story-time (Appendix Q). U had added some birds in her picture because she believed they could fly freely and she enjoyed herself in the natural world to release her stress (Appendix U). W had added a triangle with a smiling face to indicate being happy was the best way to cherish life (Appendix W).

#### **4.3.2.2.3 'Improving Interpersonal Relationships'**

Five students (16.7%) had recommended cherishing life by 'Improving interpersonal relationships'. C would like to share the happiness with others and thus she had added some stars, grass and other people in her picture (Appendix C) while D believed that happiness could only be secured with the blessings from family. She had added a shield with thematic texts of 'good health', 'delight' and 'happiness' as shown in Appendix D. E thought that being with her family in the rural area during holidays was the happiest moment for her (Appendix E) while H had added a human figure flying with a kite into the picture because he believed companionship was very important for human life (Appendix H). 'I' had expressed that life could be cherished with diversities through mutual sharing of love. She had added a lot of blue curve lines in spiral shape as well as some scattering patterns to demonstrate different types of linkages among the human figures for communication with one another (Appendix I).

#### **4.3.2.2.4 'Enriching Life'**

Another five students (16.7%) had proposed 'Enriching life' to cherish life. A had painted the colorful background and added the sun, the moon, some clouds, flowers, grass, a bird and a pair of praying hands because she believed prayers could help us to nourish our life with faith (Appendix A). M had added some flowers in different colors and some stars for enlightening life with their prettiness as shown in Appendix M while BB had suggested to add a rabbit

because it was active and nimble (Appendix BB). CC believed that life could be enriched not only by interpersonal relationships among human beings, but also through interactive relationships among different types of living things (Appendix CC). DD would like to add some more plants and animals to illustrate the diversity of life but there was insufficient physical space in the original picture for her to do so (Appendix DD).

#### **4.3.2.2.5 ‘Be Good, Friendly and Kind’**

Four students (13.3%) had suggested to ‘Be good, friendly and kind’. K had shared that it was necessary to help the needy with mutual support (Appendix K) whereas O had added three hearts representing faith, love and perseverance which were essential elements for cherishing life (Appendix O). V had added a bed for his beloved Bunny Rabbit to sleep in. He believed that taking good care of others was the way to cherish life (Appendix V) while X had added some hearts to imply that love and kindness could help to cherish life (Appendix X).

#### **4.3.2.2.6 ‘Environmental Protection’**

Last but not least, two students (6.7%) had proposed to cherish life by ‘Environmental protection’. P had added some lines of rain and rays of light which were essential for the growth of plants. She had also added recycling bins to highlight the importance of using eco-friendly products (Appendix P). Similarly, R had added a yellow plastic bag with the sign of ‘no’ and a plastic cup with a straw and a red ‘cross’ to remind us to protect the natural environment by minimizing consumption of plastic products (Appendix R).

#### **4.3.2.3. Images of ‘Human Figures’ and ‘Self’**

The ‘human figures’ and ‘self’ portrayed in the drawings or shared by the participating students in the interviews had provided more concrete data for the researcher to understand the

expressed meaning of their perceptions of life, especially in their interpersonal relationships or self-identity.

#### **4.3.2.3.1 Images of ‘Human Figures’**

Referring to Figure 4, it was noted that the four most popular types of living things drawn in the thirty pictures were plants (21), human beings (20), animals (14) and insects (6). Among the twenty participants who had put human figures in their pictures, eighteen of them had drawn human figures in their original pictures including the student who had portrayed himself as a cartoon character. Meanwhile, one participating student had added human figures in the final picture (Appendix CC). Besides, another girl (E) had shared that she would like to add her family in the final picture. However, she had not done so because her picture was already fully occupied.

Nine of these twenty students (45%) had drawn or would like to include their families in their pictures, either with pictorial images or written texts. Twelve out of the total number of thirty participating students (40%) had involved their family in either their drawings (9) or their sharing in the interviews (3). Among these twelve participating students, nine of them (75%) had also shared about the happy moments with their families. Nevertheless, it was indicated that a Primary 3 boy, W, had not drawn himself with his family in the picture. When he was asked for the reason for his absence, he kept silent and his mother replied for him by saying that he might have forgotten to do so (Appendix W).

Four primary students (13.3%) had mentioned the importance of companionship with friends in the interviews (Appendix C, K, N and X). Three primary students (10%) had indicated the significance of mutual sharing or support with others (Appendix C, K and N) while another student had expressed that he enjoyed being with his dog (Appendix X). Only one primary 1

boy had drawn himself alone lying on the floor comfortably with his toys at home (Appendix B). It was observed that none of the participating students had drawn or shared anything about their school life. Most probably it might be due to the suspension of school during the pandemic of COVID-19. At the time when the interviews were conducted with the participating students, they were unable to have direct daily interactions with their schoolmates or join any normal school activities.

#### **4.3.2.3.2 Representative Image of ‘Self’**

Among the nineteen participating students who had already drawn human figures in their pictures, it was noted that eight participating students (42%) had not obviously drawn the ‘self’ in their pictures or denied that they had included the ‘self’. However, the representation of the ‘self’ could be detected in a more subtle way. The researcher had asked whether the drawers could select any appropriate items from their pictures to be a representation of themselves. F, the girl in Primary 1 had chosen to be the butterfly because it was colorful and it could fly. H, the boy in Primary 6 had chosen the tortoise because he had claimed that he himself behaved slowly as the tortoise. ‘I’, a Primary 1 girl, had drawn seven female figures with similar hairstyle but in different dressings together with a male figure with wings flying high up with another two female figures. She had chosen one of the girls whom she thought was the prettiest to represent herself. N, the girl in Primary 5 would like to be the human figure along the red line because she enjoyed achieving goals. R, the girl in Primary 5 would like to be the red fish because of its beauty. AA, the girl in Primary 4 had indicated that she had not drawn herself in her picture. However, she had perceived that the frog was waving to greet her. BB, the girl in Primary 3 preferred to be the seeds rather than at other stages of the growing process because she believed that seeds are most energetic and lively while another

girl in Primary 6 (DD) preferred to be the owl because it could fly freely and had a broader view from a higher position.

## **(B) Projective Data**

The thirty sets of drawings of the participating students (Appendix A-DD) had expressed some concrete data as well as had revealed some projective data about their emotional state, personality or mentality. Although the projective data could not be understood with an exact meaning, they could still provide some hints for the researcher to explore the participating students' perceptions of life and ways of cherishing life which could be influenced by many developmental factors. It was suggested that the size, location and use of colors in pictures could entail some unspoken feelings or thoughts of the drawers. These propositions had helped to broaden the researcher's perspective to understand the inner world of the participating students.

### ***4.3.2.4. Size and Location of the Figures in the Drawing***

Referring to the 'Narrative and Drawing Intervention' (NDI) Approach, children who had drawn large figures (E & J) tended to be extroverted, aggressive, self-centered, emotional and self-defensive. They were used to enjoying and seeking out for social interactions while those who had drawn small figures (H, & N) were more likely to be introverted, insecure, quiet, shy and withdrawn. Those who had drawn figures out of the boundary of their pictures (O) had a tendency of being arrogant and out of control. Children who had drawn their figures in the center of the pictures (Z) were more likely to be insecure and rigorous whereas those who had drawn most of their figures slightly higher from the center were comparatively more secure and self-confident (S). Children who had drawn at the upper part of their pictures tended to have stronger desires and ambitions (CC). If most figures were located at the left upper

corner, the drawers tended to be confused and timid. If the figures were mostly drawn at the right upper corner, the drawers might have a higher tendency to suppress their unhappy memories and become withdrawn (Wong, 2016). It was noted that none of the thirty participating students had either one of these two tendencies.

#### ***4.3.2.5. Use of Colors***

It was claimed that color choices could be considered as one of the significant indicators to explore an individual's existing affective state (Jonaskaite et al., 2018) by analyzing the three dimensions of colors including hue, lightness and chroma chosen by the person (Hunt & Pointer, 2011). Hue defines the 'color family', including red, yellow and blue as primary colors; orange, green and purple as secondary colors whereas reddish orange, yellowish green, bluish purple, etc. are examples of tertiary colors. Red, orange and yellow are basically categorized as warm colors whereas blue, grey and black are identified as cool colors. Yet, both green and purple cannot be simply grouped as neutral, warm or cool hues (Elliot et al., 2015). Red is a bright and warm color for courage, strength, anger, violence and brutality. Blue can be considered as calming, relaxing and healing while green is the color of balance and harmony (O'Connor, 2011). Black can be represented as color of night, death or loss which is usually associated with fear, depression (Cooper & Matthews, 2000), hopelessness or mysterious emotions (Nomura, 2000). White is the absence of pigment which can be symbolized as purity, simplicity or newness (Cooper & Matthews, 2000) but also immature or unrealistic (Nomura, 2000). Grey, the mixture of black and white can be interpreted as conservative (Cooper & Matthews, 2000), prudent or suppressed (Nomura, 2000).

Lightness refers to how much natural light the color contains while chroma indicates the 'density of color'. Dark cool colors with a lower value of chroma, like greyish dull are conceptually linked to negative moods including anxious, depressed and fearful. Contrarily,

bright warm colors with a higher value of chroma, like reddish orange are generally associated with positive affections such as joy and optimism (Jonauskaite et al., 2018). Therefore, brighter, more chromatic and warm colors are conceptually linked to positive stimuli while darker, less chromatic and cool colors are associated with negative stimuli (Jonauskaite et al., 2018). This can explain that brighter warm colors are preferable to be used in festival decorations.

It is stated that young children's attraction to brightness is universal. Most children at the age under 10 years old generally like red, yellow and pink as their favorite colors. When they grow up to 10 years old, they are more likely to prefer blue. It is also noted that young boys prefer black and dark colors in comparison with young girls (Cooper & Matthews, 2000).

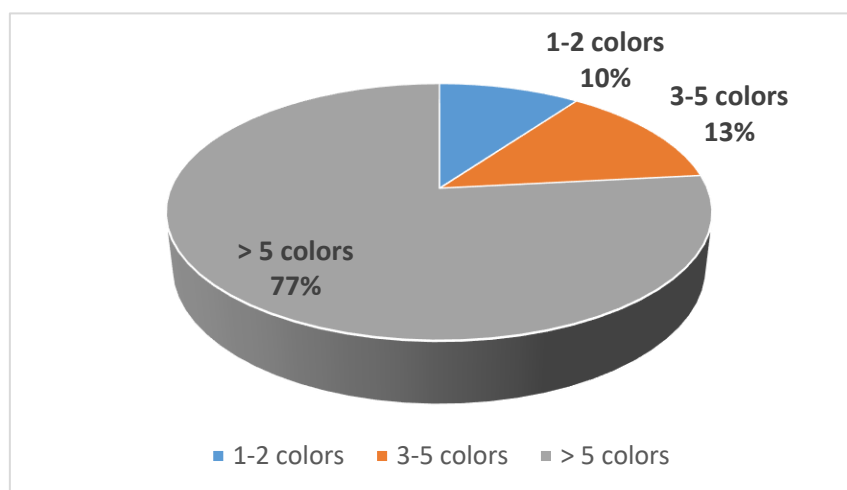
Among the thirty pictures, it was observed that twenty-four participating students (80%) as the great majority had drawn bright and colorful pictures while two of them (6.7%) had chosen comparatively dull colors (Appendix K and DD). It could be concluded from this finding that most of the participating students were comparatively happy with positive mindsets. They tended to be optimistic and full with vitality and expectations of life.

Referring to the following pie-chart (Figure 9), it was observed that 23 participating students (77%) had used over 5 colors in their drawings. Only 4 students (13%) had used 3-5 colors whereas 3 of them (10%) had drawn with 1-2 colors. According to the Theory of Narrative and Drawing Intervention (NDI), it is mentioned that people generally use 3-5 colors in their drawings. People who draw with 1-2 colors seem to be more apathetic and rational whereas those who use over 5 colors tend to be more aggressive and impulsive (Wong, 2016). It was noted that a great majority of the participating students had used a wide range of colors in their drawings. Nevertheless, it was necessary to point out that the two brothers (V and W) had sketched their pictures without any colors because all their drawing materials including colors



had been packed up for immigration by the time of interview. They could only draw with blue (V) and black (W) ball pens provided by their mother. Apart from them, only one student, S had sketched his picture in black and colored in brown. It should be highlighted that D had drawn her picture in red and black with the word ‘Life’ in blue written at the top of her picture. It is proposed that people who overuse the colors of red and black in their pictures seem to be suppressed with anger while those who draw their picture with brown color only tend to be introvert or withdrawn (Wong, 2016).

**Figure 9.** *Percentage in the number of colors used in the drawings in the qualitative part of the study*



Summing up from the above observations in the number of colors used in the drawings, it was indicated that the large majority (77%) of the participating students tended to be aggressive and lived with a joyful and ‘colorful’ mindset. This finding was in congruence with the finding in the use of bright colors to signify that the participating students were generally energetic, explorative, full of dreams at their young age and developmental stage before entering adolescence.

#### ***4.3.2.6. Representation of ‘Human Figures’***

Referring to Figure 4, two-thirds of the participating students (19) had drawn human beings in their pictures though the human beings might not necessarily look like a person with head, body and limbs. It was noted that some latent meanings could be explored from the drawn human figures with their symbolic presentations. It was speculated that those who had drawn matchstick man or cartoon character to represent the ‘self’ might have the tendency to cover up their true self (Q, K & W) while the drawn human figures without any facial features (N) might be interpreted as being unable to adapt to the existing environment or tended to escape from involvement in any interpersonal relationship. Those who had drawn human figures without any ears (A) might be understood as being uneasy to accept any criticism from others. The small eyes of the human figures drawn by both B and C in their pictures could be perceived as they were inclined to be introverted and ego-centered (Wong, 2016).

#### ***4.3.2.7. Images of ‘Plants’***

It was observed that twenty-one participating students (70%) had drawn plants in their pictures as shown in Figure 4. These participants included twenty who had put plants in their original pictures while a boy had added plants in his final picture (Appendix T). The images of ‘plants’ could also reveal some projective meaning for the researcher to explore more about the drawers’ personalities and perceptions of life.

It was highlighted that if someone had drawn a growth ring on the thick trunk of a tree as J did, it was suggested that she might have overcome trauma (growth ring) with her strong vitality (thick trunk). Those who were prone to be proud of themselves (E & P) always drew big treetops while those who might have difficulties in developing their potential tended to draw round treetops (M & BB). A tree bearing many big fruits in the picture (E) might be

considered as a representation of having too many yearnings and desires while a tree with a few small fruits (AA) might symbolize that the drawer had a lower self-image (Wong, 2016).

For those who had drawn some beautiful flowers (E, F, I, J, P, BB & CC), it might imply that they liked to make friends with others. They tended to have a stronger desire for love and prettiness (Wong, 2016). With some butterflies flying around the flowers, the drawers were inclined to have more fascinations or dreams (P, BB & CC). It was observed that only girls had drawn flowers and butterflies flying around the flowers. No boy had drawn any flowers in their pictures but one boy (H) had drawn a butterfly which was high up in the sky.

#### ***4.3.2.8. Images of ‘House’***

Apart from including different types of living things like human figures and plants in the drawings, the images of ‘house’ were drawn by some participating students to represent their home. Home is not just a place for shelter but also an enjoyable living environment with love. For boys (13.3%) had drawn their pictures with the image of ‘house’. A boy in Primary 1 (Appendix B) and the other boy in Primary 2 (Appendix Q) had drawn the interior display of the house with home-feelings while the other two boys had sketched the outline of the houses with door and windows. The boy in Primary 6 (Appendix M) had drawn his family inside the house while the other boy in Primary 1 had drawn his family outside the house. This might be interpreted that the first two boys had greater emphasis on their physical living environment while the other two boys were more concerned with the interpersonal relationships among their family members.

Among their pictures, B had not drawn any window while M had drawn a small window without any door. Both of them might be considered to be overprotected and had the tendency to be withdrawn from any close interpersonal relationship (Wong, 2016). Thus, the image of

house could also help the researcher to know more about the projective meaning of the participating students especially in terms of self-identity or interpersonal relationships since house usually signifies a family or a physical context of a group of closely related people.

Based on the findings of the concrete and projective data observed and speculated from the thirty sets of drawings as illustrated above, the analysis and discussion of the research theme to explore the perceptions of life and ways of cherishing life among the participating students will be presented in the following section.

#### **4.4 Analysis and Discussion for the Qualitative Part of the Study**

By exploring the school children's drawings with the theme of 'Life' along with the analysis of the interviews, both the concrete data and projective data had provided valuable information for the researcher to form a preliminary understanding of the perceptions of life and ways of cherishing life among the thirty participating students. Using the 'Draw and Narrate Approach' for data collection, drawing was proved to be an effective means to facilitate the research participants to depict their ideas and feelings with their chosen images and colors for sharing on a very deep and existential topic of 'Life'. Even though all the participants were at a young age, they managed to present their perceptions and aspirations of life in a very concrete and unique way filled with meaning and creativity. Since no participant had sent in a blank paper, none of their pictures had been categorized as 'no answer' or 'nil participation'. The 100% response rate had demonstrated clearly that the participating students were able to share and illustrate their personal feelings and thoughts of life based on their concrete life experiences and rich imaginations.

The research findings had revealed that 'Life' for the participating students was not just a blank paper with nothing on it. Their life experiences were not prone to emptiness, meaningless,

passivity, incomprehensible, abstract or completely static. In contrary, their drawings had vividly showed that they were very active, observant and explorative in developing their personal worldview and aspiring for a brighter future. They had concretely portrayed a variety of images like human figures, plants, animals, insects, nature and houses in their pictures to express their experience, orientation and expectation of life. They had been creative and insightful in using many symbols or colors to present their perceptions of life as well as how they would like to cherish life.

It was obvious that the participating students at different primary levels had perceived life with some degree of variations owing to their differences in age and developmental stages. However, their common concern was to focus on relationships, which was the basic essence of human nature. Life for them was expressed as relationships in terms of accompaniment or activities or observation about people, self, animals, insects, the environment and even to get in touch with the transcendence.

In the later part of the interview when the participating students were requested to add something to show their ways of cherishing life, four participants (13.3%) had not added or could not add anything into their pictures. This was not due to their reluctance to cherish life or to live a better life. Two of them, including E and DD could not add anything into their original pictures because the paper was already fully occupied and thus no spare physical space was available. Another student K considered that his original picture had already been drawn perfectly well and he had no more idea for adding anything into it. BB had time constraint to put aside her picture in order to attend her piano lesson right after the initial part of the interview. When she wanted to add a rabbit into her original picture as expressed at the later part of the interview, she could not find out her picture. These four participating students had

not added extra images on their original drawing but they had verbally shared about their aspirations of cherishing life.

With regard to the research theme of what were the perceptions of life and the ways of cherishing life for the local primary students, it is impressive to note that the thirty participating students have developed a broad view as discussed below.

#### ***4.4.1 Perceptions of Life: Meanings and Values***

Based on their drawings in association with the theme of ‘Life’, the participating students had touched on nine categories or dimensions of human living. Children at the lower primary levels perceived the concrete existence and external appearance of the ‘different types of living things’. Yet, they had also emphasized their ‘significant others’ in a family context with inter-relatedness. The relationships with animals, plants and insects in the natural world as well as the harmonious relationship at home or in the natural world were also their concerns. For the participating students in the middle or higher primary levels, their perceptions of life had moved beyond the physical existence of objects. They had described the ‘characteristics’ and ‘process of life’ in a more intrinsic and chronological sense. They had observed the growth of a plant, the metamorphosis of a butterfly as well as the life journey of human beings from birth to death with reference to their daily life experiences. Thus, their perceptions of life had been broadened and deepened to include the daily events encountered by them.

‘Basic needs of life’ was also a very concrete and tangible category which includes shelter, safety and companion to be perceived and valued as important in life especially for the participating students in the lower primary levels.

The ‘life characteristics’ as related to the sustainment, mobility, relationship and individuality of human beings had been portrayed to denote its importance. Human organs, vital signs of

life, skeleton and bone joints were some visible features to express the aliveness of people among the participating students' perceptions in both the lower and upper primary levels. It was quite amazing to note that a girl in the upper level (U) had demonstrated her understanding that people were unique to possess individual personhood with freedom to be in a close or distant relationship.

The 'significant other' was a core element in the perceptions of life of the participating students regardless of their age or academic level. The family members were identified as their significant others no matter they were inside or outside the home context while the happy moments with family were treasured by the participating students. Some of them had included their pets like dogs, cats or toys as their significant others to accompany them. However, the domestic helper who took care of the drawer's daily living was not considered by V, W and CC as a significant other.

The 'self' was more clearly emphasized by the participating students at the lower or middle primary levels. The expressions of self were respectively represented by human figure, cartoon figure or the companionship with the pet. The concept of self as a focus of their perception of life might be explained by their ego-centric stage of life development in early childhood.

The perceptions of life for the participating students in the middle or upper primary levels had covered a wider spectrum including the 'Nature', the 'Attitude of Life' and the 'Philosophical/Religious sense of Life'. Two participating students of the middle primary level (E and O) had expressed their concern about the natural surroundings. It was quite surprising to note that a student in middle primary level (N) had acknowledged the ups and downs in life to be faced with positive mentality. Three participating students of the middle or upper primary levels (A, V and DD) had shared beyond the physical earthly world to

embrace the concept of a transcendent God who is loving, creative and in harmonious relationship with people and environment.

Summing up from the pictorial expressions or verbal sharing of the thirty participating students, their perceptions of life had been determined by their life stage of development to a large extent advancing from understanding the existing concrete objects to the transcendent beings in a more philosophical sense. Children at a younger age tended to perceive themselves as a focus in life and their interactions with the environment are more for their basic needs or joy. Children at an older age perceived life with a wider perspective and were aware of the essence of life in terms of the beginning and ending of life as well as the physiological functioning and changes in time and space. Relationships were perceived as tangible, enjoyable and valuable in life even though not all the participating students had drawn family members in their pictures. However, relationships with their significant others, different types of living things in the natural world, and their pets had a special role to play in their life experiences.

The participating students as a whole had shared their perceptions of life with reference to a wide range of life characteristics (Figure 6). The top three features mentioned by the participating students regardless of their age or academic levels were all related to the physiological aspects for survival or growth, like nutrients, water and breathing. Then the existential aspects of living were emphasized, including movement and death. The psychological and social aspects of human interactions were also valued, such as feelings, entertainment, sharing and support. Thus, it was concluded that the participating students had their perceptions of life focus more on the physiological sense but had not ignored the psychological, social and existential dimensions of life.



#### 4.4.2 Proposed Ways of Cherishing Life

Prior to the later part of the interview was conducted, all the participating students were requested to add something onto their original picture to show how they would cherish life or live a better life. Their proposed ways of cherishing life had been grouped into six categories namely, ‘Survival, growth or Stay healthy’, ‘Be happy, positive or relaxed’, ‘Improving interpersonal relationships’, ‘Enriching life’, ‘Be good, friendly or kind’ and ‘Environmental protection’ as shown in Figure 7 for analysis. ‘Thematic Approach’ and the ‘Maslow’s Hierarchy of Human Needs’ had been adopted for analyzing these six categories of ways of cherishing life proposed by the thirty participating students. According to the five levels of hierarchy of needs introduced by Maslow, the sequence of needs is ordered from the bottom to the top as (1) physiological, (2) safety and security, (3) love and belongingness, (4) esteem, and (5) self-actualization (Taormina & Gao, 2013).

Referring to Figure 7, it was indicated that eight participating students (26.7%) as the majority had focused on the physiological needs to maintain their survival, growth and health which corresponded to the first level of needs of Maslow’s hierarchy. Six of them (20%) had accentuated their emotional need to enjoy a relaxed life with happiness and positivity which was closer to the second level of Maslow’s hierarchy of needs of safety and security. Five participating students (16.7%) had a greater concern for their social needs in improving interpersonal relationships which was associated with the third level of needs of Maslow’s hierarchy. These three categories could be considered as the basic needs locating at the base of Maslow’s hierarchy (Oved, 2017).

Four participating students (13.3%) had proposed from the ethical perspectives to ‘be good, friendly and kind’, which was quite typical at the third and fourth level of needs of Maslow’s hierarchy to satisfy the social need of love and belongingness as well as the need of esteem.

Another five students (16.7%) had suggested some developmental perspectives of ‘enriching life’ for achievement. Two participating students as a minority (6.7%) had recommended some measures for ‘environmental protection’ and ecological well-being. All these categories were closely related to the fourth and fifth level of the Maslow’s hierarchy of needs for attaining the psychological need of esteem and the spiritual need of self-actualization or self-fulfillment (Oved, 2017).

Based on the aforementioned analysis, it could be summarized that nearly half of the thirty participating students had placed the emphasis on their physiological and emotional needs (14) to cherish life. The social need (9) was the next important aspect for cherishing life. The more abstract need of esteem and self-actualization (7) was the least concerned area for cherishing life. This finding was reasonable as it was generated from a group of primary students who were in their early childhood or at the beginning of adolescence. The distribution of their preferences in cherishing life had reflected a kind of balanced development which was appropriate for their stage of development.

In analyzing the ways of ‘cherishing life’ among the research participants, the factors of socialization in family and school have to be taken into consideration. The observations of a few participating students were remarked as below for further reflection of the current situations of our children’s family life and school life experiences which might and could affect their capacity and aspiration to cherish life.

#### ***4.4.2.1 Impact of Family on Cherishing Life***

It was noted ten participating students (30%) had drawn an image or concept of their family in their original pictures or had added in their final pictures. As family is the primary agent for a person’s socialization and children usually have strong attachment to their family, the fact

that less than half of the participating students had included family in their pictures about Life was worthy of our further exploration. W, a Primary 3 boy, had excluded himself from the image of his family in the original picture. He kept silent about why he was absent though his mother had answered on behalf of him that he might have forgotten to draw himself. During the interview with W, he only named three kinds of emotions as happy, sad and excited when he shared about the four circles representing different kinds of feelings in life drawn by him. The actual family circumstances of W were not known to the researcher. However, the responses of W had reminded the researcher to be more attentive to the influences of socialization on children.

It is stated that family atmosphere is undoubtedly a key impact on children's development and parents can strongly affect their children's belief about their competence (Yamamoto & Holloway, 2010). According to Erikson's Theory of Psychosocial Development (Admans, 2008), primary students at the age of 6-12 are in the fourth stage of psychosocial development named as 'Industry versus Inferiority'. Children who have not obtained adequate praise or recognition from their significant others may tend to develop a sense of inferiority and may retreat to the protective zone of the family (Papalia & Martorell, 2021). Children under overprotection from their parents may be hindered from exploring their environment independently which may also negatively impact their holistic development (Soenens et al., 2009; Ungar, 2009).

Regarding the aspect of children's emotional development, it is suggested that children who have difficulty in identifying and expressing emotions may face greater challenges and require special assistance to deal with their social and behavioral issues. Children who are more sensitive to emotions and feelings may become more empathic and understanding in

interpersonal relationships. They consequently tend to be comparatively more constructive and act properly in different social circumstances (Papalia & Martorell, 2021).

#### ***4.4.2.2 Impact of School life on Cherishing Life***

Comparing with their early childhood before schooling, school aged children (6-12 years old) generally spend less time with their parents at home but more time at school to socialize with their schoolmates and teachers. This is a foundational stage for a person's holistic development including one's physical strength, social skills, emotional management, ethics and morality as well as intellectual capacity. Children learn to communicate, share and cooperate with others through interacting with their peers. Friendship becomes more important for enhancing their cognitive maturity and emotional growth. Primary students learn to respect rules and authority as well as to attain goals from the school personnels. They further develop social competence, emotional regulation, moral judgement and conflict resolution by adjusting their personal needs and desires in order to get along well with others. They gradually learn to become more autonomous in developing their senses of self-concept, self-esteem, self-efficacy, disciplines and gender identity.

Nevertheless, it was remarkably noted that school life seemed to be totally absent from the drawing or the sharing of the participating students. It was speculated that the major reason was due to the suspension of school during the pandemic of COVID-19. As the context of development for primary students is composed of family and school, it was highly probable that the deprivation of the school environment had limited the children's experiences. Hence, the participating students had not included schoolmates, teachers or school activities in illustrating their perceptions of life or their proposed ways to cherish life.

Regarding friendship, it is advocated that boys tend to have more friends for team sports whereas girls prefer to have close friends with intimacy and affection (Papalia & Martorell, 2021). Nevertheless, the findings of this study had shown a different phenomenon. It was observed that only one Primary 4 boy had drawn some friends playing team sports together (L) whereas another girl in Primary 3 had included the concepts of ‘friends’ in her original picture (A) and a Primary 6 boy had added a male friend as his companion in his final picture (H). Besides, a boy in Primary 3 had drawn himself with his dog (X) as companion while another girl in Primary 5 had drawn two girls with their own pets on two different mountain tops (U) which seemed to have indicated a social distance between the girls. These pictures might reflect the feeling of aloneness among the school children due to the prolonged suspension of normal school activities during the pandemic of COVID-19. Thus, the participating students were not so eager to involve their teachers or schoolmates in cherishing life.

In conclusion of conducting the qualitative part of the study, it is encouraging to find that the research participants were capable to express the wide scope of their perceptions of life and could propose a broad spectrum of ways to cherish life. It is noted that the psychosocial development of children through the socialization process at home and in school will affect their perspectives on cherishing life.

## **V. Quantitative Part of the Study**

This chapter describes the quantitative part of the study in four sections, including the methodology, process of implementation, research findings as well as analysis and discussion. The first section outlines the research method applied in the quantitative part of this study. The second section is an overview of the process of implementation including data collection and data analysis. The third section is a detailed illustration of all the findings including the demographic information of the research participants and the statistical data collected from the questionnaires. The fourth section is a summary of analysis and discussion of the collected data.

### **5.1 Methodology of the Quantitative Part of the Study**

The quantitative part of the study was conducted by using a semi-structured and self-administered questionnaire to collect data from primary students for understanding their perceptions of life and their proposed ways of cherishing life. The questionnaire was designed by the researcher. It contains two open-ended and four close-ended questions. The full set of research documents comprising the invitation letter (Appendix 3), the questionnaire (Appendix 4) and the parental consent form with information sheet (Appendix 5) were prepared in both Chinese and English versions.

The research participants were recruited through the schools which accepted to join the study. The participating schools were requested to assist in the distribution and collection of the questionnaires to their students. Submission of the completed questionnaire was on a voluntary basis. Students who had submitted the completed questionnaires within the timeframe of data collection would be counted as the research participants. All the collected data would be processed by using the SPSS28 for batched statistical analysis.

## 5.2 Process of Implementation

Both the qualitative and quantitative parts of the study were simultaneously undertaken with the approval of the supervisors after the pilot study had been successfully conducted as illustrated in the previous chapter.

A full set of document, including the electronic copy of the invitation letter (Appendix 3), the sample of the self-administered questionnaire (Appendix 4), the parental consent form with the information sheet (Appendix 5) had been sent to the principals of all the local primary schools via email in early January 2022 to request their support to facilitate their students for participation in the quantitative part of the study.

By the end of the recruiting period, four local primary schools, consisting of three government-subsidized schools and one private school located in different districts, had expressed their interest and concern to participate in the quantitative part of the study. They are all religiously affiliated, including Catholicism, Protestantism and Buddhism. Nevertheless, their students can also be diversified in religious and cultural backgrounds since each government-subsidized school is required to reserve at least 50% of its places for the computer-programmed Central Allocation in the Primary One Admission System of the government (Education Bureau, 2023).

Upon receiving their acceptance reply, the researcher had actively contacted the designated panels of the participating schools to explain the details of the study and to discuss about all the logistic arrangement with timeline. A total number of 885 sets of the hard copies of all the research materials were then delivered to the participating schools for their dissemination. Assistance from the school personnels was indispensable and greatly appreciated for communication with parents and students as well as the distribution and collection of research materials.

Since the participation of the students was on a voluntary basis, it was impossible to estimate the actual number of completed questionnaires to be received in total from the four participating schools. Applying the sample size calculator of the Creative Research Systems (2012), the number '400' had been set as the minimum sample size for the study. All the completed and valid questionnaires collected within the timeline would be accepted for data analysis. Owing to the suspension of school in Hong Kong from March 2022 for the pandemic of COVID-19, the time slot for data collection of the quantitative part of this study had been extended from the end of June to the end of August 2022.

By the end of August 2022, a total number of 597 completed questionnaires, including 15 completed questionnaires in English version, had been received from these schools with the kind assistance of their staff. After screening, it was found that 21 questionnaires (3.5%) could not be considered as valid for some missing demographic information or incompleteness. All the collected data from the 576 valid questionnaires had been input into the database of SPSS28 for compiling and further analysis.

### **5.3 Findings of the Quantitative Part of the Study**

Data collected from the 576 valid questionnaires are classified into Demographical Information and Statistical Findings.

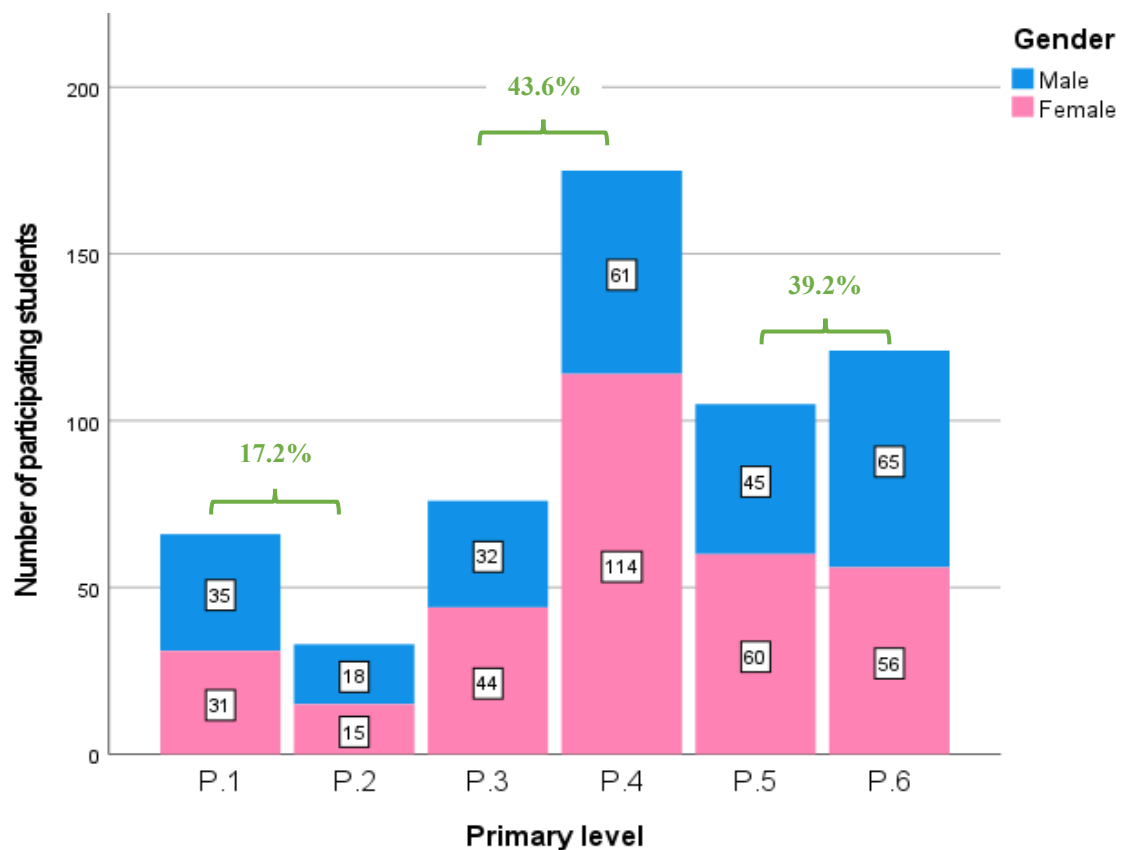
#### **5.3.1 *Demographical Information of Participants***

As shown in the above histogram (Figure 10), 44.4% of the participating students were male while 55.6% were female. Among all the participating students, 17.2% of them studied in lower levels (Primary 1-2), 43.6% studied in middle levels (Primary 3-4) while 39.2% of them studied in upper levels (Primary 5-6). It was observed that the participating rate among the students in the lower levels was comparatively lower than other levels while the highest



participation rate was found in Primary 4 of the middle levels. It was also remarkably noted that a higher participating rate of female was among Primary 4 students because one of the participating schools was a local aided primary school for girls.

**Figure 10.** *Demographic information of participating students in the quantitative part of this study by academic level and gender*



### 5.3.2 Statistical Data of Participants

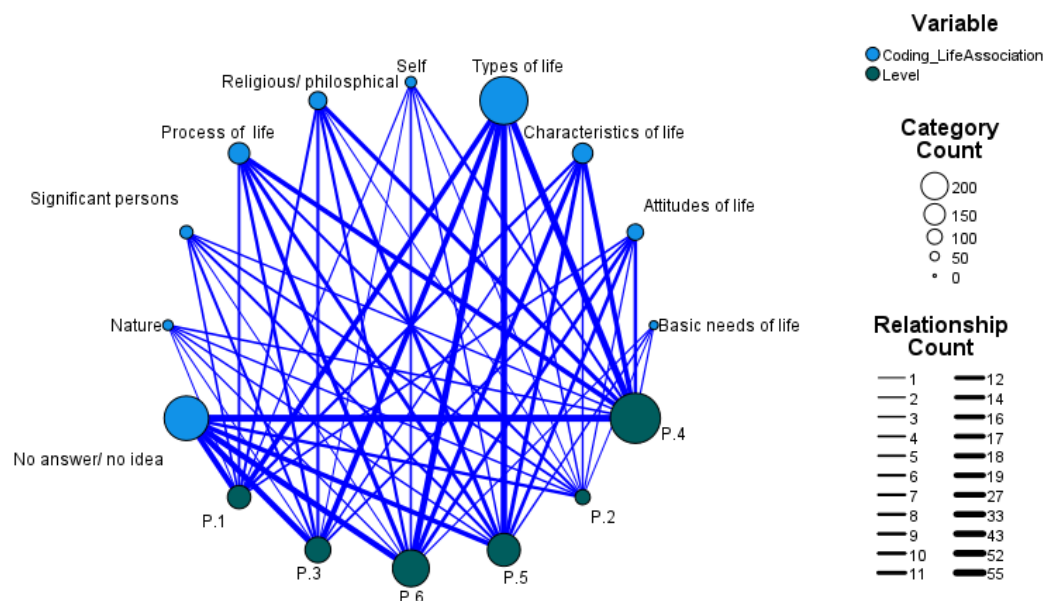
The statistical data collected is presented in the following sections in corresponding with the six parts of questions on the questionnaire.

#### 5.3.2.1 Part 1: Immediate Association with the Word 'Life'

The participating students had answered the open-ended question of Part 1 with many ideas. Their associations with the word 'Life' had been sorted out into ten different categories,

including ‘No answer or no idea’, ‘Attitudes of life’, ‘Basic needs of life’, ‘Life characteristics’, ‘Nature’, ‘Process of life’, ‘Religious or philosophical concepts’, ‘Significant others’, ‘Self’ and ‘Types of life’.

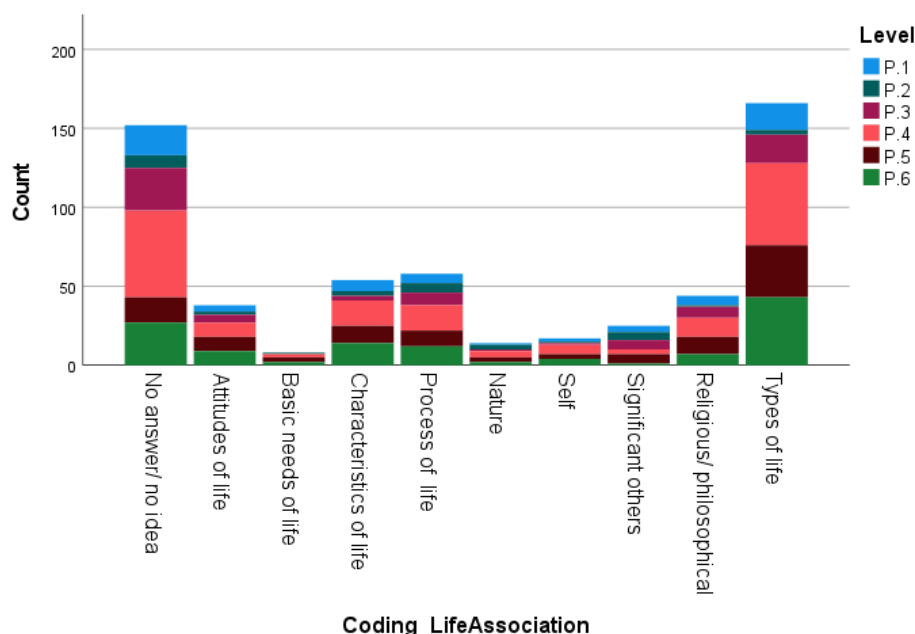
**Figure 11.** Relationship map illustrating the distribution of different categories of associations with life among different academic levels in the quantitative part of the study



		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No answer/ no idea	152	26.4	26.4	26.4
	Attitudes of life	38	6.6	6.6	33.0
	Basic needs of life	8	1.4	1.4	34.4
	Characteristics of life	54	9.4	9.4	43.8
	Process of life	58	10.1	10.1	53.8
	Nature	14	2.4	2.4	56.3
	Self	17	3.0	3.0	59.2
	Significant others	25	4.3	4.3	63.5
	Religious/ philosophical	44	7.6	7.6	71.2
	Types of life	166	28.8	28.8	100.0
	Total	576	100.0	100.0	

**Table 5.** Distribution of different categories of associations with life in the quantitative part of the study

**Figure 12.** Bar-chart illustrating the distribution of different categories of associations with life among different academic levels in the quantitative part of the study



The relationship map (Figure 11) and the bar chart (Figure 12) show the distribution of the 10 categories of association with life among different primary levels while Table 5 summarizes the distribution of the 10 categories among all the participating students regardless of their academic levels.

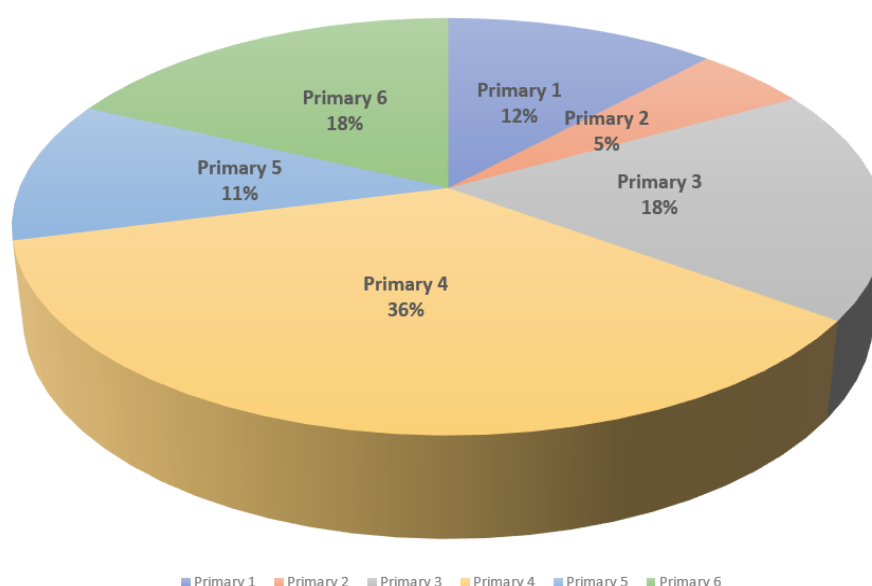
Referring to Table 5, it was noted that a total number of 152 students (26.4%) had not answered this question or marked ‘No idea’. 166 students (28.8%) had listed out different types of life like ‘plants’, ‘animals’, ‘human beings’, etc. which were categorized as ‘Types of life’. 58 students (10.1%) had listed out different life situations including ‘birth’, ‘growth’, ‘aging’, ‘sickness’ and ‘death’ which were grouped as ‘Process of life’ whereas 54 students (9.4%) had listed out different ‘Life characteristics’ including ‘breathe’, ‘heartbeat’, ‘movable’ etc. There were 44 students (7.6%) who had associated the word ‘Life’ with some ‘Religious or philosophical concepts’ like the ‘origin’ or ‘meaning’ of life while 38 students (6.6%) had associated with ‘Attitudes of life’ like ‘respect all living things’, ‘afraid of death’, ‘cherishing

life’ etc. while 25 students (4.3%) had associated with their ‘Significant others’ such as parents and family members. 17 students (3%) had associated with their ‘Self’, 14 students (2.4%) had associated with the ‘Nature’ like the ‘sky’ and ‘ocean’ whereas the other 8 students (1.4%) had associated with the ‘Basic needs of life’ including ‘nutrients’, ‘water’ and ‘air’.

#### 5.3.2.1.1 No answer or No idea

It was noted that 26.4% of all the participating students (152) had not indicated their immediate association with the word ‘Life’. The composition of this group of non-respondents in relation to their academic levels was shown in Figure 13.

**Figure 13.** *Distribution of ‘No answer/no idea’ in association with life by academic levels in the quantitative part of the study*



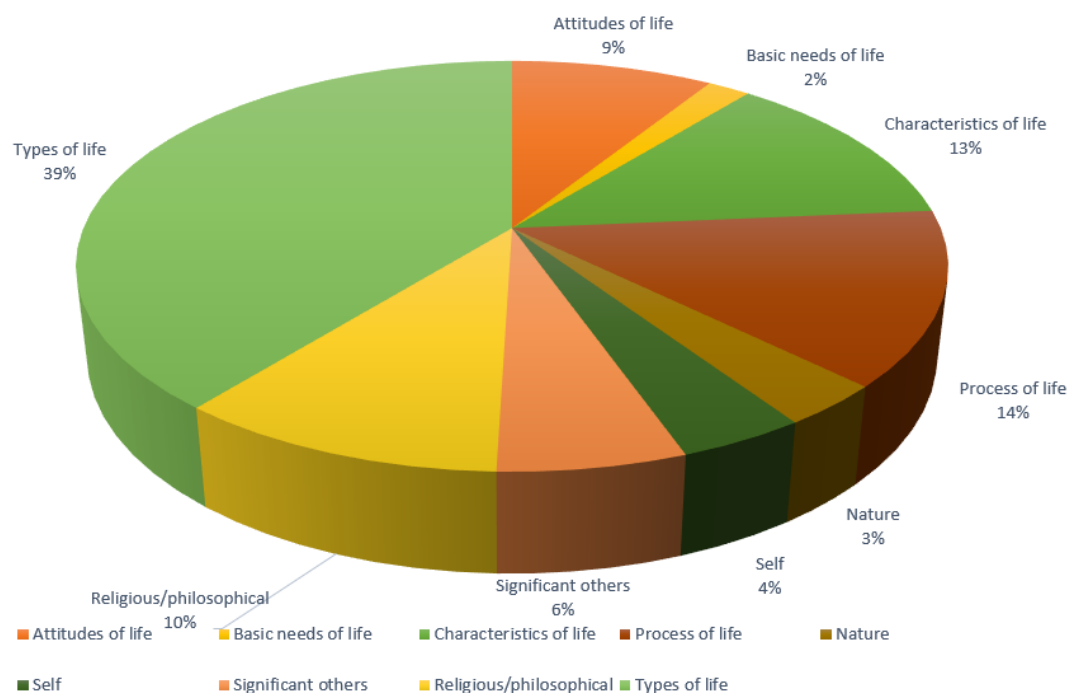
Among the 152 students who had not answered this question or marked ‘No idea’, 36% were in Primary 4 while 18% were distributed in Primary 3 or Primary 6. 12% and 11% of them were in Primary 1 and Primary 5 respectively whereas 5% were in Primary 2 as shown in the following pie-chart (Figure 13). It was noted that the percentages among the lower levels (Primary 1-2), the middle levels (Primary 3-4) and the upper levels (Primary 5-6) were 17%,

54% and 29% respectively. These statistics had reflected that the students' readiness to share their idea about 'Life' was not directly related to their academic levels. Children at a younger age are also able to share their ideas about a profound topic of 'Life'.

#### 5.3.2.1.2. *Nine Categories of Association with the Word 'Life'*

Apart from the 152 students, the responses of the other 424 participating students had been enumerated into ten categories to associate with life. Among these 424 answers, 39% of the students associated the word 'Life' with 'Types of life'. 14% and 13% of them respectively associated with 'Process of life' and 'Life characteristics'. 10% of them associated with 'Religious or philosophical concepts' like origin or meaning of life while the others associated with 'Attitudes of life' (9%), 'Basic needs of life' (2%), 'Nature' (3%), 'Self' (4%) and 'Significant others' (6%). The distribution of percentages was demonstrated in the following pie-chart (Figure 14).

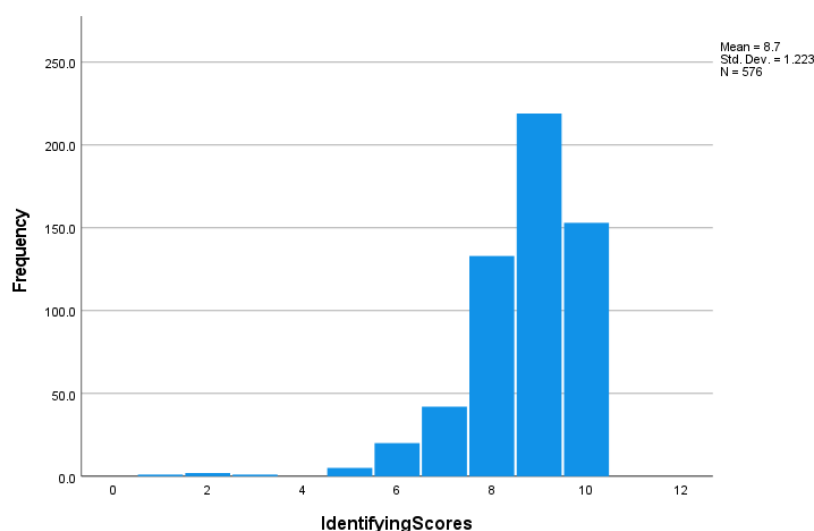
**Figure 14.** *Percentage of different categories of associations with life among primary students in the quantitative part of the study*



### 5.3.2.2 Part 2: Identifying Living Things

All the participating students could recognize at least one living thing from the ten listed items on the questionnaire while some of them could differentiate all these items correctly between living things and non-living things and got a full mark of 10. As shown in the above bar-chart (Figure 15), most participants could successfully differentiate nine out of ten listed items between living things and non-living things while the mean score was 8.7 with the standard deviation of 1.22.

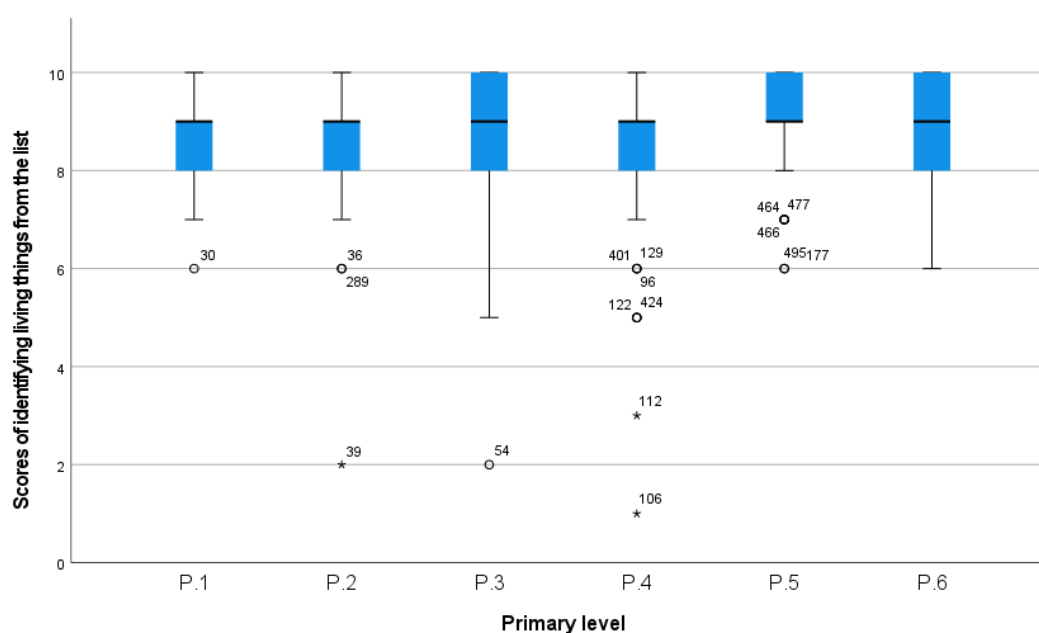
**Figure 15.** *Distribution of the scores in identifying living things from the listed items in the quantitative part of the study*



**Figure 16.** *Median in distribution of scores in identifying living things from the list in the quantitative part of the study*

It was found that most participating students from all different primary levels could correctly differentiate living things from non-living things among the ten listed items as shown in the above boxplot chart (Figure 16). The median score of identifying living things in all primary levels was 9 as the middle value indicating that most children from different primary levels could successfully differentiate between living things and non-living things from the listed items. It was noted that the scores among Primary 6 students were comparatively higher since

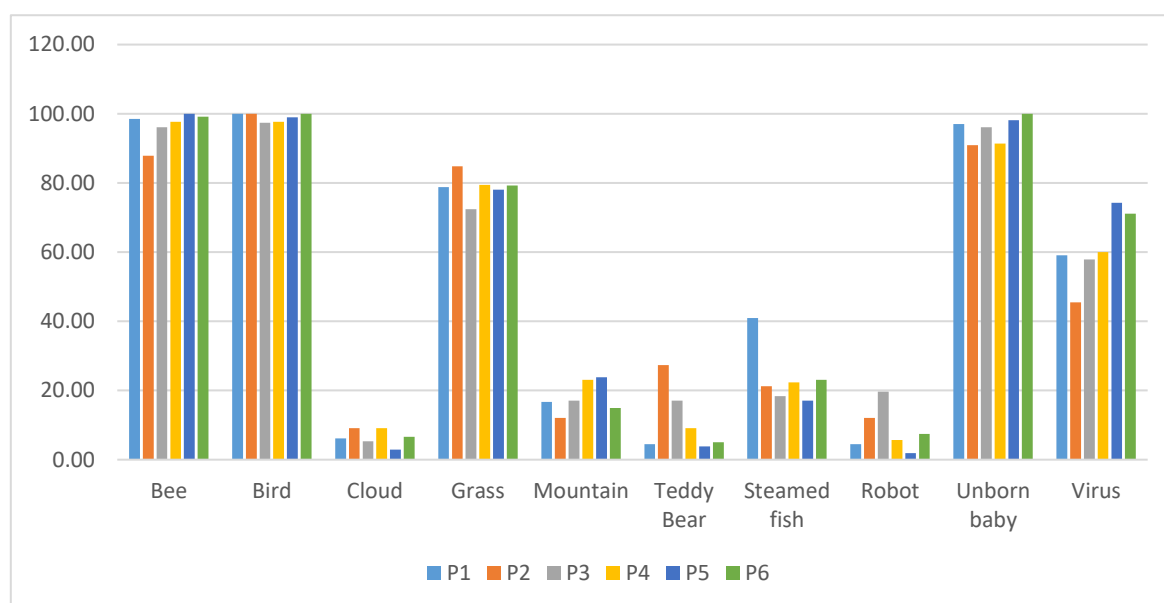
its interquartile range spanning from the scores of 8 to 10 with the whisker extending from the box to the score of 6 and there was no outlier for any extreme value or potential error. It was indicated that all of them could identify 6 items from the list as living things or non-living things while over 50% of them could identify at least 8 listed items correctly. The interquartile range of Primary 3 also spanned within the same range from the scores of 8 to 10 but with a longer whisker extending to the score of 5 with an outlier and thus could only rank at the second top among all primary levels. This meant that Primary 6 students and Primary 3 students had performed better in differentiating between living things from non-living things based on this question. However, there was not much difference in terms of the ability of differentiation among the participating students from the middle levels or upper levels.



Item/Primary level	P1	%	P2	%	P3	%	P4	%	P5	%	P6	%	P1-P6	%
Bee	65	98.5%	29	87.9%	73	96.1%	171	97.7%	105	100.0%	120	99.2%	563	97.7%
Bird	66	100.0%	33	100.0%	74	97.4%	171	97.7%	104	99.0%	121	100.0%	569	98.8%
Cloud	4	6.1%	3	9.1%	4	5.3%	16	9.1%	3	2.9%	8	6.6%	38	6.6%
Grass	52	78.8%	28	84.8%	55	72.4%	139	79.4%	82	78.1%	96	79.3%	452	78.5%
Mountain	11	16.7%	4	12.1%	13	17.1%	41	23.4%	25	23.8%	18	14.9%	112	19.4%
Teddy Bear	3	4.5%	9	27.3%	13	17.1%	16	9.1%	4	3.8%	6	5.0%	51	8.9%
Steamed fish	27	40.9%	7	21.2%	14	18.4%	39	22.3%	18	17.1%	28	23.1%	133	23.1%
Robot	3	4.5%	4	12.1%	15	19.7%	10	5.7%	2	1.9%	9	7.4%	43	7.5%
Unborn baby	64	97.0%	30	90.9%	73	96.1%	160	91.4%	103	98.1%	121	100.0%	551	95.7%
Virus	39	59.1%	15	45.5%	44	57.9%	105	60.0%	78	74.3%	86	71.1%	367	63.7%

**Table 6.** Number and percentage of students identifying each listed item as a living thing in the quantitative part of the study

**Figure 17.** *Percentage of answering ‘Yes’ for each listed item by different academic levels in the quantitative part of the study*



As shown in Table 6 and Figure 17, it was reported that over 95% of the students could identify the ‘bee’ (97.7%), ‘bird’ (98.8%) and ‘unborn babies’ (95.7%) as living things. Nevertheless, only 78.5% and 63.7% of the students could classify ‘grass’ and ‘virus’ respectively as living things. Some participating students had also selected the ‘steamed fish’ (23.1%), ‘mountain’ (19.4%), ‘teddy bear’ (8.9%), ‘robot’ (7.5%) and ‘cloud’ (6.6%) respectively as living things.

It should be highlighted that 27.3% of Primary 2 students had chosen the ‘Teddy Bear’ as a living thing. This shows that students in lower primary levels might have a higher tendency to develop stronger emotional attachment by associating thoughts, emotions and attentions to their inanimate favorite toys to care and love in the cognitive process of anthropomorphism (Neave et al., 2015). They treat them as their sources of companionship and support.

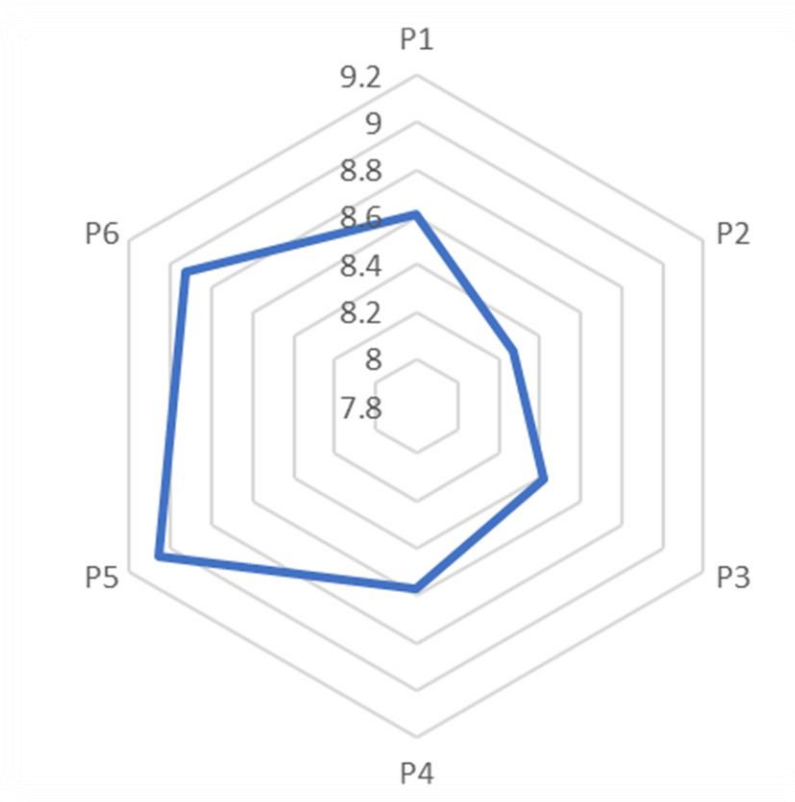
Nearly a quarter of students in Primary 4 (23.4%) and Primary 5 (23.8%) had chosen ‘mountain’ as a living thing. It was indicated that students in higher primary levels might tend to connect a mountain with the natural world and depicted it as a living thing for their exposure to the narratives of the cultural beliefs which perceive mountains as powerful and alive for its



majestic features or the religious concepts of Polytheism which believe there are spirits among mountains (Janowski, 2020).

Referring to the radar chart (Figure 18) and Table 7, it was observed that the overall mean score of identifying living things was basically much higher in higher level, except those in Primary 1 and Primary 6. Primary 2 students had got the lowest mean score (8.27) while Primary 5 students had got the highest (9.06).

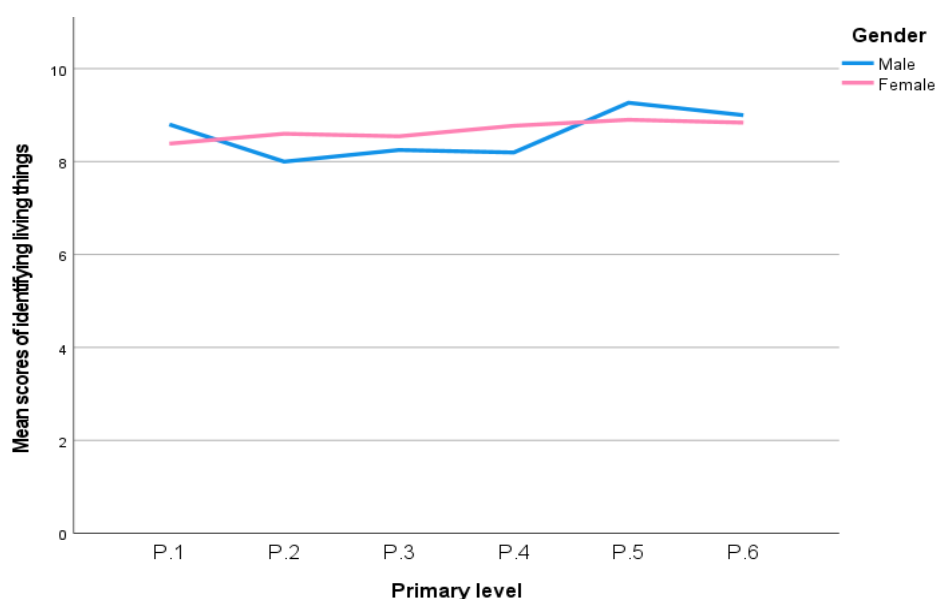
**Figure 18.** *Distribution of mean scores in identifying living things by different academic levels in the quantitative part of the study*



Level	Gender	Mean	Level	Gender	Mean
P.1	Male	8.80	P.4	Male	8.20
	Female	8.39		Female	8.77
	Total	8.61		Total	8.57
P.2	Male	8.00	P.5	Male	9.27
	Female	8.60		Female	8.90
	Total	8.27		Total	9.06
P.3	Male	8.25	P.6	Male	9.00
	Female	8.55		Female	8.84
	Total	8.42		Total	8.93
Total		Male			8.66
		Female			8.73
		Total			8.70

**Table 7.** *Mean scores of identifying living things among different academic levels by gender in the quantitative part of the study*

**Figure 19.** *Distribution of mean scores in identifying living things by academic level and gender in the quantitative part of the study*



In reviewing the changes of mean scores at different primary levels, it was found that boys had shown more irregular changes with either an increase or a decrease in the mean scores value while girls had shown a more gradual increase in the mean scores value. Besides, it was noted that girls could generally identify more living things from the listed items with a higher overall mean score of 8.73 while comparing with boys who got the overall mean score of 8.66.

Nevertheless, boys in Primary 1, 5 and 6 could get higher mean scores than girls as shown in the following line-chart (Figure 19).

Summing up from the above, it was noted that the median (9) of the score regardless of gender in identifying living things was equal to the mode (9) but was greater than the mean (8.7). In other words, the median was equal to the mode while both of them were greater than the mean. Thus, it implied that it was a left-skewed distribution as the data was skewed to the left (Figure 18), except the mean score of the boys in Primary 5 is 9.27, which was higher than the median and the mode.

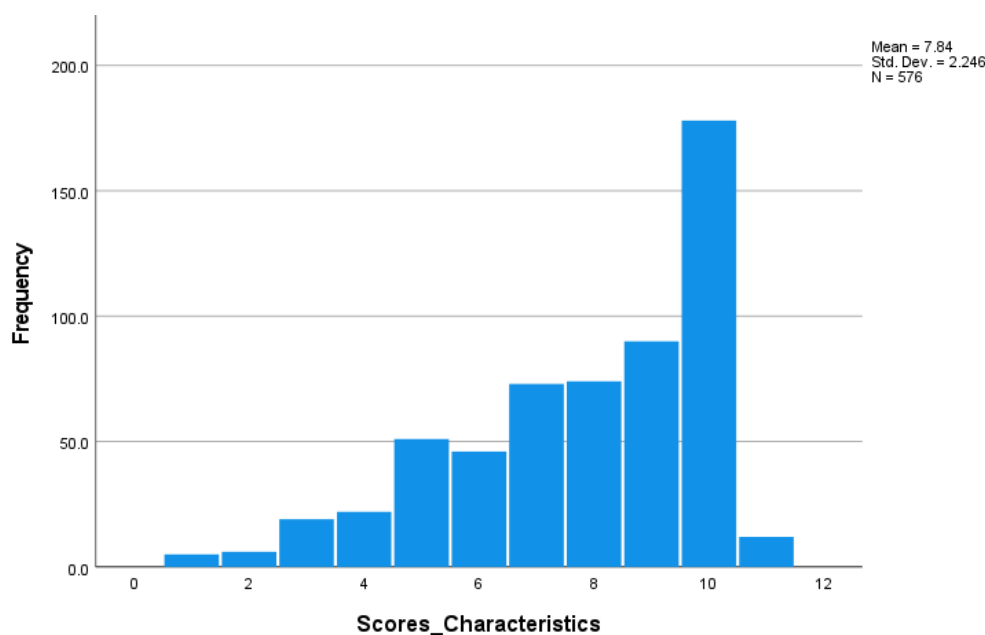
### **5.3.2.3 Part 3: Identifying Life Characteristics**

The participating students were invited to choose the life characteristics from a list of ten items in part 3 of the questionnaire. They would score one mark for each correct choice. Thus, they would get 10 marks if they could correctly identify the ten listed life characteristics.

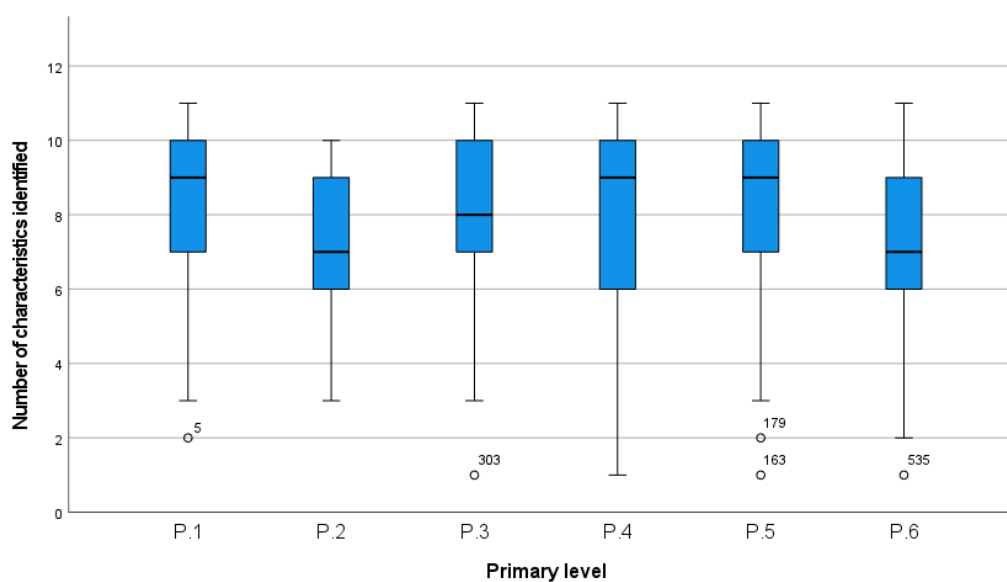
Apart from the ten listed items, the participants could fill in additional characteristics of living things by selecting the item ‘others’. Consequently, they could get an extra mark for each newly added characteristic of life. Hence, some participating students might get a score higher than the full mark of 10 by correctly identifying all the ten listed characteristics of living things and adding one or more appropriate characteristics by themselves.

All the participating students could recognize at least one characteristic of life from the ten listed items while some of them could get 11 marks as their scores. As shown in the above bar-chart (Figure 20), most of the students could successfully identify five or more life characteristics out of the list while the mean score was 7.84 with the standard deviation of 2.25.

**Figure 20.** *Distribution of the scores in identifying life characteristics in the quantitative part of the study*



**Figure 21.** *Median in Distribution of scores in identifying life characteristics in the quantitative part of the study*

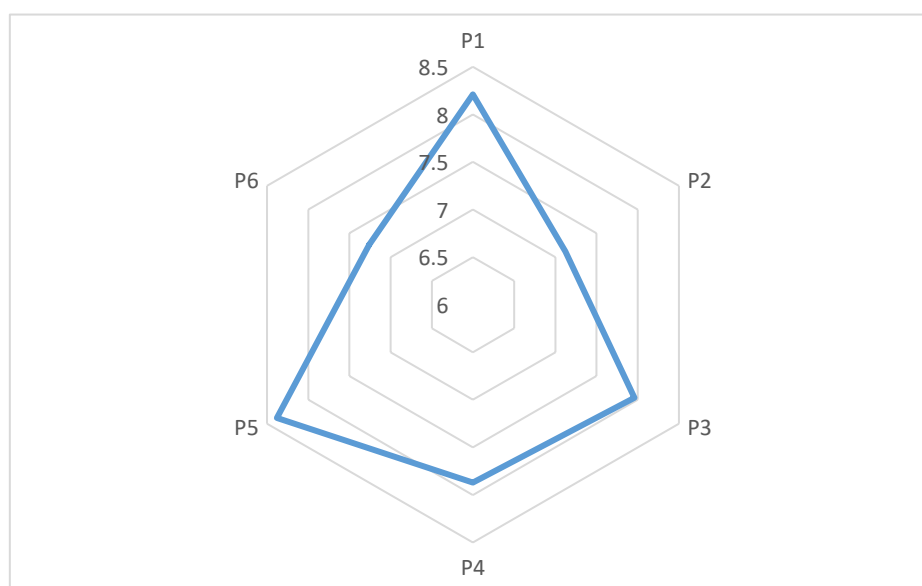


Referring to the above boxplot (Figure 21), it was noted that the median scores of identifying characteristics of living things vary at different primary levels. Comparing with the median scores of different primary levels, it was found that the median scores in both Primary 2 and

Primary 6 are 7 which were comparatively lower than the median scores of other primary levels. Nevertheless, there was a relatively uneven distribution of the median scores among the participating students in Primary 6 with the longer whiskers extending from the box to either the score of 2 or 11 and outlier at the score of 1. It was further noted that the median scores in Primary 1, 4 and 5 were the highest at 9 while the median score in Primary 3 was 8. It was also illustrated that some students in different primary levels, excluding those in Primary 2, could get higher than full mark of 10 by adding additional characteristics of living things.

Excluding those outliers spotted in the boxplot, it was illustrated that Primary 4 students had the longer interquartile range spanning from 6 to 10 with both the whiskers extending from the box to the score of 11 as well as the score of 1. A longer whisker skewed in the direction of the lower scores which indicated that more students in Primary 4 could get lower scores than the median scores of 9.

**Figure 22.** *Distribution of mean scores in identifying life characteristics by different academic levels in the quantitative part of the study*

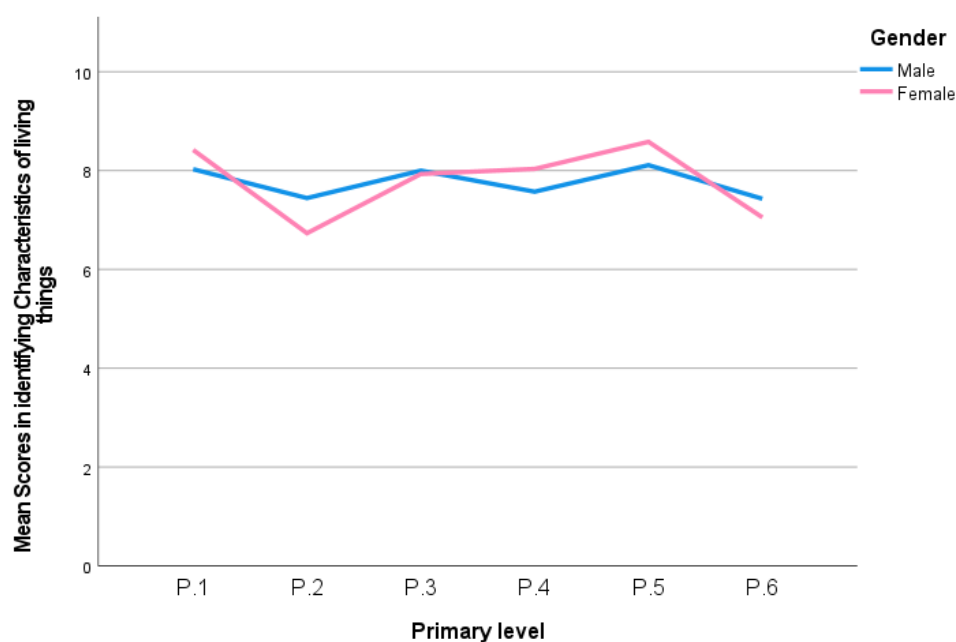


As shown in the following radar chart (Figure 22) and Table 8, it was observed that the mean scores of identifying the life characteristics was comparatively higher in Primary 5 (8.38) and Primary 1 (8.21) while students in Primary 2 (7.12) and Primary 6 (7.26) had got the lower mean scores.

Level	Gender	Mean	Level	Gender	Mean
P.1	Male	8.03	P.4	Male	7.57
	Female	8.42		Female	8.04
	Total	8.21		Total	7.87
P.2	Male	7.44	P.5	Male	8.11
	Female	6.73		Female	8.58
	Total	7.12		Total	8.38
P.3	Male	8.00	P.6	Male	7.43
	Female	7.93		Female	7.05
	Total	7.96		Total	7.26
Total	Male	7.74			
	Female	7.93			
	Total	7.84			

**Table 8.** *Mean scores of identifying life characteristics among different academic levels by gender in the quantitative part of the study*

**Figure 23.** *Distribution of mean scores in identifying life characteristics by academic level and gender in the quantitative part of the study*



Referring to Table 8, it was reported that girls could generally recognize more characteristics of living things with a higher mean score of 7.93, if comparing with the mean score of 7.74 for boys. Nevertheless, boys in Primary 2, 3 and 6 could get higher mean scores than girls whereas girls in Primary 1, 4 and 5 could get higher mean scores. The line chart (Figure 23) showed that boys had a zigzag trend of distribution of mean scores from Primary 1 to Primary 6 while girls had shown an irregular trend of distribution of mean scores at different primary levels.

Summing up from the above findings, it was noted that both the median and mean scores of identifying life characteristics varied at different primary levels but the difference was not extremely big. This meant that the ability to identify life characteristics was quite even among the participating students at different primary levels.

The distribution of the participating students in identifying the ten listed life characteristics was illustrated in Table 9 and Figure 24. It was reported that the top three life characteristics identified by all the participating students were ‘breathing’ (95%), ‘growth’ (92.9%) and ‘require nutrients and water’ (91%) while the least chosen three characteristics were ‘communication’ (62.3%), ‘movement’ (62.5%) and ‘thinking’ (67.4%). The other four characteristics which were selected in between the scale of popularity are ‘feelings’ (85.1%), ‘senses’ (79.2%), ‘death’ (73.3%) and ‘reproduction’ (70.7%). The findings showed that the primary students regardless of their academic levels could easily perceive the physiological aspects of life. Since ‘communication’ and ‘movement’ can be understood in many aspects while ‘thinking’ is expressed in a more subtle way, so some participating students might not immediately perceive them as life characteristics. It was quite remarkable to note that a high proportion of participating students at a young age could identify ‘feelings’, ‘senses’, ‘death’

and ‘reproduction’ as life characteristics.

An analysis of the responses of the participating students at different academic levels had revealed that the ability to identify life characteristics was not directly related to age or level of study. A higher percentage of students in the lower levels (Primary 1-2) could identify seven and four life characteristics while students in the middle levels (Primary 3-4) could identify six to seven life characteristics with a higher percentage. Students in the upper levels (Primary 5-6) had shown an extreme phenomenon in comparing with the percentages among all participating students.

In reviewing the type of life characteristics identified by the participating students in different academic levels, it was noted that students from Primary 1 to Primary 3 had identified ‘Death’ as life characteristics with a lower percentage respectively at 57.6%, 63.6% and 63.2% in comparing with the average percentage of identification at 73.3%. The percentage of identification among Primary 1 students was the lowest at 57.6% while the percentage of Primary 5 students was the highest at 81%.

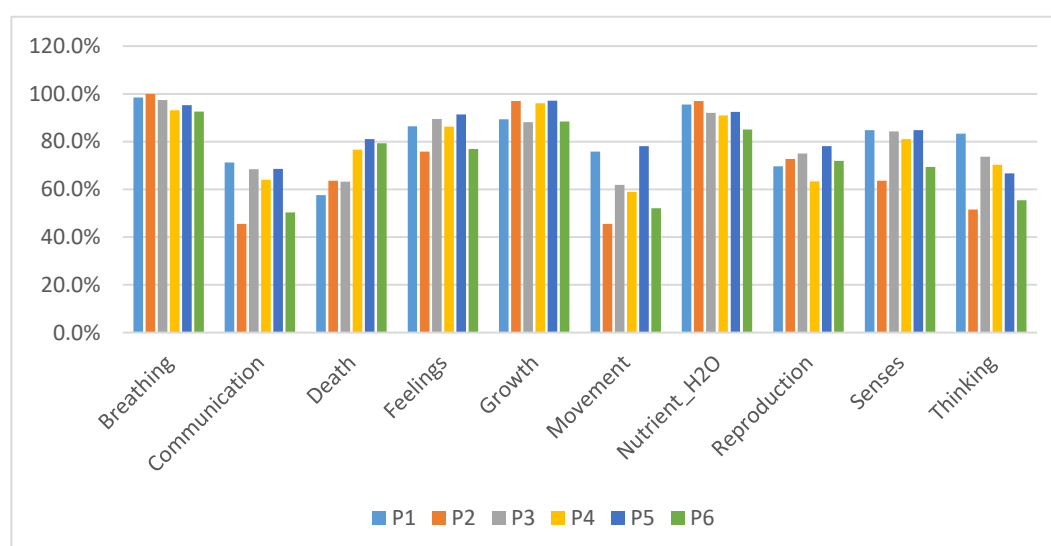
In comparing with the average percentage of identification of ‘communication’ (62.3%) and ‘movement’ (62.5%) in all academic levels, it was highlighted that Primary 2 students had respectively got the lowest percentages (45.5%) while Primary 6 students got the second lowest percentages (50.4% and 52.1%). On the other hand, it was illustrated that a lower percentage of Primary 2 students (51.5%) and Primary 6 students (55.4%) had chosen ‘thinking’ as one of life characteristics in comparing with the average percentage of identification at 67.4% among all the participating students in different academic levels.



Item/Primary level	P1	%	P2	%	P3	%	P4	%	P5	%	P6	%	P1-P6	%
Breathing	65	98.5%	33	100.0%	74	97.4%	163	93.1%	100	95.2%	112	92.6%	547	95.0%
Communication	47	71.2%	15	45.5%	52	68.4%	112	64.0%	72	68.6%	61	50.4%	359	62.3%
Death	38	57.6%	21	63.6%	48	63.2%	134	76.6%	85	81.0%	96	79.3%	422	73.3%
Feelings	57	86.4%	25	75.8%	68	89.5%	151	86.3%	96	91.4%	93	76.9%	490	85.1%
Growth	59	89.4%	32	97.0%	67	88.2%	168	96.0%	102	97.1%	107	88.4%	535	92.9%
Movement	50	75.8%	15	45.5%	47	61.8%	103	58.9%	82	78.1%	63	52.1%	360	62.5%
Nutrient_H2O	63	95.5%	32	97.0%	70	92.1%	159	90.9%	97	92.4%	103	85.1%	524	91.0%
Reproduction	46	69.7%	24	72.7%	57	75.0%	111	63.4%	82	78.1%	87	71.9%	407	70.7%
Senses	56	84.8%	21	63.6%	64	84.2%	142	81.1%	89	84.8%	84	69.4%	456	79.2%
Thinking	55	83.3%	17	51.5%	56	73.7%	123	70.3%	70	66.7%	67	55.4%	388	67.4%

**Table 9.** *Number and percentage of students identifying each life characteristic in the quantitative part of the study*

**Figure 24.** *Percentage of answering 'Yes' for each listed life characteristic by different academic levels in the quantitative part of the study*



Apart from the aforementioned listed life characteristics, the participating students could add more into the list. There were 21 new items of life characteristics proposed by them. The frequency of suggesting additional characteristics was 28 with suggestions mostly proposed by female students (71.4%) or Primary 4 students (39.3%). It was noted that none of the Primary 2 students had made any additional items as shown in Table 10.

Item/Level & Gender	P1		P2		P3		P4		P5		P6		P1-P6	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Affections								1		3			1	0
Consciousness											1		1	0
DNA												1	0	1
Ego												1	0	1
Environmental Adaption								1					0	1
Excretion										1			0	1
Facial Expression											1		1	0
Getting Sick								1					0	1
Happy					1								1	0
Having Status		1											0	1
Heartbeat		1											0	1
Living											1		1	0
Love						1							0	1
Playing								2					0	2
Self-protection								1				1	2	0
Sleeping		1											0	1
Spiritual connections										1			1	0
Studying								2					0	2
Survival								1					0	1
Useful	1												1	0
Wisdom								2					0	2
Total	1	3	0	0	1	1	1	10	1	4	4	2	8	20
	4		0		2		11		5		6		28	

**Table 10.** *Life characteristics proposed by the participating students in the quantitative part of the study*

Referring to Table 10, there were four students including one girl in Primary 4 and three girls in Primary 5 who had added ‘affections’ while one girl of Primary 1 had suggested ‘sleeping’ as the characteristic of life. Two girls in Primary 4 had recommended ‘wisdom’ as a characteristic of life. Besides, two girls of Primary 4 had proposed ‘playing’ whereas another two girls of the same academic level had suggested ‘studying’. One boy in Primary 4 and another boy of Primary 6 believed that living things were capable of ‘self-protection’. On the other hand, one girl of Primary 4 had suggested ‘environmental adaptation’ while another girl of Primary 4 had mentioned ‘getting sick’. One boy in Primary 3 had suggested ‘happy’ while another girl of Primary 3 had suggested ‘love’. One girl of Primary 1 had suggested ‘heartbeat’ while another girl of Primary 1 had proposed ‘having status’. One girl of Primary 5 had proposed ‘excretion’ whereas a boy of primary 1 had mentioned ‘useful’. Three boys of Primary 6 had individually proposed ‘consciousness’, ‘facial expression’ and ‘living’ while two girls of Primary 6 had distinctly suggested ‘DNA’ and ‘ego’. Furthermore, one girl of Primary 4 had advised ‘survival’ while another boy of Primary 5 had added ‘spiritual connections’ as the characteristics of living things.

### **5.3.2.4 Part 4: Self-evaluating Levels of Satisfaction with Life**

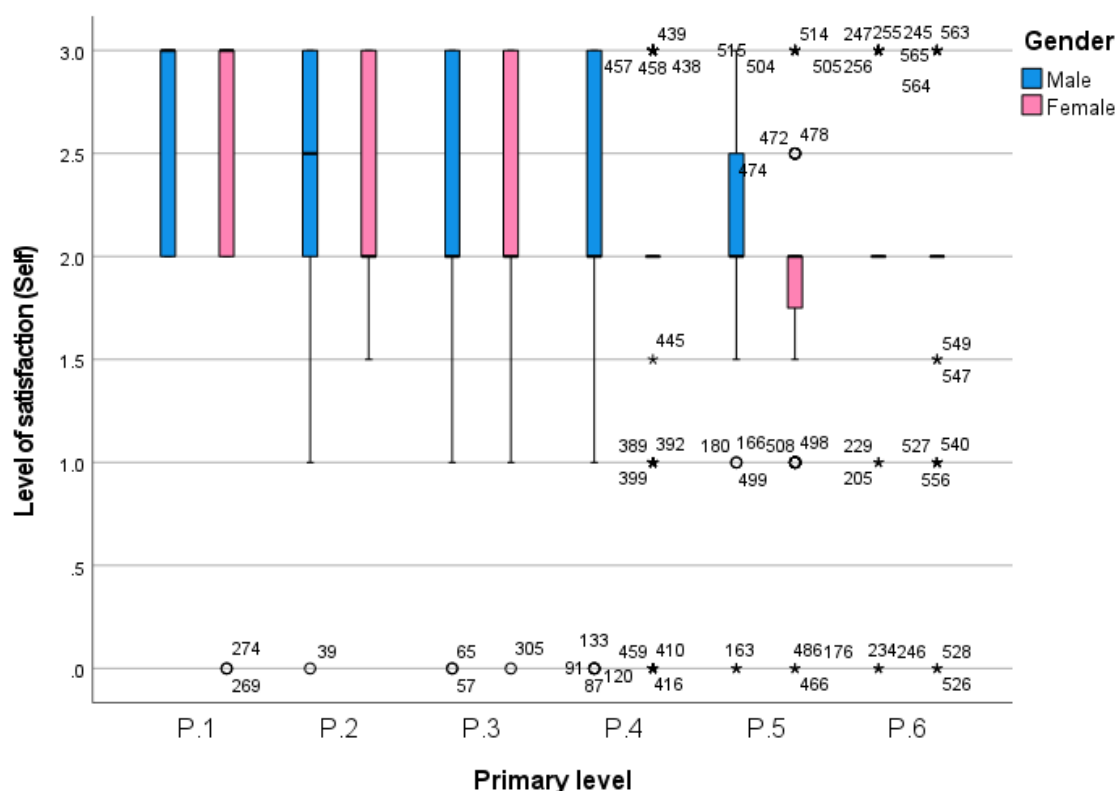
Part 4 of the questionnaire is a self-rating question requesting the participating students to rate their level of satisfaction in five areas of life. There are four distinct choices including ‘very dissatisfied’, ‘dissatisfied’, ‘satisfied’ and ‘very satisfied’ for them to rate their level of satisfaction. The five areas of life are in relation to ‘self’, ‘family life’, ‘school life’, ‘living environment’ and ‘friendships’.

Since some students from one participating school had put the tick ‘√’ across the two boxes, for example on the line between ‘satisfied’ and ‘very satisfied’. Therefore, the data types of this part had been modified from an ordinal scale to a marking scale with numerical values for compiling the answers. Thus, the values of ‘0-3’ would be assigned to different ‘levels of satisfaction’ by marking ‘0’ as ‘very dissatisfied’, ‘1’ as ‘dissatisfied’, ‘2’ as ‘satisfied’ and ‘3’ as ‘very satisfied’. There would be a numerical value for each answer of the participants. In case a student had marked on the line between ‘satisfied’ (2) and ‘very satisfied’ (3) as an example, the value of ‘2.5’ was assigned as the numerical value for the answer. All the numerical values would be processed for further analysis.

#### **5.3.2.4.1 ‘Self’:**

Referring to the following boxplots chart (Figure 25), it was noted that most students in Primary 1 of both genders had evaluated about their ‘Self’ within the range between ‘satisfied’ and ‘very satisfied’ with the median at the top level of 3.

Figure 25. *Median in Self-evaluating level of satisfaction about ‘Self’ by academic level and gender in the quantitative part of the study*



However, some students in Primary 2 had expressed dissatisfaction with their ‘Self’ and thus the median in the level of satisfaction about ‘Self’ had dropped from level 3 to level 2.5 among boys and dropped from level 3 to level 2 among girls. The median continued to drop from level 2.5 to level 2 among boys while it remained unchanged at level 2 among girls in Primary 3. Among the students in Primary 4, both the range and median among boys remained unchanged whereas girls had a tendency of drop in the level of satisfaction about their ‘self’. A similar tendency of drop had also been noted among boys and girls in Primary 5. Nevertheless, the length of the boxes representing the spread of the middle 50% of the data as well as the whiskers extend from the boxes had illustrated that boys had a higher level of satisfaction about their ‘self’ with a greater gap than girls. The level of satisfaction about ‘self’ among students of both genders in Primary 6 varied from individual to individual.

Meanwhile, it was obviously illustrated that more outliers as the extreme values in the dataset were shown from Primary 4 to Primary 6. The finding might reflect the impact of the commencing of early puberty in both boys and girls on their perceived self-image.

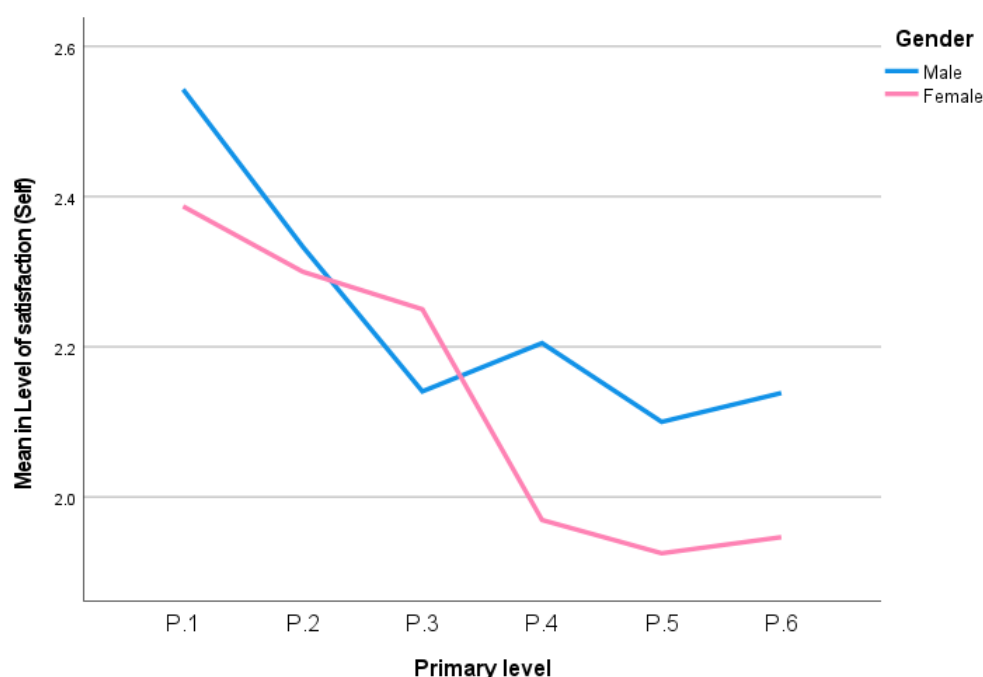
IV_Self				
Level	Gender	Mean	N	Std. Deviation
P.1	Male	2.543	35	.5054
	Female	2.387	31	.8032
	Total	2.470	66	.6615
P.2	Male	2.333	18	.8402
	Female	2.300	15	.5278
	Total	2.318	33	.7051
P.3	Male	2.141	32	.8155
	Female	2.250	44	.6515
	Total	2.204	76	.7219
P.4	Male	2.205	61	.8726
	Female	1.969	114	.7822
	Total	2.051	175	.8201
P.5	Male	2.100	45	.6958
	Female	1.925	60	.6940
	Total	2.000	105	.6968
P.6	Male	2.138	65	.6092
	Female	1.946	56	.6652
	Total	2.050	121	.6403
Total	Male	2.217	256	.7336
	Female	2.052	320	.7341
	Total	2.125	576	.7378

**Table 11.** *Mean in level of satisfaction about ‘Self’ by academic level and gender in the quantitative part of the study*

Apart from the median, a continuous drop of the mean in the level of satisfaction about ‘self’ among boys was noted from 2.54 in Primary 1 to 2.33 in Primary 2 and then to 2.14 in Primary 3. The mean among girls had also dropped continuously with a comparatively slight change from 2.39 in Primary 1 to 2.3 in Primary 2 and then to 2.25 in Primary 3 as shown in Table 11. Nevertheless, the mean among girls had shown a drastic fall from 2.25 in Primary 3 to 1.97 in Primary 4 while the mean among boys had a minor increase from 2.14 in Primary 3 to 2.21 in Primary 4. Both the means among boys and girls continued to drop respectively from 2.21 in

Primary 4 to 2.1 in Primary 5 and from 1.97 in Primary 4 to 1.93 in Primary 5. There was a minor increase from 2.1 in Primary 5 to 2.14 in Primary 6 among boys and from 1.93 in Primary 5 to 1.95 in Primary 6 among girls. All the aforementioned changes are obviously demonstrated in Figure 26.

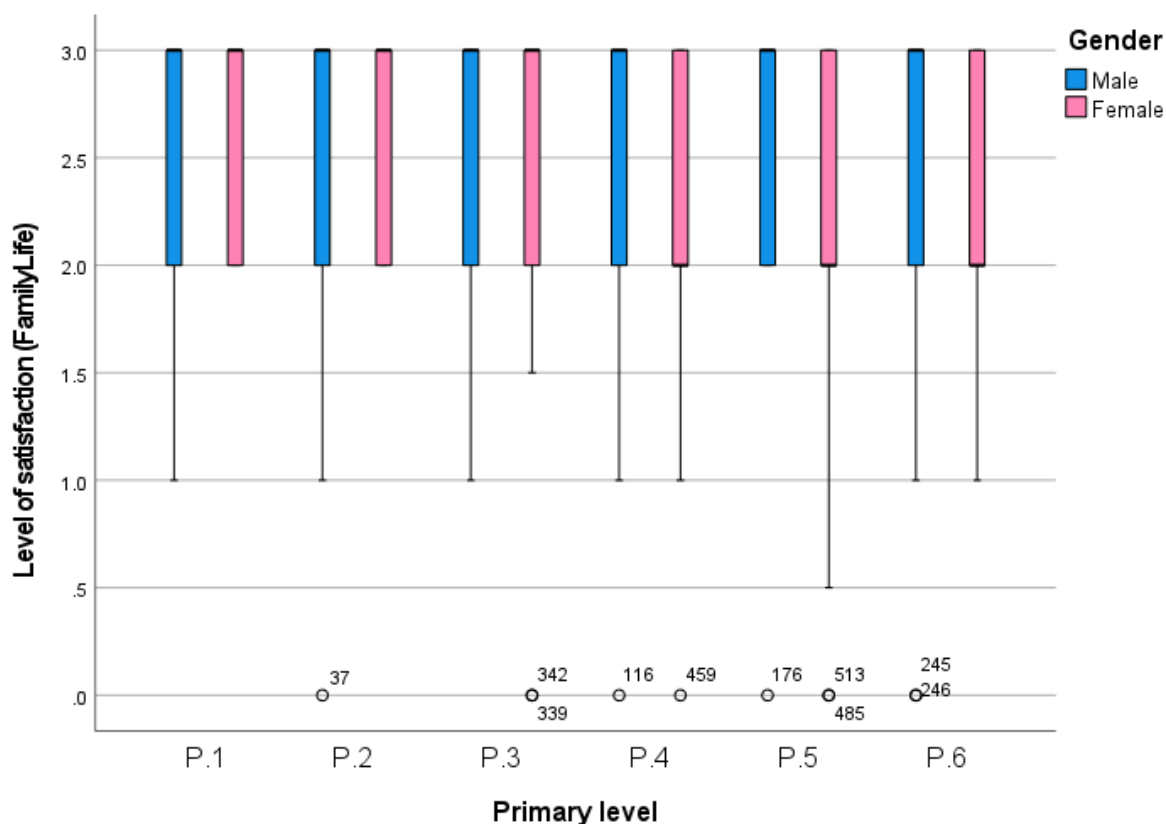
**Figure 26.** *Mean in level of satisfaction about ‘Self’ by academic level and gender in the quantitative part of the study*



#### 5.3.2.4.2 ‘Family Life’:

Unlike the finding of the self-evaluating level of satisfaction about ‘self’, it was found that most students in different levels had commented either ‘satisfied’ or ‘very satisfied’ with their existing family life as shown in the boxplot (Figure 27). It was noted that the medians of both genders in the lower levels (Primary 1-3) had reached level 3 indicating ‘very satisfied’. Nevertheless, the medians among boys in the upper levels (Primary 4-6) remained unchanged at level 3 whereas the relevant medians among girls had dropped from level 3 (‘very satisfied’) to level 2 (‘satisfied’).

**Figure 27.** *Median in Self-evaluating level of satisfaction about 'Family life' by academic level and gender in the quantitative part of the study*

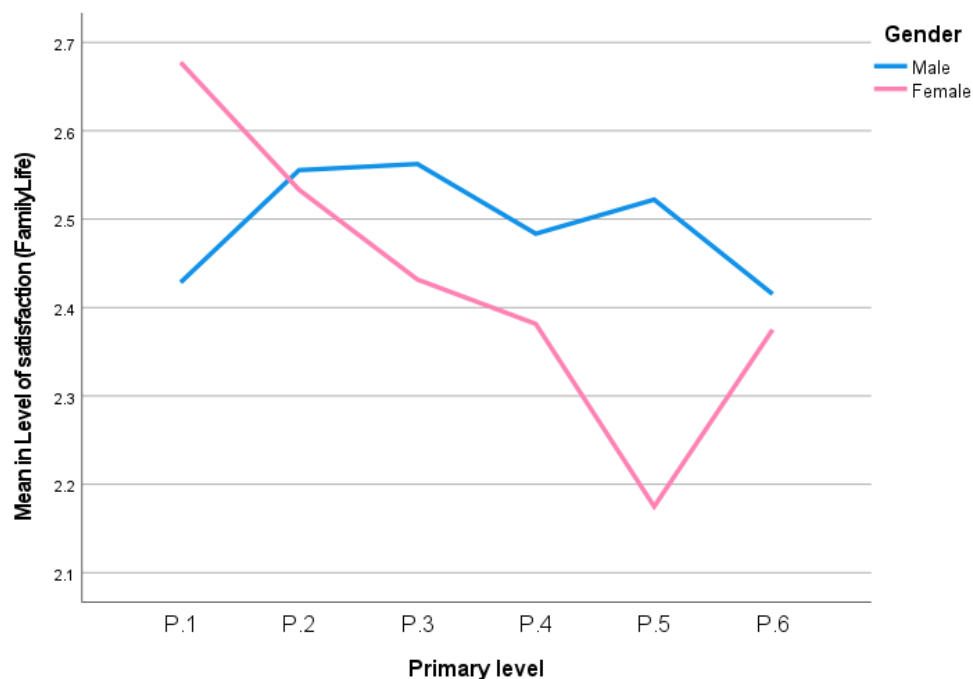


Referring to Table 12 and Figure 28, it was noted that the mean in the level of satisfaction about 'family life' among boys in Primary 1 is 2.43 which was much lower than that among girls in the same primary level at 2.68. Nevertheless, the mean among boys increased from 2.43 to 2.56 from Primary 1 to Primary 2 but dropped from 2.56 to 2.48 from Primary 3 to Primary 4. It increased again to 2.52 in Primary 5 but dropped to 2.42 in Primary 6. Contrarily, a continuous trend of drop was noticed from 2.68 to 2.18 in the means among girls from Primary 1 consecutively to Primary 5 but then an increase from 2.18 to 2.38 was finally identified in Primary 6.

IV_FamilyLife				
Level	Gender	Mean	N	Std. Deviation
P.1	Male	2.429	35	.6981
	Female	2.677	31	.4752
	Total	2.545	66	.6122
P.2	Male	2.556	18	.8556
	Female	2.533	15	.5164
	Total	2.545	33	.7111
P.3	Male	2.563	32	.6189
	Female	2.432	44	.7360
	Total	2.487	76	.6879
P.4	Male	2.484	61	.6768
	Female	2.382	114	.6494
	Total	2.417	175	.6589
P.5	Male	2.522	45	.6212
	Female	2.175	60	.8479
	Total	2.324	105	.7752
P.6	Male	2.415	65	.7047
	Female	2.375	56	.5580
	Total	2.397	121	.6387
Total	Male	2.480	256	.6800
	Female	2.384	320	.6782
	Total	2.427	576	.6801

**Table 12.** *Mean in level of satisfaction about 'Family life' by academic level and gender in the quantitative part of the study*

**Figure 28.** *Mean in level of satisfaction about 'Family life' by academic level and gender in the quantitative part of the study*

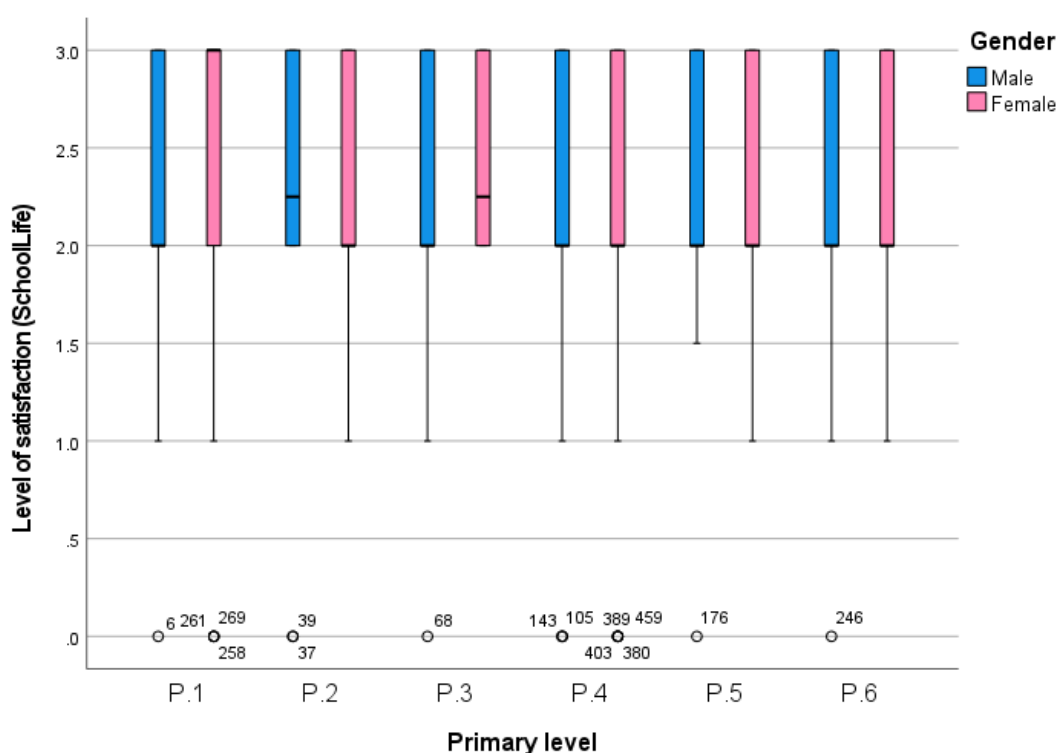




### 5.3.2.4.3 'School Life':

Similar to the level of satisfaction about 'family life', most students in different primary levels had rated their school life as 'satisfied' or 'very satisfied' as shown in the boxplot (Figure 29). Nevertheless, the medians of the two genders were different among students in Primary 1-3. It was noted that more girls enjoyed their school life with the median of 3 in Primary 1 but more boys enjoyed their school life than girls in Primary 2 and the condition reverted again in Primary 3. The medians among both boys and girls remained unchanged at the level of 2 from Primary 4 to Primary 6.

**Figure 29.** Median in Self-evaluating level of satisfaction about 'School life' by academic level and gender in the quantitative part of the study



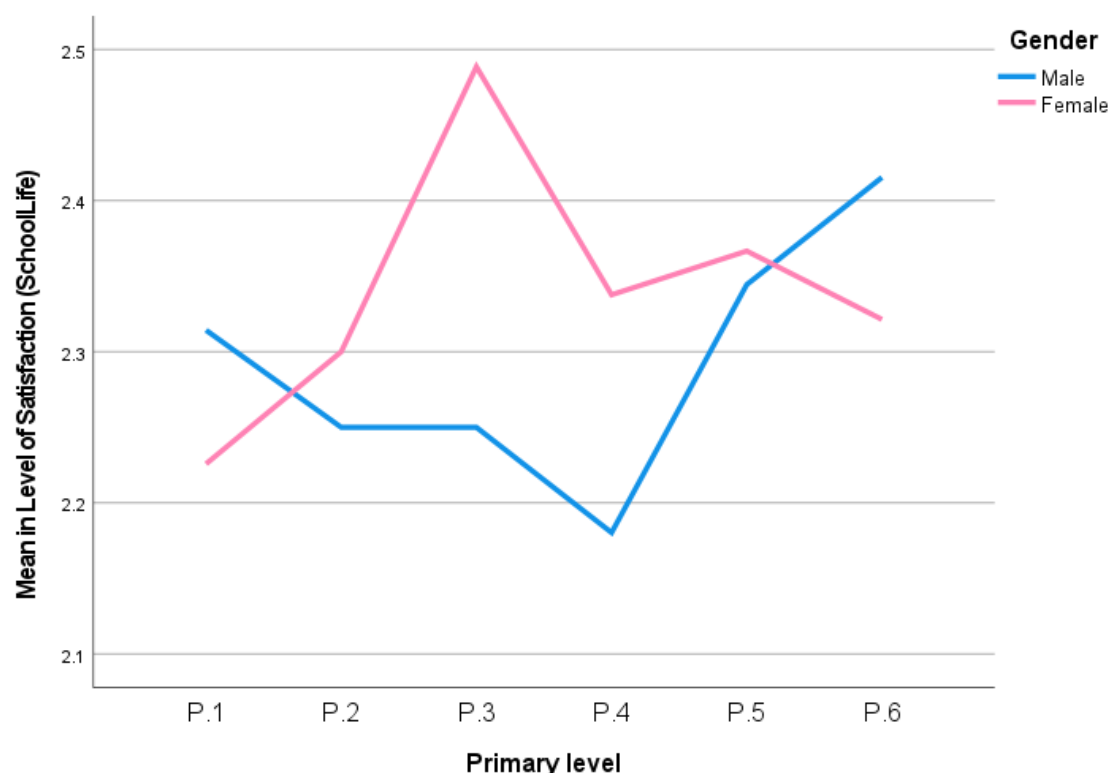
Nonetheless, the finding was found completely different by comparing the means as shown in Table 13 and Figure 30. This difference could be interpreted as the uneven distribution of data which might be asymmetric, skewed or bimodal. Boys in Primary 1 enjoyed their school

life more than girls with the mean of 2.31 and 2.23 respectively. Then, an opposite phenomenon was observed from Primary 2 to Primary 5. The mean level of satisfaction among boys decreased from 2.31 in Primary 1 to 2.25 in both Primary 2 and Primary 3. It continued to drop to 2.18 in Primary 4 but rebounded to 2.34 and 2.42 respectively at Primary 5 and Primary 6. On the contrary, the mean level of satisfaction among girls increased continuously from 2.23 to 2.49 from Primary 1 to Primary 3. A sudden drop to 2.34 was noted in Primary 4. It rose again to 2.37 in Primary 5 but fell to 2.32 in Primary 6.

IV_SchoolLife				
Level	Gender	Mean	N	Std. Deviation
P.1	Male	2.314	35	.7183
	Female	2.226	31	.9903
	Total	2.273	66	.8512
P.2	Male	2.250	18	.9432
	Female	2.300	15	.7512
	Total	2.273	33	.8486
P.3	Male	2.250	32	.8424
	Female	2.489	44	.4999
	Total	2.388	76	.6713
P.4	Male	2.180	61	.8516
	Female	2.338	114	.7118
	Total	2.283	175	.7647
P.5	Male	2.344	45	.6291
	Female	2.367	60	.6166
	Total	2.357	105	.6191
P.6	Male	2.415	65	.6347
	Female	2.321	56	.5345
	Total	2.372	121	.5899
Total	Male	2.301	256	.7497
	Female	2.348	320	.6740
	Total	2.327	576	.7084

**Table 13.** *Mean in level of satisfaction about 'School life' by academic level and gender in the quantitative part of the study*

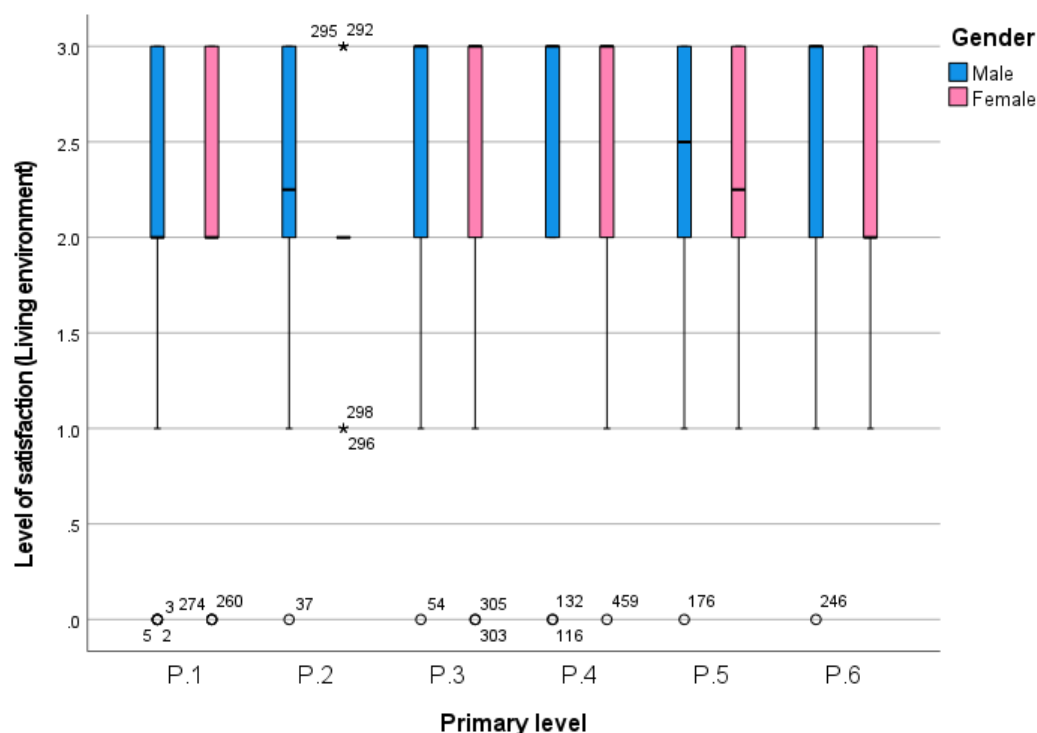
**Figure 30.** *Mean in level of satisfaction about 'School life' by academic level and gender in the quantitative part of the study*



#### 5.3.2.4.4 'Living Environment':

Referring to the following boxplots chart (Figure 31), the level of satisfaction with their living environment varied for different primary levels of students. The lowest median among girls was noted in Primary 2. The finding showed that a greater number of girls seemed to be more satisfied with their living environment than boys in Primary 1 while the median of level of satisfaction for boys increased in Primary 2. Both boys and girls were more satisfied with their living environment in Primary 3 and Primary 4 than in Primary 1 and Primary 2. The level of satisfaction with living environment for both boys and girls dropped from Primary 4 to Primary 5 and then rose again from Primary 5 to Primary 6. Girls tended to be less satisfied with their living environment than boys in both Primary 5 and Primary 6.

**Figure 31.** *Median in Self-evaluating level of satisfaction about 'Living environment' by academic level and gender in the quantitative part of the study*

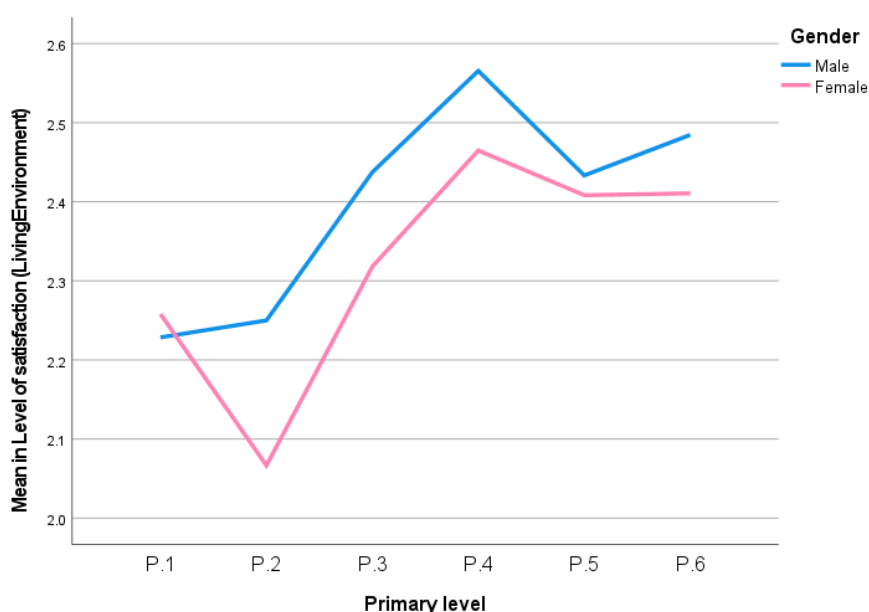


To explore about the level of satisfaction for their living environment by comparing with the means as shown in Table 14 and Figure 32, it was reported that girls tended to be less satisfied with their living environment than boys in different primary levels except those in Primary 1. Girls had a higher mean level of satisfaction (2.26) than boys (2.23) in Primary 1. However, a greater drop to 2.07 had been shown among girls in Primary 2 while a trivial increase to 2.25 was found among boys in the same primary level. Even the means of both girls and boys increased from Primary 2 to Primary 3 and then to Primary 4, girls still had a lower mean of level of satisfaction for their living environment than boys in the same primary levels. A great drop of the mean among boys from 2.57 to 2.43 was noted from Primary 4 to Primary 5 while a slight increase of the mean among boys was observed from 2.43 in Primary 5 to 2.49 in Primary 6. A very minor increase of the mean from 2.408 in Primary 5 to 2.411 in Primary 6 among girls was noted.

IV_LivingEnvironment				
Level	Gender	Mean	N	Std. Deviation
P.1	Male	2.229	35	.9727
	Female	2.258	31	.8932
	Total	2.242	66	.9292
P.2	Male	2.250	18	.8787
	Female	2.067	15	.5936
	Total	2.167	33	.7569
P.3	Male	2.437	32	.8776
	Female	2.318	44	.8633
	Total	2.368	76	.8655
P.4	Male	2.566	61	.6613
	Female	2.465	114	.6405
	Total	2.500	175	.6477
P.5	Male	2.433	45	.6537
	Female	2.408	60	.6411
	Total	2.419	105	.6435
P.6	Male	2.485	65	.6845
	Female	2.411	56	.5729
	Total	2.450	121	.6338
Total	Male	2.437	256	.7605
	Female	2.386	320	.6916
	Total	2.409	576	.7229

**Table 14.** Mean in level of satisfaction about 'Living environment' by academic level and gender in the quantitative part of the study

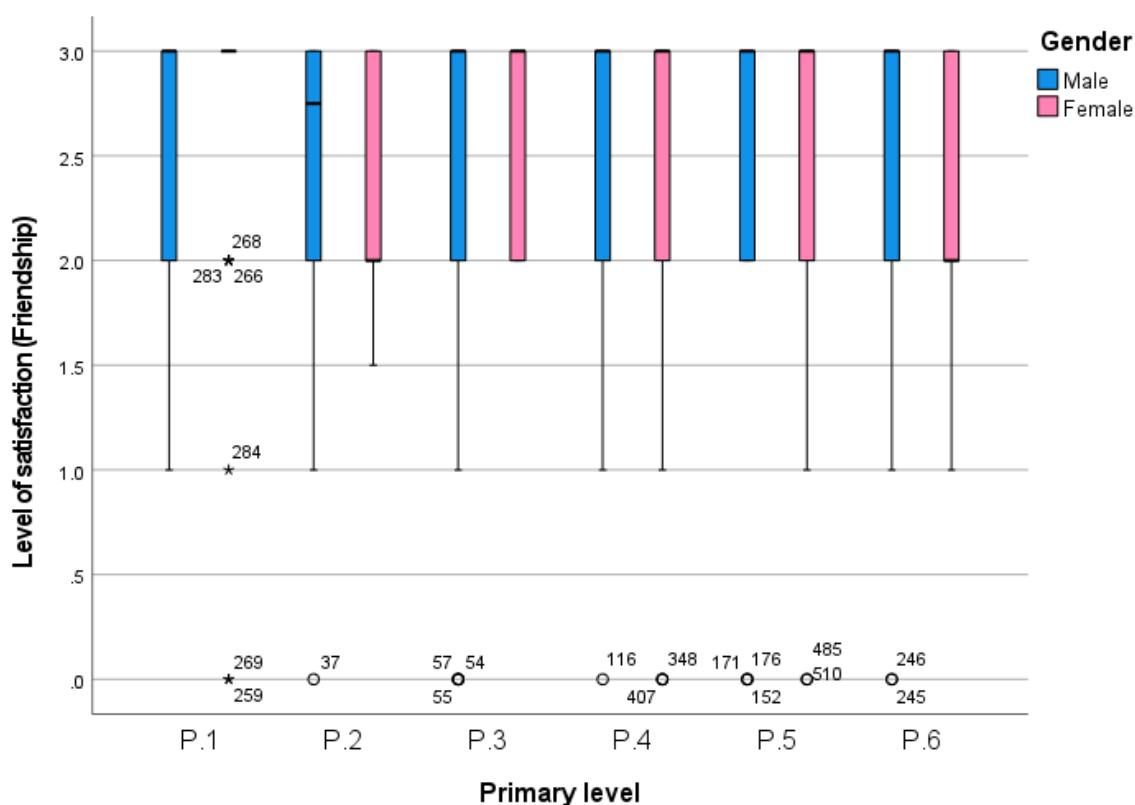
**Figure 32.** Mean in level of satisfaction about 'Living environment' by academic level and gender in the quantitative part of the study



### 5.3.2.4.5 'Friendships':

It was reported that most of the participating students from different primary levels enjoyed being with their friends, excluding those outliers which were of extreme value or potential error as shown in the boxplots chart (Figure 33). It was illustrated that the median level of satisfaction about friendships among students in different primary levels were at level 3 referring to 'very satisfied', except the girls in Primary 2 and Primary 6. It was noted that the median level among boys in Primary 2 was 2.75 while the median level among girls in the same primary level was 2. On the other hand, the median level among boys in Primary 6 was 3 but the median level among girls in the same primary level was only 2.

**Figure 33.** *Median in Self-evaluating level of satisfaction about 'Friendships' by academic level and gender in the quantitative part of the study*



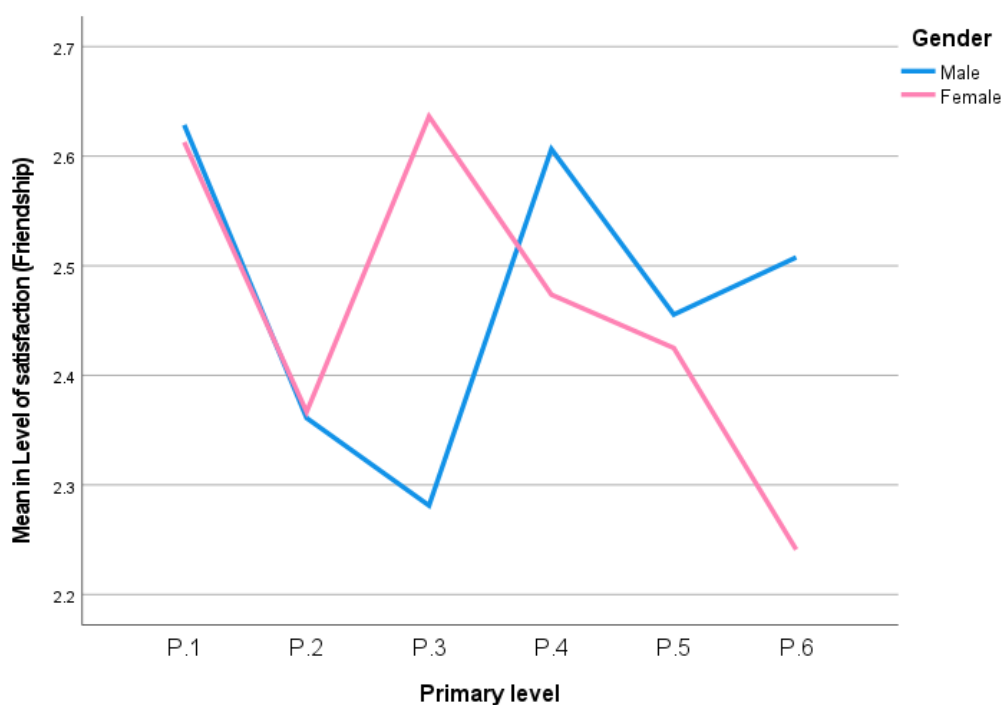
The line chart (Figure 34) illustrated that there was a sharp drop in the mean level of satisfaction about friendships among both boys and girls from Primary 1 to Primary 2. Upward and

downward movements in different shapes were observed in the means among both boys and girls from Primary 2 to Primary 6. By crosschecking with the means as shown in Table 15 and Figure 34, it was found that both boys and girls had similar levels of satisfaction about friendships in Primary 1 and Primary 2. However, a rapid increase from 2.37 to 2.64 was noted among girls from Primary 2 to Primary 3 while there was a drop from 2.36 to 2.28 among boys in the same primary level. Then the mean level among boys in Primary 4 rebounded rapidly to 2.61, dropped to 2.46 in Primary 5 and finally rose to 2.51 in Primary 6. Meanwhile, the mean levels among girls had continued to drop from 2.64 to 2.24 gradually from Primary 3 to Primary 6. The total mean levels as shown in Table 15 showed that boys had a slightly higher mean level of satisfaction about friendships (2.5) than those of girls (2.46) indicating that boys tended to enjoy more to be with friends than girls. The differences may be explained by that boys tend to participate more in physical activities or competitive games which require a stronger sense of team spirit whereas girls have greater preference for verbal games (Papalia & Martorell, 2021).

IV_Friendship				
Level	Gender	Mean	N	Std. Deviation
P.1	Male	2.629	35	.5983
	Female	2.613	31	.8437
	Total	2.621	66	.7182
P.2	Male	2.361	18	.8368
	Female	2.367	15	.5499
	Total	2.364	33	.7101
P.3	Male	2.281	32	1.0234
	Female	2.636	44	.4866
	Total	2.487	76	.7745
P.4	Male	2.607	61	.6398
	Female	2.474	114	.7432
	Total	2.520	175	.7099
P.5	Male	2.456	45	.8106
	Female	2.425	60	.7525
	Total	2.438	105	.7743
P.6	Male	2.508	65	.7930
	Female	2.241	56	.6030
	Total	2.384	121	.7210
Total	Male	2.500	256	.7759
	Female	2.455	320	.7006
	Total	2.475	576	.7347

**Table 15.** *Mean in level of satisfaction about 'Friendships' by academic level and gender in the quantitative part of the study*

**Figure 34.** *Mean in level of satisfaction about 'Friendships' by academic level and gender in the quantitative part of the study*

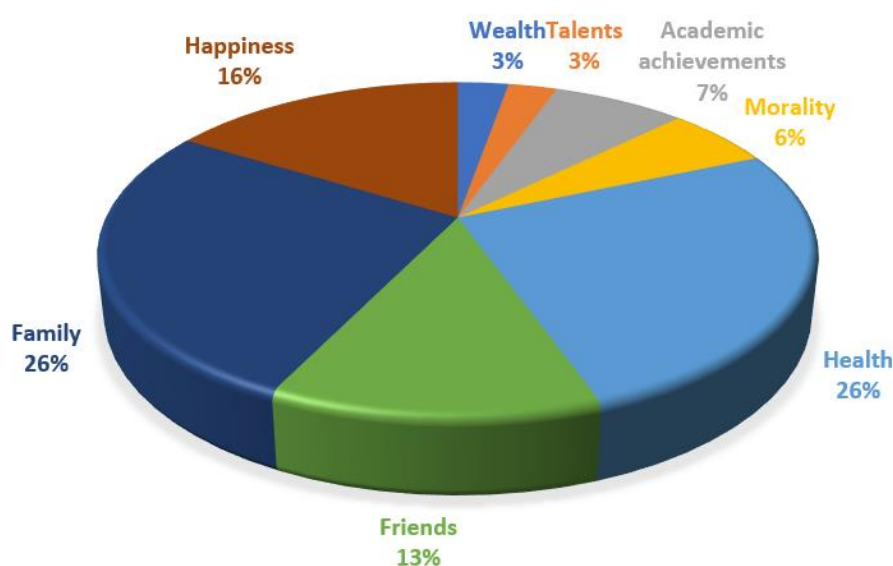




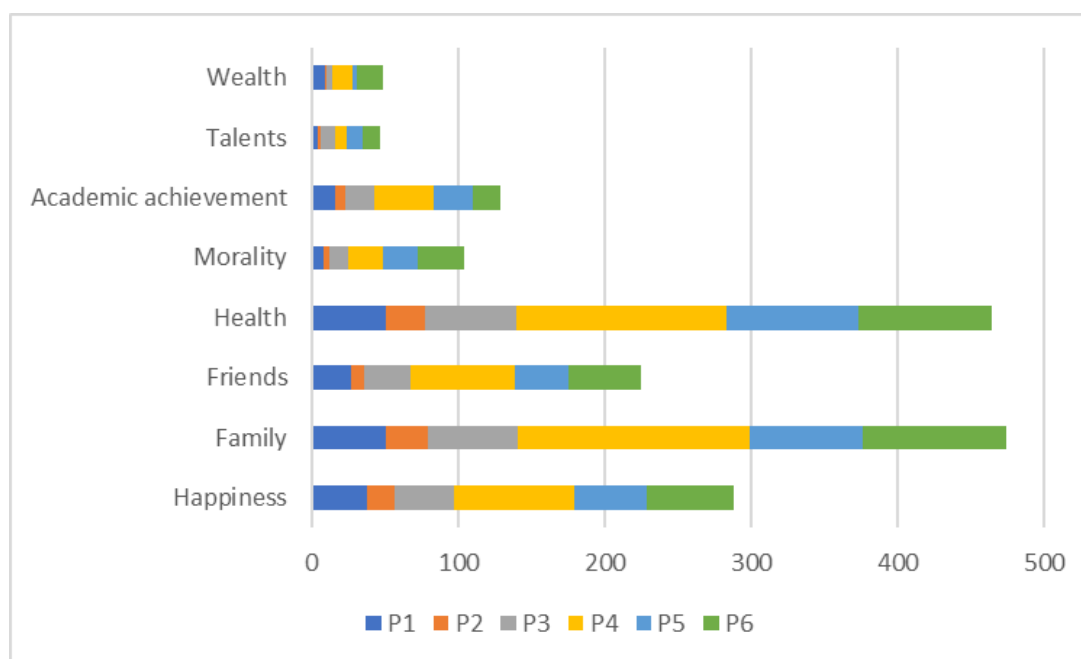
### 5.3.2.5 Part 5: Preferences of Priority

The participating students were requested to choose 3 items from a list of 8 items in Part 5 of the questionnaire to indicate their priority or value of life. Among the eight listed items, ‘family’, ‘health’ and ‘happiness’ were selected as the top three preferences while ‘talents’, ‘wealth’ and ‘morality’ were the lowest three preferences of all the participating students as shown in the following pie chart (Figure 35) and bar chart (Figure 36). Referring to Table 16, it was noted that over 80% of all the participating students regardless of their academic levels had chosen ‘family’ (82%) and ‘health’ (81%) while half of them had chosen ‘happiness’ (50%) as their first three preference of priority in life. On the contrary, it was reported that only 8% and 9% of the participating students had respectively chosen ‘talents’ and ‘wealth’ whereas 18% of them had chosen ‘morality’ as their first three preferred priorities in life. In between these six selected items, it was found that 39% and 22% of all the participating students had respectively chosen ‘friends’ and ‘academic achievement’ as their preference of priority in life.

**Figure 35.** *Percentage of preferences of priority by academic level in the quantitative part of the study*



**Figure 36.** *Distribution of preferences of priority by academic level in the quantitative part of the study*



Preferences/primary level	P1	P2	P3	P4	P5	P6	TOTAL	%
Wealth	9	1	4	14	3	18	49	9%
Talents	4	2	10	8	11	12	47	8%
Academic achievement	16	7	20	40	27	19	129	22%
Morality	8	4	13	24	23	32	104	18%
Health	51	26	63	143	90	92	465	81%
Friends	27	9	31	72	36	50	225	39%
Family	51	28	62	158	77	98	474	82%
Happiness	38	19	40	82	50	59	288	50%

**Table 16.** *Number of each preference of priority by academic level in the quantitative part of the study*

To obtain a more comprehensive view by minimizing the bias due to the uneven distribution of participating students in different academic levels, the percentages of each preference in different academic levels had been calculated by the total number of participants in each academic level for more detailed enumeration as shown in Table 17.

Preferences/primary level	P1	P2	P3	P4	P5	P6
Wealth	14%	3%	5%	8%	3%	15%
Talents	6%	6%	13%	5%	10%	10%
Academic achievement	24%	21%	26%	23%	26%	16%
Morality	12%	12%	17%	14%	22%	26%
Health	77%	79%	83%	82%	86%	76%
Friends	41%	27%	41%	41%	34%	41%
Family	77%	85%	82%	90%	73%	81%
Happiness	58%	58%	53%	47%	48%	49%

**Table 17.** *Percentage of each preference of priority by academic level in the quantitative part of the study*

By horizontally comparing the percentages of each preference of priority in different primary levels as shown in Table 17, a similar pattern as corresponding to the results found in Table 16 was noted. The participating students of all levels had chosen ‘family’, ‘health’ and ‘happiness’ as the most important in life with a higher percentage. The range of percentages of choosing ‘family’ (73%-90%), ‘health’ (76%-86%) and ‘happiness’ (47%-58%) respectively at different levels was observed. The least three preferences of priority noted in Table 16 were also reflected in the findings of Table 17. ‘Morality’, ‘wealth’ and ‘talents’ were similarly selected by fewer participating students with a lower range of percentages across different levels. The respective ranges were ‘morality’ (12%-26%), ‘wealth’ (3%-15%) and ‘talents’ (5%-13%). The range of percentages of different levels of participating students in choosing ‘friends’ and ‘academic achievement’ were shown as ‘friends’ (27%-41%) and ‘academic achievement’ (16%-26%). These findings suggested that the participating students at all primary levels value ‘family’, ‘health’ and ‘happiness’ as most important in their life.

Comparing the percentage of each preference vertically by academic levels, it was similarly observed that ‘family’, ‘health’ and ‘happiness’ were chosen as the top three preferences by most students in all different levels. Both ‘family’ and ‘health’ had been selected as the first preference among students in Primary 1 (77%). ‘Family’ had been chosen as the first

preference among students in Primary 2 (85%), Primary 4 (90%) and Primary 6 (81%) while ‘health’ had been chosen as the first preference among students in Primary 3 (83%) and Primary 5 (86%).

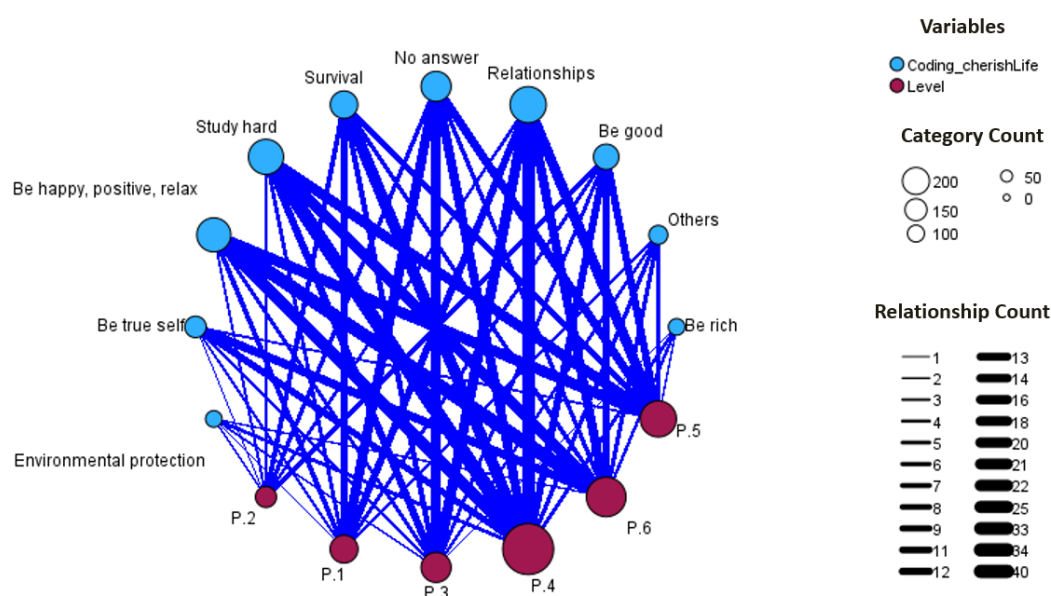
The preferences indicated by the participating students could indirectly reveal their values in life. The highest or lowest percentages of students in each academic level in choosing from the eight listed items for the importance in their life were illustrated as follows. It was noted that more students in Primary 1 and Primary 2 (58%) had selected ‘happiness’ as one of their top preferences while the lowest percentage of selecting happiness was found in Primary 4 students (47%). The highest percentage was 90% of Primary 4 students while the lowest percentage was 73% of Primary 5 students had chosen ‘family’ as their preferences. The percentages in choosing ‘friends’ as their preference were 41% of students in most primary levels, except those in Primary 2 (27%) and Primary 5 (34%). It was shown that the highest percentage of choosing ‘health’ as important was found in Primary 5 students (86%) while the lowest percentage was 76% of Primary 6 students. Besides, 26% of Primary 6 students and only 12% of Primary 1 or Primary 2 students had selected ‘morality’ as important in life for them. The highest percentage of selecting ‘academic achievement’ as important in life was 26% of the Primary 3 students or the Primary 5 students while the lowest percentage was 16% of Primary 6 students. Only 5% of Primary 4 students, which was the lowest percentage, had chosen ‘talents’ while 13% of Primary 3 students had accounted for the highest percentage of preference. Finally, the lowest percentage of choosing ‘wealth’ as important for life was 3% of Primary 2 or Primary 5 students while the highest percentage was 15% of Primary 6 students. It was also shown that the percentages of selecting both ‘talents’ and ‘wealth’ as important for life were comparatively lower among students in all different primary levels. The least preferred items chosen by the participating students at different primary levels was observed

as ‘talents’ for Primary 4 (5%), Primary 1 (6%) and Primary 6 (10%) whereas ‘wealth’ for Primary 2 (3%), Primary 3 (5%) and Primary 5 (3%).

Furthermore, it was highlighted that a much higher percentage of Primary 6 students (15%) and Primary 1 students (14%) had chosen ‘wealth’ as one of their preferred items as compared with students in other primary levels. A relatively higher percentage of the upper-level students had selected ‘morality’ as one of their preferred items. 22% of Primary 5 students and 26% of Primary 6 students in comparison with 12%-17% of students in other academic levels (Primary 1-4) had chosen ‘morality’ as one of their preferred items with importance in life.

### 5.3.2.6 Part 6: Proposed Ways of Cherishing Life

**Figure 37.** Relationship-map illustrating the distribution of different categories of ways in cherishing life among different academic levels in the quantitative part of the study



Part 6 was another open-ended question for the participating students to describe briefly how they could enjoy a better life or to cherish life. All the proposed ideas were grouped into ten

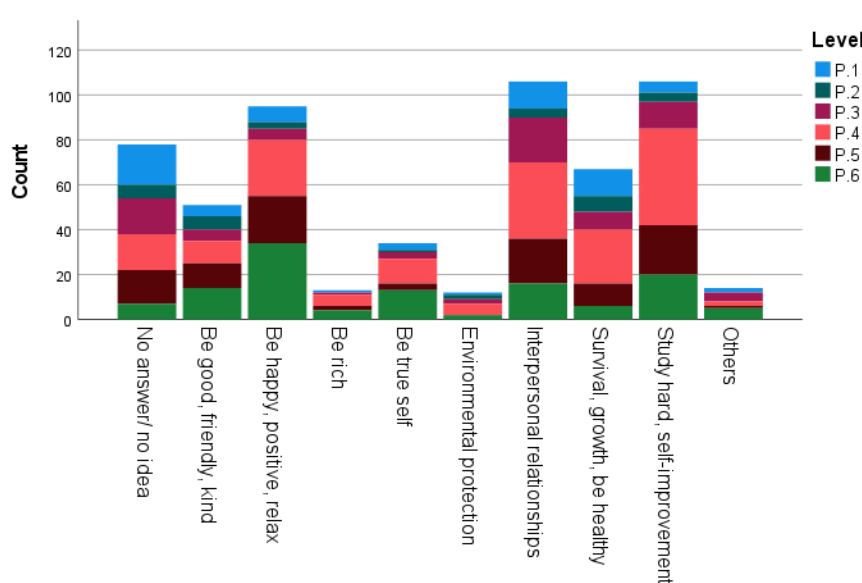
categories. The distribution of the categories of ideas among different levels of students are shown in the relationship map (Figure 37).

	N	%
No answer/ no idea	78	13.5%
Be good, friendly, kind	51	8.9%
Be happy, positive, relax	95	16.5%
Be rich	13	2.3%
Be true self	34	5.9%
Environmental protection	12	2.1%
Interpersonal relationships	106	18.4%
Survival, growth, be healthy	67	11.6%
Study hard, self-improvement	106	18.4%
Others	14	2.4%

**Table 18.** *Distribution of different categories of way in cherishing life in the quantitative part of the study*

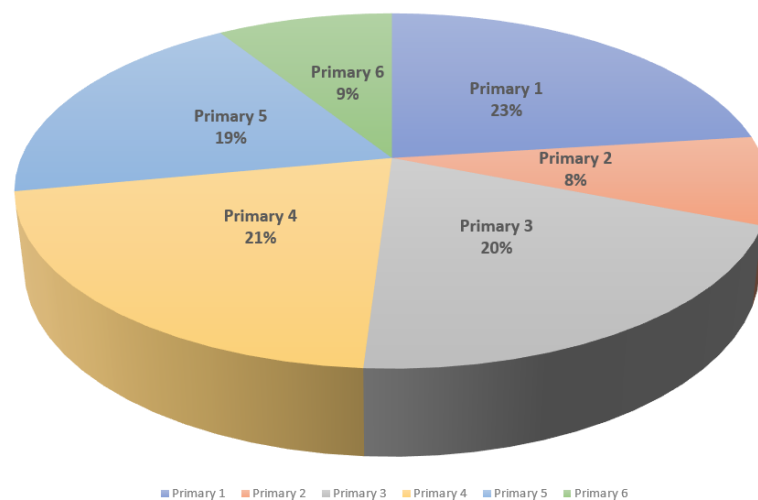
Referring to Table 18, it was noted that 78 participating students (13.5%) had not answered this question or marked as ‘No idea’. The details of the distribution of the ten categories among students of different academic levels are shown in the following bar-chart (Figure 38).

**Figure 38.** *Bar-chart illustrating the distribution of different categories of cherishing life by different academic levels in the quantitative part of the study*

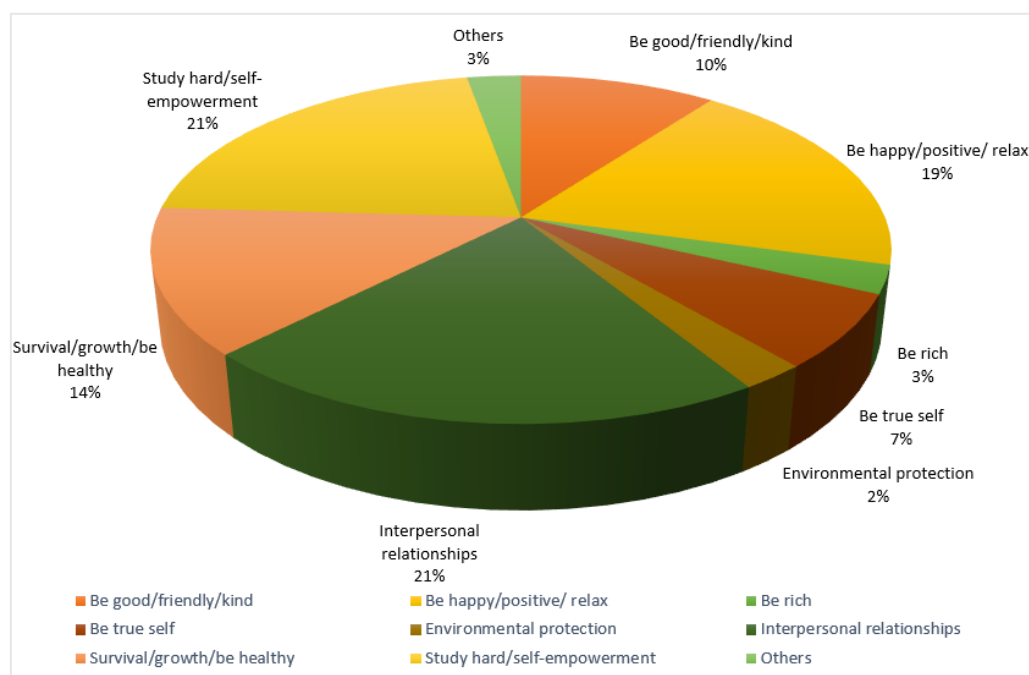


The following pie-chart (Figure 39) had illustrated the distribution of the 78 non-respondents in different levels. Among these 78 students, 23% were in Primary 1 while 21% and 20% were respectively in Primary 4 and Primary 3. 19% were in Primary 5 whereas 9% and 8% were respectively found in Primary 6 and Primary 2.

**Figure 39.** *Distribution of 'No answer/no idea' in proposed ways of cherishing life by academic levels in the quantitative part of the study*



**Figure 40.** *Percentage of different categories of ways in cherishing life among primary students in the quantitative part of the study*



Excluding those who had not answered this question or marked as ‘No idea’, 498 participating students had recommended different ways in cherishing life as shown in the above pie-chart (Figure 40).

Among these 498 answers, 21% of the participating students had suggested different ways in ‘Enhancing interpersonal relationships’ or ‘Self-empowerment’. 19% of the participating students had recommended ‘Being happy, positive and relax’ whereas 14% had proposed different ways for ‘Survival, growth and staying healthy’, such as on healthy diets or doing more physical exercises. 10% of the participating students had been aware to ‘Be good, friendly and kind’ to others while 7% wish to ‘Be true self’. Some participating students had aspired to ‘Be rich’ (3%) or expressed concern for ‘Environmental protection’ (2%).

Level	Gender	Suggestions	Coding of suggestion
5	M	Be lazy	Be lazy
4	F	Having a dog	Companionship
6	F	Have a peaceful world	Having a peaceful world
6	M	Immigration	Orientation of life
1	M	More living spaces	Improving living environment
3	F	Have her/his own room	Improving living environment
3	F	Having a bigger room	Improving living environment
4	F	No more cockroaches at home	Improving living environment
3	M	Enjoy more freedom at school	Less restriction/ more freedom
6	M	Less restriction	Less restriction/ more freedom
3	F	No disasters	No disasters
6	F	No need to cherish life	No need to cherish life
6	M	Trust in God	Orientation of life

**Table 19.** *Proposed ways in cherishing life which have been categorized as ‘others’ in the quantitative part of the study*



Apart from the aforementioned categorized items, 13 students (3%) had made some other suggestions which had been categorized as ‘Others’ as shown in the above table (Table 19). Three girls in Primary 3-4 and one Primary 1 boy had proposed to improve their existing living environments. Two boys in Primary 3 and Primary 6 had expressed their wish to enjoy more freedom with fewer restrictions while two girls in Primary 3 and Primary 6 had expressed their hope to have a peaceful world and without disasters. Besides, one Primary 5 boy wished to be lazy while the other Primary 4 girl wanted to have a dog. A Primary 6 boy believed that immigration could cherish his life whereas another Primary 6 boy trusted in God. A Primary 6 girl had indicated that there was no need to cherish life.

#### 5.4 Analysis and Discussion

Regarding the association with the word ‘Life’ in Part 1, it was reported that a total number of 152 participating students (26.4%) of different levels had left the blank empty or filled in ‘no idea’. As shown in the following table (Table 20), it was observed that about one-third of the participating students in the middle levels (35.5% of students in Primary 3 and 31.4% of students in Primary 4) had not answered this question or left it blank while the percentage of no answering was comparatively lower in the upper levels (15.2% of students in Primary 5 and 22.3% of students in Primary 6).

Level	No. of participants	No. of 'No answer/idea'	%
P1	66	19	28.8%
P2	33	8	24.2%
P3	76	27	35.5%
P4	175	55	31.4%
P5	105	16	15.2%
P6	121	27	22.3%
TOTAL	576	152	26.4%

**Table 20.** *Number and percentage of students who have not answered the question of Part 1 of the questionnaire*

For the proposed ways in cherishing life in Part 6, it was reported that a total number of 78 participating students (13.5%) of different academic levels had left the blank empty or filled in ‘no idea’. As shown in the following table (Table 21), it was observed that the percentage was comparatively higher in the lower levels (27.3% of Primary 1 students, 21.1% of Primary 3 students and 18.2% of Primary 2 students) while the percentage was comparatively lower in the higher levels (5.8% of Primary 6 students, 9.1% of Primary 4 students and 14.3% of Primary 5 students).

Level	No. of participants	No. of 'No answer/idea'	%
P1	66	18	27.3%
P2	33	6	18.2%
P3	76	16	21.1%
P4	175	16	9.1%
P5	105	15	14.3%
P6	121	7	5.8%
TOTAL	576	78	13.5%

**Table 21.** *Number and percentage of students who have not answered the question of Part 6 of the questionnaire*

It was suggested that age or academic level was not a major determinant to give ‘no answer’ or ‘no idea’ in association with the word ‘Life’ whereas it seemed to be one of the contributing factors to give ‘no answer’ or ‘no idea’ to suggest ways of cherishing life.

Excluding those who had not answered Part 1 or marked ‘no idea’, 424 participating students had enumerated nine categories of association with ‘Life’. Among these 424 students, 39% had associated with ‘Types of living things’ whereas 14% and 13% of them had associated respectively with ‘Process of life’ and ‘Life characteristics’. 10% of them had associated with ‘Religious or philosophical concepts’ like origin or meaning of life while the others had associated with ‘Attitudes of life’ (9%), ‘Significant others’ (6%), ‘Self’ (4%), ‘Nature’ (3%), and ‘Basic needs of life’ (2%). Hence, it was significantly indicated that primary students in different academic levels could have multiple perceptions of life which were not only bound

with the physiological aspects of life, but could also embraced the religious or philosophical orientations as well as the different dimensions of intrapersonal or interpersonal relationships, including the self, significant others and the nature (Table 22).

Associations with life	Frequency	Percentage
Attitudes of life	38	9%
Basic needs of life	8	2%
Characteristics of life	54	13%
Process of life	58	14%
Nature	14	3%
Self	17	4%
Significant others	25	6%
Religious/philosophical	44	10%
Types of life	166	39%
Total	424	100%

**Table 22.** *Distribution of different categories of associations with life among those who have given concrete answers in the question of Part 1 of the questionnaire*

By comparing the correlations among the academic levels, the scores of identifying living things (Part 2) and the scores of identifying life characteristics (Part 3), it was noted that the values of Spearman's rho among the academic levels and the scores of identifying living things (0.171) as well as the values between the two identifying scores of living things and life characteristics (0.045) were lower than 0.19 which indicated the very weak positive correlations. Nevertheless, a very weak negative correlation (-0.065) was noted between the academic levels and the scores of identifying life characteristics as shown in Table 23. This finding could be interpreted that the scores of identifying life characteristics tended to have a slight decrease at a higher academic level.

Correlations					
			IdentifyingScores	Level	Scores_Characteristics
Spearman's rho	IdentifyingScores	Correlation Coefficient	1.000	.171**	.045
		Sig. (2-tailed)	.	<.001	.281
		N	576	576	576
	Level	Correlation Coefficient	.171**	1.000	-.065
		Sig. (2-tailed)	<.001	.	.117
		N	576	576	576
	Scores_Characteristics	Correlation Coefficient	.045	-.065	1.000
		Sig. (2-tailed)	.281	.117	.
		N	576	576	576

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

Confidence Intervals of Spearman's rho				
	Spearman's rho	Significance(2-tailed)	95% Confidence Intervals (2-tailed) <sup>a,b</sup>	
			Lower	Upper
IdentifyingScores - Level	.171	<.001	.088	.252
IdentifyingScores - Scores_Characteristics	.045	.281	-.039	.129
Level - Scores_Characteristics	-.065	.117	-.149	.019

a. Estimation is based on Fisher's r-to-z transformation.

b. Estimation of standard error is based on the formula proposed by Fieller, Hartley, and Pearson.

**Table 23.** *Correlation among the academic levels, scores of identifying living things and scores of identifying life characteristics in the quantitative part of the study*

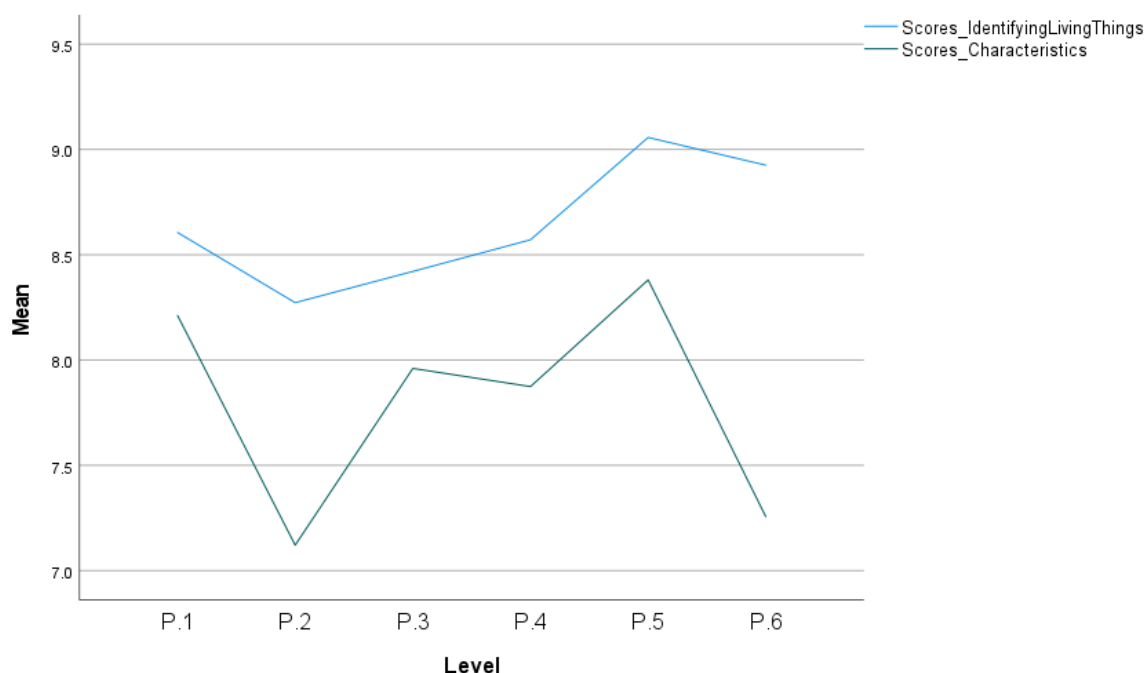
Referring to the line-chart of the mean scores of identifying living things and the mean scores of identifying life characteristics by the academic levels (Figure 41), it was shown that students in all different academic levels had got higher scores in identifying living things than their scores in identifying life characteristics. This phenomenon can be explained by the Dual-coding Theory of Paivio which has proposed that there are distinct cognitive systems for processing concrete and abstract words (Paivio, 2006). It is advocated that concrete words have either visual or haptic features and thus can be more promptly and accurately processed as well as better remembered than the abstract words (Gao, et. al., 2019). Since Part 2 of the questionnaire was presented with different living things with physical appearance, visual images and their names, they might have the processing advantages for understanding. The

question of Part 3 was provided with intangible concepts of life characteristics which most probably would become more abstract for the primary students' comprehension.

Besides, it can be assumed that students in higher academic levels are capable to get higher scores in both identifying living things and life characteristics since children at the stage of concrete operations by age 7 can solve concrete problems with inductive reasoning and make logical judgements about cause and effect according to Piagetian theory (Papalia & Martorell, 2021). Thus, students in higher primary levels who have learnt more concepts are expected to get higher scores in identifying living things and life characteristics. Nevertheless, the findings had shown that some participating students at higher academic levels did not get higher scores in the identification, for example, case #106 (Primary 4 student), #163 (Primary 5 student), #179 (Primary 5 student) and #535 (Primary 6 student). They might have selected the answers from the lists of these two parts randomly with direct intuitions besides their logical thinking as shown in the Distribution of scores in identifying living things (Figure 16) as well as the Distribution of scores in identifying life characteristics (Figure 21).

The line chart in Figure 41 shows that the mean scores in identifying living things and the mean scores in identifying life characteristics by academic levels were in a relatively parallel shape. It was highlighted that the participating students at different academic levels had got a higher score in identifying living things and a lower score in identifying the life characteristics.

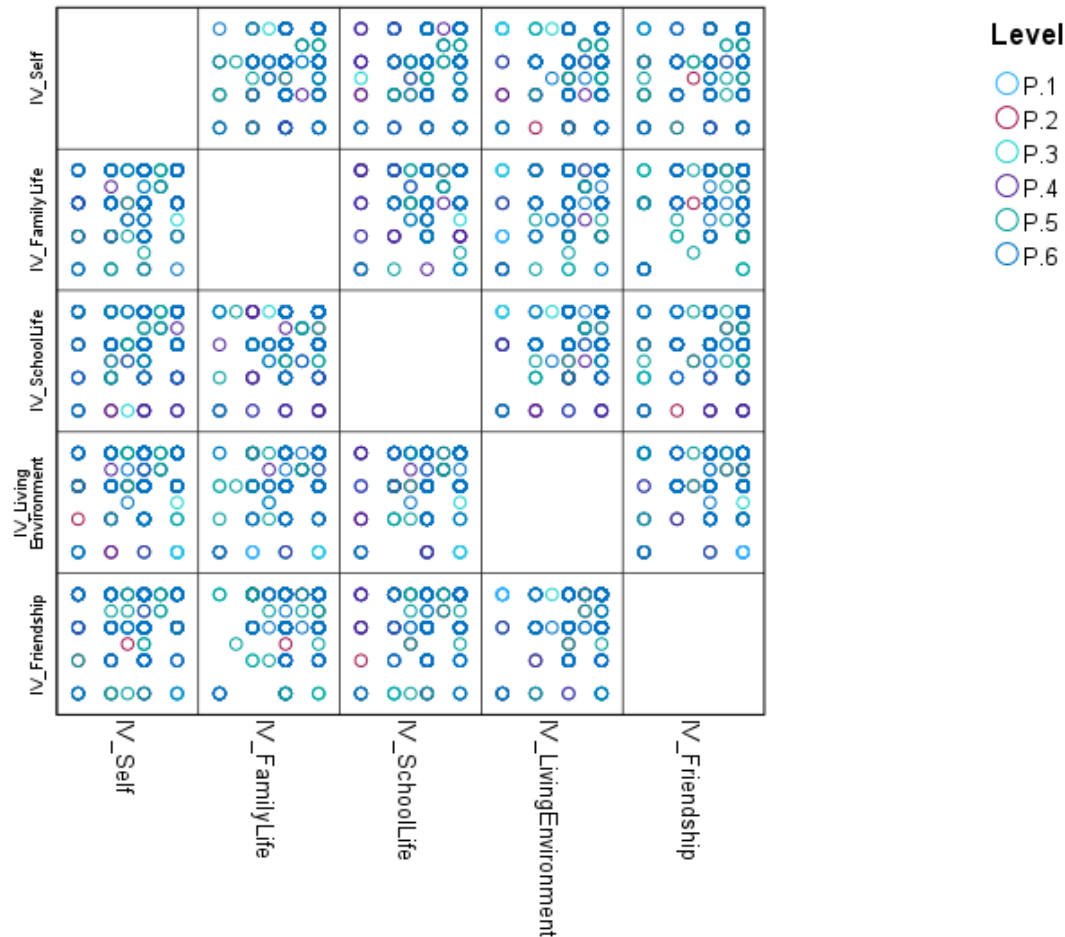
**Figure 41.** *Line chart of the mean scores in identifying living things and the mean scores of identifying life characteristics by academic levels in the quantitative part of the study*



The levels of satisfaction in various aspects of life among the participating students had been explored in Part 4 of the questionnaire. Referring to the Matrix Scatter (Figure 42) and the table of correlations among different levels of satisfaction (Table 24), it was observed that the relationships among the different levels of satisfaction were definitely statistically significant with the p-value smaller than 0.001. The level of correlations between the level of satisfaction in ‘self’ and the respective levels of satisfaction in ‘family life’, ‘school life’, ‘living environment’ and ‘friendships’ were 0.373, 0.254, 0.231 and 0.287. It can be understood and explained that individuals who have greater self-satisfaction tend to develop better interpersonal relationships with others and thus can enjoy more in their family life, school life and friendships. It may be further assumed that the participating students who have greater satisfaction in various aspects of life may generally have a comparatively positive thinking pattern towards their living environment. Simultaneously, those who can enjoy a better relationship with their family, schoolmates and friends as well as feeling more satisfied with

their living environment most probably have a higher level of self-satisfaction.

**Figure 42.** *Matrix Scatter showing the relationships between different levels of satisfaction in the quantitative part of the study*



		Correlations				
		IV_Self	IV_FamilyLife	IV_SchoolLife	IV_LivingEnvironment	IV_Friendship
IV_Self	Pearson Correlation	1	.373**	.254**	.231**	.287**
	Sig. (2-tailed)		<.001	<.001	<.001	<.001
	N	576	576	576	576	576
IV_FamilyLife	Pearson Correlation	.373**	1	.345**	.422**	.343**
	Sig. (2-tailed)	<.001		<.001	<.001	<.001
	N	576	576	576	576	576
IV_SchoolLife	Pearson Correlation	.254**	.345**	1	.316**	.330**
	Sig. (2-tailed)	<.001	<.001		<.001	<.001
	N	576	576	576	576	576
IV_LivingEnvironment	Pearson Correlation	.231**	.422**	.316**	1	.302**
	Sig. (2-tailed)	<.001	<.001	<.001		<.001
	N	576	576	576	576	576
IV_Friendship	Pearson Correlation	.287**	.343**	.330**	.302**	1
	Sig. (2-tailed)	<.001	<.001	<.001	<.001	
	N	576	576	576	576	576

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

**Table 24.** *Correlations among different levels of satisfaction in the quantitative part of study*

Regarding the relationship between the levels of satisfaction with life in correlation with academic levels and gender, the analysis was demonstrated in the Univariate ANOVA Summary Table (Table 25). It was found that among all the different levels of satisfaction, only the level of satisfaction of ‘Self’ was correlated to both the academic levels and gender. From the following Univariate ANOVA Summary Table (Table 25), it was indicated that covariate and academic levels were only significant for the level of satisfaction about ‘Self’ with the p-value of 0.001 ( $p < 0.05$ ) and ‘Living environment’ with the p-value of 0.045 ( $p < 0.05$ ) whereas covariate and gender was also significant for the level of satisfaction of ‘Self’ with the p-value of 0.017 ( $p < 0.05$ ). This phenomenon can be explained by the bio-psychosocial development among the school-aged children with the support of previous studies which have shown that there are psychological and behavioral variations among children of different genders (Chaplin & Aldao, 2013).

Referring to Erikson’s Theory of Psychosocial Development, children’s perception of their capacity for productive work which is developed in the fourth stage of psychosocial development is one of the major determinants of their self-esteem. With the sense of industry,



they learn how to work hard for achieving goals and they are more aware of the feelings of their own selves and of the others. Their productive competence is the major source of self-esteem which refers to their self-evaluation. With insufficient affirmation or recognition from their significant others, they may develop a lower self-worth or a sense of inferiority (Papalia & Martorell, 2021). It is suggested that even girls tend to have better academic achievement than boys (Pullmann & Allik, 2008), they are still inclined to have lower self-esteem due to their awareness or dissatisfaction with the changes of their body shape (Roth, 2002).

According to the Cognitive Developmental Stage Theory of Jean Piaget, children at the age of 7-11 years old are basically at the third stage of cognitive development: concrete operational. By then, they can think logically by taking multiple aspects of a situation into account which is not limited to real situations in the here and now. They have a better understanding of spatial concepts, cause and effect, categorization, seriation, inductive and deductive reasoning as well as with numbering and mathematics. Their cognitive growth enables them to develop more complex concepts of themselves and their learning of emotional management has facilitated them to establish realistic self-concepts. Simultaneously, the concern with body-image becomes important in early middle childhood, especially for girls due to the early stage of puberty (Papalia & Martorell, 2021). This can help to explain the trend of the decline of self-satisfaction during the early commencement of puberty from Primary 4 to Primary 6 among girls (Table 11 and Figure 26) because they have experienced greater change in their body shape than boys. This may also negatively impact the psychological health of girls if they have higher expectations of a physical living space with more privacy. A fall in the level of satisfaction with the living environment among girls from Primary 4 to Primary 5 (Table 14 and Figure 32) may be partially due to this expectation.

Tests of Between-Subjects Effects							
Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	IV_Self	15.838 <sup>a</sup>	6	2.640	5.054	<.001	.051
	IV_FamilyLife	4.072 <sup>b</sup>	6	.679	1.475	.184	.015
	IV_SchoolLife	1.648 <sup>c</sup>	6	.275	.545	.774	.006
	IV_LivingEnvironment	6.296 <sup>d</sup>	6	1.049	2.030	.060	.021
	IV_Friendship	3.753 <sup>e</sup>	6	.626	1.161	.326	.012
Intercept	IV_Self	302.094	1	302.094	578.443	<.001	.504
	IV_FamilyLife	350.292	1	350.292	761.141	<.001	.572
	IV_SchoolLife	262.082	1	262.082	519.754	<.001	.477
	IV_LivingEnvironment	317.680	1	317.680	614.477	<.001	.519
	IV_Friendship	339.925	1	339.925	630.780	<.001	.526
Level	IV_Self	11.955	5	2.391	4.578	<.001	.039
	IV_FamilyLife	2.759	5	.552	1.199	.308	.010
	IV_SchoolLife	1.325	5	.265	.526	.757	.005
	IV_LivingEnvironment	5.918	5	1.184	2.289	.045	.020
	IV_Friendship	3.461	5	.692	1.285	.269	.011
Gender	IV_Self	3.015	1	3.015	5.772	.017	.010
	IV_FamilyLife	1.165	1	1.165	2.531	.112	.004
	IV_SchoolLife	.392	1	.392	.778	.378	.001
	IV_LivingEnvironment	.734	1	.734	1.420	.234	.002
	IV_Friendship	.430	1	.430	.797	.372	.001
Error	IV_Self	297.162	569	.522			
	IV_FamilyLife	261.865	569	.460			
	IV_SchoolLife	286.914	569	.504			
	IV_LivingEnvironment	294.169	569	.517			
	IV_Friendship	306.632	569	.539			
Total	IV_Self	2914.000	576				
	IV_FamilyLife	3659.000	576				
	IV_SchoolLife	3408.250	576				
	IV_LivingEnvironment	3642.750	576				
	IV_Friendship	3838.250	576				
Corrected Total	IV_Self	313.000	575				
	IV_FamilyLife	265.937	575				
	IV_SchoolLife	288.562	575				
	IV_LivingEnvironment	300.465	575				
	IV_Friendship	310.385	575				

a. R Squared = .051 (Adjusted R Squared = .041)

b. R Squared = .015 (Adjusted R Squared = .005)

c. R Squared = .006 (Adjusted R Squared = -.005)

d. R Squared = .021 (Adjusted R Squared = .011)

e. R Squared = .012 (Adjusted R Squared = .002)

**Table 25.** *Univariate ANOVA Summary Table of the correlations among academic levels, gender and different levels of satisfaction in the quantitative part of the study*

Part 5 of the questionnaire had requested the participating students to choose three items from eight listed items which were considered as most important in their life. The findings had shown that the average percentages of all the participants or the percentages of different

academic levels of students had come up with similar answers (Table 16 and Table 17). The top three preferences of all participating students regardless of their academic levels were ‘family’, ‘health’ and ‘happiness’. The participating students of each individual level had also chosen ‘family’, ‘health’ and ‘happiness’ as the three most important items for their life (Table 16).

This indicated that most of the local primary students valued their family and health as well as aspiring for happiness in life. They did not only focus on satisfying their material needs. All the participating students treasured their family, health and happiness rather than talents, wealth and academic achievement. Their choices had revealed that the local primary students had developed a balanced perception of life. They viewed relationships as most important and were conscious to live with holistic wellness including the social, physical and emotional dimensions. It was noted that ‘friends’ was the fourth most important item chosen by the participating students as a whole or as a group in different academic levels (Table 16). This further showed that the primary students had highly valued interpersonal relationships in their life.

Nevertheless, it was noted that only 12% to 26% of the participating students across different academic levels had chosen ‘morality’ as one of the top three preferences of importance for their life (Table 17). It seemed to indicate that morality was not considered as very important for the local primary students. It can be explained that primary students are basically at both stages of pre-conventional level and conventional level as advocated by Kohlberg. Thus, students in lower academic levels can only focus on the direct consequences of their behaviors for avoiding punishment or for receiving rewards or personal satisfaction. They can only start to internalize their moral standards when they grow up as adolescents (Gonzalez-DeHass & Willems, 2013). Nonetheless, this finding may somehow indirectly reveal the general

condition that moral education has been overshadowed by academic achievement which may hamper the holistic development of our young generation in the local context.

The responses of the participating students about how to enjoy a better life or to cherish life in Part 6 of the questionnaire were similar to the answers of Part 5 in some aspect. All the proposed ways of cherishing life had been grouped into nine categories with the distribution of percentages of students in proposing each category (Figure 40). It was noted that the top three categories were ‘Enhancing interpersonal relationships’ (21%), ‘Self-empowerment’ (21%) and ‘Be happy, positive and relax’ (19%) while the fourth proposed category was ‘Survival, growth or to be healthy’ (14%). This meant that the participating students had perceived that relationships, emotional well-being and physical wellness were the important elements for them to live a better life or to cherish life. It was highlighted that 10% of the participating students had proposed to ‘Be good, friendly and kind’ to others. This finding signifies that they also have a concern to treat others well and to develop satisfying relationships.

Summing up from the findings of Part 5 and Part 6, it could be concluded that ‘Relationships’, ‘Emotional state’ and ‘Physical health’ were valuable for the participating students in their life experiences as well as the priority of concern for them to strive for their future. There were other aspects which were also relevant to their life but were placed at a comparatively lower priority which included ‘Academic achievement’, ‘Morality’, ‘Wealth’ and ‘Talents’. A minority of the participating students had proposed ways to cherish life which were oriented towards the existential aspect of ‘Be true self’, the economic aspect of ‘Be rich’ and the ecological aspect of ‘Environmental protection’.

All these findings from the quantitative part of the study have shown that our primary students are capable to develop diverse perceptions of life and various ways to cherish life. LVE is

aimed at nurturing, consolidating and strengthening the potentials and capacities of our young generation to attain holistic perceptions of life and to cherish their life with fulfillment. It is important to emphasize more on moral education for the primary students, so that they will not only focus on the wellness of themselves or their significant others but to have greater concern for the public welfare.



## **VI. Discussion: A Synthetic Analysis with Cultural Review**

All the primary findings collected from the 30 primary students in the qualitative part and the 576 primary students in the quantitative part of this study are presented in an integrated way for a comprehensive analysis and discussion. Some similarities and distinctive differences of the research participants' responses have helped to answer the research questions of this study, including the perceptions of life among Hong Kong primary students and their proposed ways of cherishing life. Some key issues related to the research theme are also insightful for the further exploration of LVE for our local primary students.

This chapter consists of six sections. The first two sections are the synthetic analysis and discussion of the findings of the qualitative and the quantitative parts of the study on the primary students' perceptions of life and their proposed ways of cherishing life. The third section is a general discussion of some key areas of concern related to the implementation of LVE. The fourth section is a review of the major findings located in the sociocultural context of Hong Kong. The fifth section is the contribution and limitation of this study based on the reflections of the researcher. The last section is the future direction of implementing LVE and its relevant research orientations envisioned by the researcher.

Based on the participating students' explicit and implicit responses disclosed by pictorial images, verbal and written expressions in both parts of this study, further investigation were undertaken to explore their perceptions of 'Life' and proposed ways of cherishing life.

### **6.1 Perceptions of Life of the Participating Students**

All the findings collected from the 30 pieces of pictures with the theme of 'Life' in the qualitative part of this study (Picture A1-DD1) as well as the answers in the first five parts of the 576 valid questionnaires in the quantitative part of the study were summarized and

discussed in an integrated way under the following headings.

### **6.1.1     *Association with the Word ‘Life’***

It was highlighted that over a quarter of the participating students (26.4%) in the quantitative part of this study had not answered the question on their immediate association with the word ‘Life’ or had written ‘No idea’ in Part 1 of the questionnaire. This phenomenon did not appear in the qualitative part of the study because none of the participating students had submitted a blank sheet with nothing drawn on it. It is believed that the ‘Draw and Narrate Approach’ adopted in the qualitative part had encouraged the participating students to exhibit their unlimited creativity and allowed them to illustrate their conceptual thoughts in a more comprehensive and colorful way (Angell et al., 2015; Otgaar et al., 2016) in a comparatively relaxed atmosphere (Kirk, 2007).

There might be a variety of possible reasons for the participants not responding to the question in the quantitative part of the study. It could be argued that life might be too abstract for primary students to reflect upon or to express in words. However, it was observed from Figure 13 that over half of the non-respondents (54%) were in the middle levels (Primary 3 and Primary 4). The corresponding non-respondent rates were 17% in lower levels (Primary 1 and Primary 2) and 29% in upper levels (Primary 5 and Primary 6). This shows that the capacity of primary students to express their ideas about ‘Life’ is not dependent on their age or academic levels. Children at a very young age have already started to develop their individual viewpoint or expectation about the profound reality of ‘Life’. These findings were found to be consistent with the Erikson’s Theory which suggests that children of school age commence to develop abstract concepts about values of life with more basic and social senses (Batra, 2013).

The average non-respondent rate of 26.4% among all the participating students was not low. Disregarding those who might have skipped this question intentionally or carelessly, it could be speculated that a comparatively high proportion of the local primary students might seldom be aware of, concerned for or interested in exploring or sharing about their feelings or ideas of the theme of life. Life for them might just mean going on as a routine arranged by their significant others and they just followed without much reflection or anticipation, especially those who were brought up by authoritarian parents. It is remarked that authoritarian parents may weaken the ability of children to develop their independent thinking and to make their own decisions (Masud et al., 2019).

Thematic Codes of Association with the word 'Life'	Ranking (Percentage)			
	Qualitative Part		Quantitative Part	
Types of life	1	(30%)	1	(39%)
Process of life	2	(13.3%)	2	(14%)
Characteristics of life	4	(10%)	3	(13%)
Religious/ Philosophical concepts	4	(10%)	4	(10%)
Attitude of life	8	(3.3%)	5	(9%)
Significant others	2	(13.3%)	6	(6%)
Self	4	(10%)	7	(4%)
Nature	7	(6.7%)	8	(3%)
Basic needs	8	(3.3%)	9	(2%)

**Table 26.** *List of percentage of different categories of associations with the word 'Life' among primary students in both the qualitative and quantitative parts of the study*

After excluding those who had not responded to the question or marked 'no idea' in Part 1 of the questionnaire, the proportion of each category of association with life was calculated from the remaining 424 respondents (73.6% of all the participating students). The rates of each thematic code in both the qualitative part and quantitative part of the study were listed



chronologically from the highest to the lowest frequency in Table 26 as shown below. The thematic codes which had the same percentage of responses were marked as the same ranking. From the distribution of percentages shown in Table 26, it was indicated that most of the participating students of either the qualitative part or the quantitative part of the study had perceived ‘Types of life’, ‘Process of life’, ‘Life characteristics’ and ‘Religious/ Philosophical concepts of life’ with a greater emphasis. For the other five thematic codes of association with the word ‘Life’, both groups had shown a lower percentage and ranking in ‘Attitude of life’, ‘Nature’ and ‘Basic needs’. However, the participating students of the qualitative study had a higher ranking for the two thematic codes of ‘Significant others’ and ‘Self’ as comparing with those of the quantitative study. According to the chronological sequence from the highest to the lowest frequency of each thematic code as calculated from the response of the research participants both the qualitative and quantitative parts of the study are discussed in the following:

#### ***6.1.1.1 ‘Types of Living Things’***

Referring to Table 26, it was observed that ‘Types of life’ was ranked at the first position for both the qualitative and quantitative parts of the study. In the qualitative part, 30% of participating students (9 out of 30 students) had associated the word ‘Life’ with different types of living things. The majority were from Primary 1 and Primary 3 (3 students each in Primary 1 and Primary 3, 1 student each in Primary 2, Primary 5 and Primary 6). Among all the participating students, 21 students had drawn some ‘plants’ in their pictures while 14 students had drawn some animals. 8 students had drawn ‘Human beings’ whereas 6 students had included some ‘Insects’ (6 students). 3 students had individually portrayed ‘Toy Bunny Rabbit’, ‘Aliens’ and ‘Mountains’ in their drawing. (Figure 4 in Chapter IV). The Primary 1 boy who had drawn his beloved toy Bunny Rabbit in his picture shared that he believed it was

alive. The Primary 3 girl who had drawn an alien in her picture believed that there might be other living creatures existing on other planets of our universe.

In the quantitative part of the study, 39% of the participating students had listed different types of living things like ‘Plants’, ‘Animals’, ‘Human beings’ and others in Part 1 of the questionnaire which requested the participants to write down their immediate association with the word ‘Life’. They were almost evenly distributed from Primary 1 to Primary 6 with the exception in Primary 2 as shown in the relevant relationship map (Figure 11 in Chapter V).

For Part 2 of the questionnaire in the quantitative part of the study, it was noted that about 150 participating students from different academic levels (26%) could correctly differentiate between living things and non-living things from a list of 10 items as shown in Appendix 4. More than 200 students (34.7%) could differentiate 9 out of 10 items as the median value. The mean score was 8.7 with the standard deviation of 1.22 as shown in Figure 15 of Chapter V. It could be interpreted that most participating students could correctly differentiate 8-9 items from the listed items.

It was also highlighted that 23.4% of Primary 4 students and 23.8% of Primary 5 students had chosen ‘Mountain’ as living things while the percentages of 27.3% of Primary 2 students and 17.1% of Primary 3 students had selected ‘Teddy Bear’ as living things. These percentages were much higher than the relevant percentages among the participating students in other primary levels (Table 6 in Chapter V).

The findings of both the qualitative and quantitative parts of the study had shown that primary students were basically capable of differentiating between living things and non-living things. Children at the lower and middle academic levels mainly understand and differentiate life from their physical types of existence. Individual children at different academic levels had

considered toys as living beings. Some students regardless of their ages or academic levels might have an imaginary or explorative tendency to broaden their perception of life to include aliens or mountains.

#### **6.1.1.2 ‘Process of Life’**

It was illustrated that ‘Process of Life’ was ranked at the second position for both the qualitative and quantitative parts of the study. In the qualitative part of the study, it was observed that the four participating students (13.3%) who had used ‘Process of life’ as a thematic code of association with the word ‘Life’ had introduced a wide range of perspectives of life in their pictures. The boy in Primary 6 (Appendix K) and the girl in Primary 5 (Appendix N) had drawn the life journey of a human being which was not only a simple process from birth to death, but also the journey with meaningful activities. K had drawn the human figure helping an elderly to cross the road to demonstrate the spirit of help for the needy while N had drawn life journey with ups and downs to express its instability and the significance of mutual support. Apart from the life journey of humankind, two participating students had associated the word ‘Life’ with the growing process of other living things like plants and butterflies. A girl in Primary 3 had drawn various patterns to illustrate the growing stages of a tree (Appendix BB) whereas a girl of Primary 5 had drawn the four different phases in the process of metamorphosis of a butterfly together with the support of the different growing stages of the plants (Appendix P).

In the quantitative part of the study, it was noted that 58 participating students (14%) had associated the word ‘Life’ with different stages of lifespan, including ‘birth’, ‘growth’, ‘aging’, ‘sickness’ and ‘death’ which were grouped as ‘Process of life’ (Table 5 in Chapter V). Most of the respondents of the quantitative part who had associated life with ‘Process of life’ were from the middle or upper academic levels (Primary 4-6) as shown in the relationship map

(Figure 11 in Chapter V). Meanwhile, the 13.3% of the participating students in the qualitative part who had associated the word ‘Life’ with ‘Process of Life’ were from the middle or upper academic levels including one Primary 3 student, two Primary 5 students and one Primary 6 student (Table 1 and Figure 3 in Chapter IV). These findings showed that school children at the middle or upper academic levels could observe and understand that life involves a series of changes and transformations in the human species and in nature. They could perceive both the biological process of aging as well as the development of interdependent relationships among individual beings as part of the process of life.

#### **6.1.1.3 ‘Life Characteristics’**

It was indicated that both groups of respondents of the qualitative and quantitative parts of the study had also considered ‘Characteristics’ as remarkable in their perceptions of life by ranking in the fourth position with 10% in the qualitative part while in the third position with 13% in the quantitative part.

In the qualitative part of the study, the pictures of three participating students (10%) had been categorized as ‘Life characteristics’ for the thematic code of association with the word ‘Life’ (Figure 2 in Chapter IV and Table 26 in this chapter). One of them was from Primary 2 while two were from Primary 5 as shown Table 1 in Chapter IV.

In the quantitative part of the study, 13% of the participating students had ‘Life characteristics’ as the thematic code of association with the word ‘Life’ in answering Part 1 of the questionnaire (Figure 14 in Chapter V). They had listed different life characteristics like ‘breathing’, ‘heartbeat’, ‘movable’, etc. Most of them were in the middle or upper levels (Primary 4 to Primary 6) as shown in the relationship map (Figure 11 in Chapter V).

It was noted that a great majority of the participating students in both the qualitative and

quantitative parts of this study were capable of identifying a number of life characteristics. It was shown that the participating students of all different academic levels in the quantitative part of the study could successfully identify most of the listed items in part 3 of the questionnaire (Figure 20 and Table 8 in Chapter V) with the mean score of 7.84 (Figure 20 in Chapter V). This result could be interpreted as most students could identify 7-8 life characteristics. Meanwhile, all the 30 participating students in the qualitative part of the study had included altogether 25 life characteristics in their pictures (Figure 6 in Chapter IV). It was indicated that 26.7% of the participating students had listed four or five characteristics while 20% of the participating students had counted in three characteristics (Table 2 in Chapter IV). One girl in Primary 5 had signposted nine life characteristics by herself (Appendix N) while another Primary 3 girl had indicated seven characteristics (Appendix O).

Characteristics of life	Percentage	
	Qualitative Part	Quantitative Part
Breathing	46.7%	95.0%
Communication	6.7%	62.3%
Death	33.3%	73.3%
Feelings	26.7%	85.1%
Growth	66.7%	92.9%
Movement	36.7%	62.5%
Need nutrients/ water	60.0%	91.0%
Reproduction	6.7%	70.7%
Senses	13.3%	79.2%
Thinking	None	67.4%

**Table 27.** *Percentage of identifying life characteristics among primary students in qualitative and quantitative parts of the study*

From the distribution of percentages shown in Table 27, it was indicated that the great majority

of the participating students in both the qualitative and quantitative parts of the study had chosen ‘Breathing’, ‘Growth’ and ‘Need nutrients or water’ as the top three life characteristics. This result could be interpreted as the fundamental perceptions of life among the local primary students were more focused on the physiological aspect of life.

Nevertheless, it was illustrated that a great variety of other life characteristics portrayed or shared from their pictorial, verbal or written ideas had included the psychological, social, relational, philosophical and existential aspects of life. Apart from the ten listed items of life characteristics in the quantitative part of the study, 4.9 % of the participating students (28) had filled in the item of ‘Other’ to specify 21 additional life characteristics. Meanwhile, some other life characteristics had been portrayed among the 30 participating students in the qualitative part of the study (Table 28).

<b>Additional Life Charactersitics Provided by the Participating Students</b>			
<b><i>Qualitative Part of the Study</i></b>		<b><i>Quantitative Part of the Study</i></b>	
Birth	Needs and desires	Affections	Learning
Being created	Nurturing others	Consciousness	Living
Emotions	Protection	DNA	Love
Entertainment	Relationship	Ego	Playing
Faith	Sharing and support	Environmental adaption	Self-protection
Goal-achieving	Shelter	Excretion	Sleeping
Heartbeats or pulses	Sleep	Facial expression	Spiritual connection
Love	Survival	Getting sick	Survival
		Happy	Useful
		Having status	Wisdom
		Heartbeat	

**Table 28.** *Additional life characteristics portrayed by the participating students in both parts of the study*

It was also remarked that 73.3 % of the average participating students in the quantitative part of the study had selected ‘Death’ as a life characteristic. A comparatively higher percentage of students from Primary 4 to 6 and a comparatively lower percentage of Primary 1 to 3 students

had chosen ‘Death’ as a characteristic of life (Table 7 in Chapter V). Simultaneously, only two students (K in primary 6 and N in Primary 5) in the qualitative part of the study had expressed the idea of ‘death’ as the end of the life process in their drawings. Both of them were in the upper academic levels. This might reflect that students at a younger age have less opportunity to notice or encounter ‘death’ in their daily experiences. As death is an inevitable reality of life, so it is essential to start Life and Death education from lower levels as part of the foundational learning.

It was also illustrated that the participating students in the qualitative part were creative in listing the life characteristics with their imaginations. A girl in Primary 4 believed that living things could communicate not only among the same species but could also interact with other types of living things. So, she had drawn a frog greeting her even though she was not present in the picture (Appendix AA).

A girl in Primary 2 had drawn an abstract image of the heart with red arteries and blue veins to illustrate that heartbeat was one of the most significant life characteristics as well as the skeleton and joints for movements (Appendix Z). Another girl in Primary 5 had drawn some human organs with pulses to demonstrate their functions of maintaining the vital signs of life (Appendix D).

Apart from these physical characteristics, it was illustrated that two boys of the same family had drawn the symbolic characteristics of the specific living things. The boy in Primary 3 had introduced the tenacious vitality of a cat for its possession of nine lives (Appendix S) while his younger brother in Primary 2 had remarked that tortoise could be symbolized as ‘longevity’ (Appendix T). Another boy in Primary 6 had chosen the tortoise to represent himself for its slow motions (Appendix H).

#### ***6.1.1.4 ‘Religious or Philosophical Concepts of Life’***

‘Religious/ Philosophical concepts’ ranked at the fourth ranking (10%) in both the qualitative and quantitative parts of the study. In the qualitative part of the study, there were three participating students (two in Primary 3 and one in Primary 6) who had associated the word ‘Life’ with God but in different dimensions, including God’s love (A), redemption (W) and creation (DD). Their drawings had demonstrated that they had developed a religious or philosophical concept of life about the existence of a transcendent being as God. This concept was most probably learned from the religious faith of Christianity or other religions from their family or school life. This indicates that the local primary students may not only be satisfied by fulfilling their basic needs with materials for survival, growth or staying healthy. They may also have a transcendent desire to explore about the essence of our existence, including the origin, meaning and final destination of life.

In the quantitative part of the study, it was noted that the 10% of the participating students, who had given specific answers to Part 1 of the questionnaire, had also associated the word of ‘Life’ with some religious or philosophical concepts to explore the origin and meaning of life (Figure 14 in Chapter V). They were mostly from Primary 4 to 5 as shown in the relationship map in Figure 11 of Chapter V.

These findings had demonstrated that Primary 3 students already had the capacity to perceive the religious or philosophical dimension of life. It can be interpreted that their innate yearning for the sense of spirituality beyond the purely material world could be very genuine and deep. Thus, it is important to enhance the learning experiences of the local primary students to know about spirituality, philosophy and religions so that they can develop the holistic life orientations.



#### **6.1.1.5 ‘Attitudes of Life’**

‘Attitudes of life’ as a thematic code of association with the word ‘Life’ respectively ranked at the fifth and the eighth positions in the quantitative and qualitative parts of the study, It refers broadly to the mentality or ways we are interacting with people or dealing with matters in our daily living. It may be abstract in its definition but it can be felt in our inner self or experienced in interpersonal relationships. Primary students are in their developmental process to nurture their personalities and their attitudes of life as illustrated in Piaget’s Theory of Moral Development (Carpendale, 2009; Mcleod, 2023) as well as Kohlberg’s Stages of Moral Development (Gonzalez-DeHass & Willems, 2013). It is significant and valuable for the participating students to consider ‘Attitudes of life’ as a basic element in their perception of life.

In the qualitative part of the study, one Primary 3 girl (3.3%) had associated the word ‘life’ with ‘Attitudes of life’ by drawing a curve shaped rainbow to express that life was colorful and beautiful with ups and downs (Appendix O). The image and sharing were very profound and rich considering her young age and life experiences. She had expressed a positive outlook on the challenges in life.

Among the 9% of participating students who had responded to Part 1 of the questionnaire in the quantitative part of the study, they had listed out ‘respect all living things’, ‘afraid of death’ and ‘cherishing life’ which were grouped as ‘Attitudes of life’. The respondents were mostly from the middle or upper academic levels (Primary 4 to Primary 6) as shown in the relationship map in Figure 11 of Chapter V. Their responses had touched some in-depth dimensions of humanity including respect, fear and joy.

These findings had illustrated that the local primary students from the middle academic levels

onward had keen intuition and observation of the happenings in their environment. Their instinctive capacity had been developed from a young age to broaden and deepen their understanding about how to live their life.

#### **6.1.1.6 ‘Significant Others: Family’**

‘Significant others’ was understood in a broader sense including family members, teachers, classmates, friends and neighbors whom the local primary students met in their daily life. It was ranked as the second position with 13.3% in the qualitative part while its ranking was the sixth position with 6% in the quantitative part of the study as the thematic code of association with the word ‘Life’.

The four participating students in the qualitative part of the study, who had associated the word ‘Life’ with their significant others, had drawn and shared their happy moments of being with their families (Appendix C, V, L & M). They were distributed in lower, middle and upper levels (Table 1 in Chapter IV). It was highlighted that a boy in Primary 1 had drawn his beloved toy Bunny Rabbit which was considered as one of his family members but he had excluded his domestic helper who took care of his daily living (Appendix V). Another boy in Primary 3 had missed including himself in the symbols of his family as a part of his picture (Appendix W). When he was asked for the reason of his absence in the picture, he kept silent and his mother replied for him by saying that he might have forgotten to do so.

For the quantitative part of the study, 6% of the participating students who had answered Part 1 in the questionnaire had associated the word ‘Life’ with their significant others like parents and family (Figure 14 in Chapter V). They were almost evenly distributed among all different levels (Primary 1-Primary 6) as shown in the relationship map in Figure 11 in Chapter V.

The participating students of the quantitative part of the study were requested to have a self-

rating of the level of satisfaction with different aspects of life in Part 4 of the questionnaire. Their rating at family life was served as an indirect indicator to understand how they had perceived their significant others in the family context. Based on the observations of the trend of the mean scores in the levels of satisfaction about 'Family life' by academic level and gender (Figure 28 in Chapter V), there were very visible differences among the male and female primary students at different academic levels.

From the findings of the qualitative part of the study, it was clear that all the participating students of different primary levels had perceived family as significant and treasured the happy moments spent with their family members. Meanwhile, the findings of the quantitative part of the study had demonstrated that gender and academic levels had some significant bearings for the primary students' levels of satisfaction in family life.

#### ***6.1.1.7 'Significant Others: School and Peers'***

Apart from family members, teachers and peers were considered as the other group of significant others for primary students as they were supposed to spend most of their daytime at school. Nevertheless, it was illustrated that none of the participating students had associated the word 'Life' with their schools in the qualitative part of the study. It was speculated that the suspension of school during the pandemic of COVID-19 when this study was undertaken was one of the contributing factors for this phenomenon.

It was highlighted that four participating students (13.3%), including two girls (Y in Primary 3 and U in Primary 5) as well as two boys (X in Primary 3 and H in Primary 6) had drawn their pets, like dog, cat and tortoise as their companions. Furthermore, there were two drawings which had indicated a spirit of friendship. A Primary 4 boy had drawn himself playing football with his friends in the playground (Appendix L) while another boy in Primary 6 had

added a friend to play with him as the way of cherishing life (Appendix H). These two drawings had shown that boys might relate with their peers in a more active way in playing games of sports with team spirit whereas girls might prefer more verbal games as advocated by Papalia & Martorell (2021).

The levels of satisfaction with ‘School life’ and ‘Friendship’ rated by the participating students in Part 4 of the questionnaire in the quantitative part had provided some information for the researcher to understand how they had perceived school life and relationship with their peers. It was observed that most students in different primary levels had rated their school life as ‘satisfied’ or ‘very satisfied’ as shown in the boxplot (Figure 29 in Chapter V).

Nevertheless, it is remarked that girls’ levels of satisfaction of school life frustrated more obviously among different academic levels than those among boys as demonstrated in Figure 30 of Chapter V. This can be explained that girls are more likely to engage in prosocial interactions through social conversations and self-disclosure to develop intimate relationship which may heighten their vulnerability to emotional fluctuations or their level of satisfaction (Rose & Rudolph, 2006). This proposition is also supported by the previous research which have indicated that girls generally experience higher levels of interpersonal stress particularly in friendships with greater psychological and emotional investments than boys (Rudolph, 2002).

#### **6.1.1.8 ‘Self’**

‘Self’ as a thematic code of association with the word ‘Life’ was ranked at the fourth (10%) and seventh (4%) respectively among the participating students in the qualitative and the quantitative parts of the study. The association of ‘Life’ with oneself sometimes was not so visible but it was highly important in our perception of life as the self is the core of self-identity and in the development of interpersonal relationships.

For the qualitative part of the study, it was noted that the three participating students who had associated the word ‘Life’ with ‘self’, were all in the lower academic levels (Primary 1 to Primary 3). A girl in Primary 1 had drawn seven female figures with similar hairstyle but in different dressings together with a male figure who was with wings and flying up with two other female figures (Appendix I). Although she had denied of drawing her own self in the picture but it could be a subconscious representation of herself. Besides, a boy in Primary 2 had drawn himself as a cartoon figure which was the main character of the storybook his mother recently shared with him at bedtime (Appendix Q) while another boy in Primary 3 had drawn himself with his dog to indicate that they are individual beings with different needs and desires (Appendix X).

Among the twenty participating students who had included human figures in their pictures, eight of them (40%) had not included or denied of including the ‘self’ in the pictures while nine of them (45%) had included their families in their pictures or in the interviews. The eight participating students who had not drawn the ‘self’ in their pictures were invited to choose any appropriate items from their pictures to represent themselves. Three girls had respectively chosen the butterfly (Appendix F), the prettiest girl (Appendix I) and the red fish (Appendix R) because of the outlooks whereas the other four children had chosen to be the tortoise (Appendix H), the human figures along the red line (Appendix N), the seeds (Appendix BB) and the owl (Appendix DD) because of their symbolic characteristics, including slow motions, enjoying achieving goals, energetic and having a broader view from a higher position. Another girl had not put herself in her picture but she was still present in an abstract way as she saw a frog inside the picture was greeting her (Appendix AA).

From the projective data revealed in the drawings with different sizes, locations and colors of the figures, some personal inclinations or personality traits of the participating students were

identified. It was observed that two students (6.7%) tended to be extroverted and self-centered (E & J) while three others (10%) were more likely to be insecure and withdrawn (H, N & Z). One student (3.3%) had shown his strong self-confidence (S). Most participating students were happy with positive mind-sets as revealed in their pictures.

For the quantitative part of the study, the 4% of participating students, who had associated the word ‘Life’ with ‘self’, were almost evenly distributed in all different academic levels (Primary 1 to Primary 6) as shown in the relationship map in Figure 11 of Chapter V.

Referring to Part 4 in the questionnaire in the quantitative part of the study, the perception of self of the participating students could be indirectly revealed in their self-evaluation. It was illustrated that most students in Primary 1 to Primary 3 had expressed that they were ‘satisfied’ or ‘very satisfied’ with themselves. Nevertheless, it was observed that there was a wide range of variations in the level of satisfaction about ‘self’ among the students of Primary 4 to Primary 6. It was also noted that more participating students in upper academic levels had evaluated their ‘self’ as ‘dissatisfied’ or even ‘very dissatisfied’ as shown in Figure 25 of Chapter V.

The mean scores in the level of satisfaction about ‘Self’ by academic level and gender (Table 11 and Figure 26 in Chapter V) had demonstrated that there was a close relationship between the level of satisfaction about ‘Self’, gender and the academic levels for the participating students. It was indicated that most participating students had shown a tendency to drop in their levels of satisfaction about their own ‘self’ when they moved on to higher academic levels. This is a transitional period when they gradually grow up from children to become adolescents during puberty. It is reported that there is an increasing prevalence of precocious puberty among girls aged less than eight years old and boys aged less than nine years old due to the genetic, nutritional, environmental and socioeconomic factors (Latronico, et. al., 2016; Yan, et.al., 2022). With the obvious discrepancies in the changes of body shapes among their peer

groups, girls with early onset of normal puberty are inclined to encounter more psychological concerns with self-stress which may lower their self-esteem with a feeling of loneliness and even depression (Kim & Lee, 2012). This may negatively impact their psychosocial wellness and may even lower their levels of satisfaction about their family life, living environment, school life and friendship if they have not received sufficient guidance and support.

It was highlighted that there were students from different academic levels and especially the female students of Primary 4 to Primary 6 who had evaluated the level of satisfaction about their own self as ‘very dissatisfied’ (Figure 25 and 26 in Chapter V) which could be considered as having low self-esteem. Both parents and the school personnel have to be alerted to this condition. Since primary students in the upper academic level will become secondary level students in a very short time and they will face even more life challenges, so there is a great urgency to help them to develop a positive perception of self with better self-understanding, self-acceptance and self-esteem for a healthy construction of their self-identity.

#### **6.1.1.9 ‘Nature’**

‘Nature’ and human existence are inter-dependent and mutually influenced in all ages and in all parts of our earthly world. All living beings are supported and nurtured in our natural environment for survival, subsistence and development. ‘Nature’ as a thematic code of association with the word ‘Life’ has a very profound.

In the qualitative part of the study, it was noted that two girls in Primary 4 (6.7%) had associated the word ‘Life’ with the ‘Nature’. One girl had drawn some plants on the grassland with a big white cloud (Appendix E). She had shared that she liked to stay in the natural environment. The other girl had drawn some animals and plants in the pond like a place at which she had once spent a happy vacation in China (Appendix AA). In the quantitative part

of the study, 13 participating students who had answered Part 1 of the questionnaire (3%), had associated ‘Life’ with the ‘Nature’ as shown in Figure 14 in Chapter V.

The number of participating students who had associated ‘Life’ with the ‘Nature’ in both the qualitative and quantitative parts of the study were relatively small. However, it was significant that our primary students had not neglected the role of nature in their perception of life. The sharing of AA was a good illustration of the importance of experiential learning and exposure to the natural environment. It is essential and worthy to deliver learning opportunities for our primary students about the close relationship between the nature and our daily living through interactive and experiential learning.

#### **6.1.1.10 ‘Basic Needs’**

‘Basic needs’ as a thematic code of association was at the last ranking for both parts of the study. It may be explained that the participating students were generally not deprived of basic needs and thus it was not a major concern in their association with the word ‘Life’. They were probably more inclined to consider other areas of desires to fulfill higher levels of human needs as demonstrated by Maslow’s Hierarchy of Human Needs (Taormina & Gao, 2013).

In the qualitative part of the study, it was noted that one boy in Primary 1 (3.3%) had drawn some decorations of his home and his toys because a comfortable living environment and his toys were important in his life (Appendix B) as part of his basic needs. Among the participating students who had answered Part 1 in the questionnaire of the quantitative part of the study, eight of them (2%) had associated the word of ‘Life’ with the ‘Basic needs of life’ (Figure 14 in Chapter V), including ‘nutrients’, ‘water’ and ‘air’. All these are necessary elements for living things to survive, grow and stay healthy.

As basic needs can be interpreted to include physical accommodation for shelter and comfort,



it was remarkable to note that the level of satisfaction with the living environment for girls were generally lower than that of boys in all academic level except in Primary 1. It can be suggested that the early onset of puberty of adolescents as discussed above (Table 12 and Figure 32 in Chapter V) may be a reason for the girls to be less satisfied with their living environment as they most probably will expect to have a more spacious living place with greater privacy.

### ***Summary***

In analyzing the thematic codes of association with the word ‘Life’ for the qualitative and quantitative parts of the study, a few observations were noted and outlined as follows:

- 1) A variety of thematic codes with multiple dimensions were shared by the participating students in their free association in drawing or in answering the open-ended question in Part 1 of the questionnaire. Nine categories of thematic codes have covered different aspects of life, including the physical aspects (‘Types’, ‘Process’, ‘Characteristics’ and ‘Basic needs’), the psychological and sociocultural aspects (‘Significant others’, ‘Self’ and ‘Nature’) as well as the existential or transcendent aspects (‘Attitude’ and ‘Philosophical/ religious concepts’).
- 2) It was indicated that the research participants have the capacity to perceive the sense of selfhood as well as the philosophical or religious concepts by exploring the existential questions of ‘Who am I?’ and ‘What is my life?’ even a young age. Thus, LVE as a far-reaching and lifelong holistic human developmental process should be enhanced with experiential learning model in primary schools to develop their spiritual wellness with the awareness of ‘ultimate concern and practice’, ‘ethical thinking and reflection’ and ‘exploration of integrity’ (Sun & Lee, 2021, p.43).
- 3) The order of ranking of the thematic codes of association was found to be quite similar

for the responses of both parts of the study. It was observed that a greater number of students had their immediate association of ‘Life’ with the more tangible aspects and a comparatively smaller number of students had associated with the psychological, social or existential aspects of life. ‘Basic needs’ was at the last ranking for both parts of the study.

Wrapping up all these integrated findings, it can be concluded that our local primary students have a wide range of interpretations of the word ‘Life’ with different associations. It is remarked that creative and inspired ideas were demonstrated in the qualitative part of the study while statistical data of the quantitative part of the study had helped to strengthen the foundation of understanding. A higher percentage of the participating students had associated the word ‘Life’ with the thematic codes which are visible, tangible and concrete. It can be explained by Piaget’s Cognitive Developmental Stage Theory which advocates that primary students are in the third stage of cognitive development, that is the concrete operational stage. Children in this stage start to acquire concrete logical operations (Sigelman & Rider, 2018). They are generally interested in exploring their surrounding environment as well as the natural world with their innate curiosity and to develop their ‘self’ and sense of autonomy.

It is noted that the participating students have developed their perceptions of life through their observations and daily life interactions with their significant others as well as the diverse channels of communications. Their perceptions of life are multidimensional, touching the physiological, social, philosophical and environmental aspects. It is corresponding to Maslow’s Theory of Hierarchy of Needs as human beings are aspiring for different levels of needs in life. It is noted that academic level and gender of the participating students have shown certain impacts on their levels of satisfaction of life which is an area that requires further investigation in the study in LVE.

## 6.2 Proposed Ways of Cherishing Life

Thematic Codes of Proposed Ways of Cherishing Life	Ranking (Percentage)			
	Qualitative Part		Quantitative Part	
Enhancing interpersonal relationship	3	(16.7%)	1	(21%)
Study hard or Self-empowerment	Not applicable		1	(21%)
Be happy, positive and relax	2	(20%)	3	(19%)
Survival, growth and be healthy	1	(26.7%)	4	(14%)
Be good, friendly and kind	5	(13.3%)	5	(10%)
Be true self	Not applicable		6	(7%)
Be rich	Not applicable		7	(3%)
Environmental protection	6	(6.7%)	9	(2%)
Enriching life	3	(16.7%)	Not applicable	
Others	Not applicable		7	(3%)

**Table 29.** *List of percentage of different categories of ways in cherishing life among primary students in both qualitative and quantitative parts of the study*

Similar to the previous section on ‘Perceptions of Life’, a list of thematic codes of the ‘Proposed ways of Cherishing Life’ were generated from all findings of both the qualitative and quantitative parts of the study as shown in Table 29. The 78 participating students (13.5%) in the quantitative part of the study, who had not answered the question on proposed ways of cherishing life (Part 6 in the questionnaire) or marked as ‘No idea’, had been excluded in the calculation of proportion. The response rate of proposing ways in cherishing life was 100% for the qualitative part of the study since the researcher had collected verbal answers from the interactive interview with the four participating students (13.3%) who had not submitted their final pictures for different reasons, including the absence of space in their original pictures (E and DD), loss of the original picture (BB) or considering the original picture was already perfect (K).

It is considered that the proposed ways of cherishing life by the participating students are closely related with their values and priorities in life. Thus, the answers collected from Part 5 in the questionnaire of the quantitative part of the study were used together with the distribution of thematic codes in the integrated analysis. The participating students were requested to choose three most important items for their life from a list of eight items. The synthesis of all findings from the integrated analysis are presented chronologically from the highest to the lowest frequency in the quantitative part of the study as shown below:

### **6.2.1 ‘Enhancing Interpersonal Relationship’**

It was indicated that 21% of the participating students in the quantitative part of the study, who had answered Part 6, had suggested different ways in ‘Enhancing interpersonal relationships’. The answers of Part 5 in the questionnaire which revealed the respondents’ ‘Preferences of Priority’ had indicated that 82% and 39% of all the participating students had respectively selected ‘Family’ and ‘Friends’ as one of the three most important items for their life (Table 14 in Chapter V). ‘Family’ was also chosen by the participating students at different academic levels with the highest percentage (73%-90%) except in Primary 3 and Primary 5 as shown in Table 17 in Chapter V. The percentages of selecting ‘Friends’ as important for them varied from 27% to 41% for all different academic levels of the participating students (Table 17 in Chapter V).

In corresponding to the qualitative part of the study, it was designated that 13.3% of the participating students, who had associated the word ‘Life’ with significant others (Table 26), had drawn and shared the happy moments with their families. On the other hand, five participating students (16.7% as shown in Table 29) had recommended cherishing life by ‘Enhancing interpersonal relationships’. The proposed ways were sharing happiness with others (Appendix C), securing the blessings from family (Appendix D), enjoying happy

moments with family (Appendix E), mutual sharing of love with communication (Appendix I) as well as playing with others as companions (Appendix H).

### **6.2.2     *‘Study Hard and Self-empowerment’***

It was noted that 21% of the participating students in the quantitative part of the study had recommended studying hard or other different ways of self-empowerment as ways of cherishing life in Part 6 of the questionnaire. This finding was found to be aligned with Part 5 of the questionnaire with ‘Preferences of Priority’. It was illustrated that 22% of the participating students had selected ‘Academic achievement’ as one of their three preferences of priority in life (Table 16 in Chapter V). The choice of ‘Academic achievement’ as one of three most important items varied from 16% to 26% among different academic levels as shown in Table 17 in Chapter V).

‘Talents’ can be considered as one of the contributing factors for academic achievement. It was noted that 8% of the participating students in the quantitative part had chosen ‘Talents’ as their first three preferences of priority (Table 16 in Chapter V) while the percentages of ‘Talents’ as a preference of priority varied from 5% to 13% among different academic levels of the participating students (Table 17 in Chapter V). Nevertheless, it was signposted that no participating student in the qualitative part of the study had suggested ‘Academic achievement’ or ‘Talents’ as a way for cherishing life.

### **6.2.3     *‘Be Positive, Happy and Relax’***

It was reported that 19% of the participating students in the quantitative part of the study had suggested ‘Be happy, positive and relax’ as a way in cherishing life (Table 29). It was also illustrated that 50% of the participating students had selected ‘Happiness’ as their first three preferences of priority for life (Table 16 in Chapter V). The percentages of choosing

‘Happiness’ as one of three important items for life varied from 47% to 58% among the participating students of different academic levels (Table 17 in Chapter V).

Aligning with the findings in the qualitative part of the study, it was demonstrated that six participating students (20%) had proposed to ‘Be happy, positive and relax’ for cherishing life with different sorts of entertainment, including playing with their favorite toys (Appendix B), eating and playing (Appendix J), listening or playing music (Appendix N), watching television (Appendix Q), enjoying in the nature (Appendix U) as well as smiling (Appendix W).

The students had demonstrated two dimensions of happiness, including the material sense and the psychological sense. Happiness is not only predominant with material satisfactions. It also embraces deep joy and serenity in relating with ourselves, others and our environment. Thus, as advocated by the Chinese philosopher Confucius, a good life is not only in the fulfillment of one’s own desires but also a life rich in ethical pleasure with ritual and virtue (Luo, 2019).

#### **6.2.4 ‘Survival, Growth and Stay Healthy’**

It was observed that 14% of the participating students in the quantitative part of the study had proposed different avenues for ‘Survival, growth and staying healthy’ as ways to cherish life (Table 29). It was also noted that 81% of the participating students in the quantitative part of the study had chosen ‘Health’ as one of the three most important items for life (Table 16 in Chapter V). The percentages of selecting ‘Health’ as one of the three preferences of priority in life varied from 76% to 86% among the participating students of different academic levels (Table 17 in Chapter V).

In the qualitative part of the study, it was illustrated that eight participating students (26.7%) had suggested a number of ways for ‘Survival, growth and staying healthy’ to cherish life

(Table 29). Half of them (50%) had added different types of food and water in their pictures for nurturing the growth and survival of various species of living things (Appendix F, G, S and T). Apart from food and water, it was highlighted that the sun was essential for the growth of plants (Appendix L) by giving light and warmth (Appendix AA) while red blood cells were essential for human bodies to maintain life (Appendix Z). A student had added some trees and recreational facilities for human beings to show that people need the nature and leisure for our well-being (Appendix Y).

### **6.2.5 ‘Be Good, Friendly and Kind’**

It was reported that 10% of the participating students in the quantitative part of the study had proposed ‘Being good, friendly and kind’ for cherishing life (Table 29). Similar to ‘Happiness’ as discussed above, it pertained to the perspective of attaining a life rich in ethical pleasure and benevolence cultivated in a person’s heart. This is closely related to the development of morality and ethical judgement.

The quality of goodness and kindness was also valued by the participating students as reflected in their ‘Preferences of priority’. It was observed that 18% of the participating students in the quantitative part of the study had selected ‘Morality’ as one of the three preferences of priority in life (Table 16 in Chapter V). The percentages of choosing ‘Morality’ as one of three most important items for life among the participating students of different academic levels had shown that students at the upper levels (22%-26%) had expressed a greater appreciation of morality than the students at the lower or middle levels (12%-17%) as shown in Table 17 in Chapter V. This can be explained by both Piaget’s Theory of Moral Development and Kohlberg’s Stages of Moral Development. Piaget advocates that primary students in the lower levels, who are under the age of 9, are in the heteronomous morality stage (Carpendale, 2009; Mcleod, 2023) whereas Kohlberg considers that they are in the pre-conventional level of

moral development (Gonzalez-DeHass & Willems, 2013). Both Piaget and Kohlberg have suggested that children at that stage tend to obey the authority figures through observable consequences so as to avoid punishment. When they become older, they will gradually internalize their moral standards with the social norms (McLeod, 2023; Gonzalez-DeHass & Willems, 2013). Hence, students in higher academic levels are expected to have a higher level of moral senses to make moral judgements based on their consciences.

In the qualitative part of the study, it was noted that four students (13.3%) had recommended to ‘Be good, friendly and kind’ in order to live a better life (Table 29). K had shared that it was necessary to help the needy with mutual support whereas O believed that faith, love and perseverance were essential elements for cherishing life (Appendix O). V had proposed to take good care of his beloved Bunny Rabbit by adding a bed for it to sleep while X had emphasized the importance of love and kindness by adding some hearts in the picture.

#### **6.2.6      ‘Environmental Protection’**

It was reported that 2% of the participating students in the quantitative part of the study had proposed different ways to protect the natural environment in cherishing life (Table 29). It was in alignment with the findings in the qualitative part of the study which illustrated two participating students (6.7%) had recommended concrete measures to protect the natural environment and to minimize pollution by placing recycle bins (Appendix P) and using eco-friendly products (Appendix R) in their pictures.

#### **6.2.7      ‘Be True Self’ or ‘Be Rich’**

It was found that 7% and 3% of the participating students in the quantitative part of the study had relatively proposed to ‘Be true self’ and ‘Be rich’ as ways to cherish life (Table 29). Even though the percentages were relatively low, the children’s proposed ideas to live a better life



could not be ignored. Being a true self to cherish life is basically a very profound and existential perspective of life even for adults. The perception and interpretation of primary students to be their true self in cherishing life is of significance for further exploration as they can have far-reaching impacts on their human development. To be rich is usually referred to the material affluence for a decent living or to enable a person to enjoy a better life. However, richness can also be understood from various dimensions. Thus, it is also important to learn more about children's perception of being rich and how to cherish life with richness.

Meanwhile, it was remarked that 9% of the participating students in the quantitative part of the study had selected 'Wealth' as one of their first three preferences of priority in life (Table 16 in Chapter V). It was also observed that students in Primary 6 (15%) and Primary 1 (14%) had higher percentages in choosing 'Wealth' as one of the three most important items for life while the students of other academic levels from Primary 2 to Primary 5 had shown a much lower range of percentage from 3% to 8% in choosing 'Wealth' as a preference (Table 17 in Chapter V). It was remarked that no participating student in the qualitative part of the study had suggested 'Being true self' or 'Being rich' for cherishing life (Table 29).

### **6.2.8 *'Enriching Life' or 'Others'***

In the qualitative part of the study, it was noted that five participating students (16.7%) had proposed 'Enriching life' as a way to enjoy a better life (Table 29) by adding some more plants or animals to illustrate the diversity of life (Appendix M, BB and DD), praying to improve our life with faith (Appendix A) as well as through the interpersonal relationship among human beings and interactive relationship among different living things (Appendix CC).

In the quantitative part of the study, none of the participating students had recommended 'Enriching life' to cherish life (Table 29). However, 3% of the participating students had

listed a number of ways for cherishing life. All these proposed ideas were grouped and categorized as ‘Others’ including ‘Being lazy’, ‘Companionship’, ‘Having a peaceful world’, ‘Orientation of life’, ‘Improving living environment’, ‘Less restriction or more freedom’, ‘No disasters’ as well as ‘No need to cherish life’ as shown in Table 19 of Chapter V. The list of ‘Others’ contained a number of ideas which might not be presented in a systematic way. Yet, these pieces of ideas had also reflected the deep aspirations of the primary students to live with people harmoniously in a relaxed and peaceful environment and to live with a purpose and meaning.

### ***Summary***

Wrapping up all these integrated findings, it can be concluded that local primary students have a wide range of proposed ways of cherishing life which are rich and realistic in content as well as concrete and practical in implementation. They had embraced a wide spectrum of human living including self-care, relationship building, nurturing morality and the ethical aspects of life, personal obligations and social responsibility. The proposed ways of cherishing life among our young generations had been and would be impacted by their perceived values of life, exposure to learning and most importantly the availability of guidance and support from their significant others. It was observed that more creative and inspired ideas had been collected from the quantitative part of the study in comparison with the qualitative part of the study. This may be understood as the original picture had set up a frame which might inhibit the creativity of the participating students to move beyond the frame to add in new ideas of proposed ways to cherish life. Nevertheless, it reflects the reality that we all live with different sorts of predetermined situations which may impact our ways of living. For the participating students in the quantitative part, no such limitation was present and they were free to propose any idea in cherishing life.

### **6.3 General Discussion of Issues Related to the Delivery of LVE**

Apart from the findings to understand the perceptions of life and proposed ways of cherishing life among the local primary students, the study had brought up some issues worth further exploration in the research, design and delivery of LVE as illustrated below.

#### **6.3.1 *Acquired Knowledge and Intuitive Knowledge***

The wide range of perspectives of life shared by the research participants showed clearly that the local primary students had perceived different dimensions of life, including the physiological, psychological, social and even the existential aspects. Their scope of life could be considered as three-dimensional, containing their inner self, relationship with people and other living beings as well as their external environment.

Their understanding of life was basically formed and developed through acquired knowledge accessed through observations and interactions with their significant others at home or in school as well as the information gathered from school or the mass media especially the internet. The intuitive knowledge generated from their innate capacities were also reflected in their insightful sharing and imaginative drawings. This kind of knowledge is unique for different individuals and requires time and mental space for its development. It is important to provide sufficient guidance, resources and opportunities to enhance the primary students to learn how to live a good life through gaining acquired knowledge and developing intuitive knowledge in the delivery of LVE.

#### **6.3.2 *Gender or Academic Levels***

The findings of the quantitative part showed that gender or academic level of the participating students had influenced their perceptions of life. Examples of the influence of gender or academic levels are shown in the following two areas:

### ***6.3.2.1 Satisfaction of Life***

The findings of the self-rating of the level of satisfaction in the different aspects of life had illustrated the great variations among the male and female participating students of different academic levels. For both boys and girls, the higher their academic level, the lower they felt satisfied with themselves (Figure 26 in Chapter V). Girls tended to have more fluctuating levels of satisfaction with their ‘Family life’ (Figure 28 in Chapter V), ‘School life’ (Figure 30 in Chapter V), ‘Living environment’ (Figure 32 in Chapter V) and ‘Friendship’ (Figure 34 in Chapter V). The levels of satisfaction in different aspects for boys were relatively more stable and closer to the average mean at all academic levels with moderate changes. These findings seem to be in line with another study which designated that girls were more rationally aggressive and emotionally sensitive (Zimmer-Gembeck & Duffy, 2014). Thus, girls tend to be more susceptible to disruptions in their interpersonal relationships (Rudolph, 2002).

### ***6.3.2.2 Capacity and Readiness for Sharing***

Among the 152 non-respondents (26.4%) in the quantitative part of the study who had not answered or marked ‘No idea’ in sharing their immediate association with the word ‘Life’, it was found that 17% of them was from the lower-levels, 54% was from the middle academic levels and 29% was from the upper academic levels (Figure 13 in Chapter V). The distribution of the 78 non-respondents (13.5%) in the quantitative part of the study who had not shared about their proposed ways in cherishing life was rather evenly distributed among different academic levels (Table 18 & Figure 38 in Chapter V). These findings seemed to indicate that the capacity and readiness of the primary students to share their perceptions of life or ways to cherish life are not directly related to their age or academic level.

### **6.3.3      *Content of LVE***

#### **6.3.3.1    *'Death' as an element of Life***

It is signposted that children aged around 5 or 6 years old can understand death as an inevitable biological fact (Slaughter, 2005). They can perceive that every living being will die even though the concept is complex and emotionally loaded. Nevertheless, it was shown that 10 participating students in the qualitative part of the study (33.3%) had mentioned death (Figure 6 in Chapter IV). In the quantitative part of the study, the participating students of Primary 1 had shown the lowest percentage (57.6%) to perceive 'death' as a life characteristic (Table 9 in Chapter V). It was demonstrated that primary students generally were more aware of 'Death' as part of life as they were getting older. With the awareness of 'death' or 'loss', children learn to appreciate life and cherish their time with their significant others. In this way, death is not just a natural part of the biological process in the finite lifespan but it is also an element of living. Thus, 'death' as an important aspect of life needs to be included with special attention in the design and delivery of LVE for our young generations.

#### **6.3.3.2    *Important Items for Life***

Requesting the research participants to choose the three most important items for life served as an indicator to explore their values and to understand what was considered to be more precious and meaningful to them. The findings of Part 5 of the quantitative part of the study had recorded the percentages of the participating students' preferences regardless of their academic level and gender to choose the three most important items for life as follows: Family (82%), Health (81%), Happiness (50%), Friends (39%), Academic Achievement (22%), Morality (18%), Wealth (9%) and Talents (8%). (Table 16 in Chapter V). Their preferences had provided a clue for educators to locate the scope of content of LVE which could be of greater

relevance and interest to the primary students and to involve their participation in the learning process.

#### **6.3.4 *Companionship and Caring***

From the findings of the qualitative part of the study, it was illustrated that companionship was utmost important for the participating students. Twenty participating students had included human figures in their drawings or in sharing. Eight of them (40%) had shared their experience of being with their family members while seven students (35%) had shared their experience of being with their peers. In addition, six and two other participating students had respectively shown their attachment to companions, either with their pets (30%) or with their favorite toys (10%). The pet or toy might become a bonding and support for them to face their loneliness. The attachment figure can provide a dependable source of comfort and security as well as a medium for them to express their affection for nurturing their emotional development. It is also suggested that by hugging their favorite toys, children can experience a sense of love and affection with more connections to the world around them (Hartwig & Signal, 2020).

Even some participating students in the qualitative part of the study might have expressed a sense of loneliness, it was also noted that none of them had included their foreign domestic helpers in their drawings. The existence and contribution of the foreign domestic helpers who took care of their daily living seemed to be undervalued or neglected in comparison with their favorite toys which had a position in the pictures. Thus, it is a good reminder to promote a sense of gratitude and equality among our local primary students to respect everybody regardless of our ethnicity, gender, religion, occupation or social status.

#### **6.4 This Study in the Sociocultural Context of Hong Kong**

As inspired by Vygotsky's Sociocultural Theory of Human Cognitive Development, it is believed that the cultural and social factors play an integral role in the process of human cognitive development which is a socially mediated process to acquire cultural values, beliefs and problem-solving strategies. LVE as a life-transforming journey in love is intrinsically influenced by the sociocultural factors of the social milieu. Thus, it is significant to understand the findings of this study in the local sociocultural context in which our primary students live and grow to become adults.

Hong Kong is a multi-ethnic city where people migrate from the mainland of China and foreign countries with a variety of cultural backgrounds who have shared a sense of belonging and maintain continuous interactions in daily living (Cheung & Montecinos, 2019). Even though over 91% of its total population are Chinese (Census and Statistics Department, 2024), Hong Kong is characterized with a multi-faith diversity of beliefs and practices for its geographical and historical factors. In this multicultural socio-political environment, Hong Kong society has developed a fusion of Eastern and Western cultures. It is illustrated that individuality with one's uniqueness and self-actualization are valued in the western cultures of individualism (Orange, 2011) whereas individuals as part of the family is emphasized in the eastern traditions of collectivism (Wang & Ollendick, 2001). Confucianism, Daoism and Buddhism of the Chinese traditionalism are juxtaposed with Christianity of the Western modernism to form a macro-cultural balance.

Living in a city of cultural hybridity, Hong Kong people are inclined to embrace the dual qualities of Chinese and Western cultures and values. They generally abide with western cultural values and maintain the Chinese traditional practices in daily life (Chang, 2019). It is noted that most Hong Kong people still practice Confucianism as their primary behavioral code and moral fabric, regardless of their religion (Central Intelligence Agency, 2024).

Simultaneously, they have also developed a strong sense of respect for human rights and follow the rule of law as cultivated from the western culture (Cheung, 2019).

Apart from Confucianism, Taoism and Buddhism which are the three major pillars of Chinese traditional cultures, different beliefs and practices derived from the polytheistic belief system of the folk religions have also profoundly impacted the complexity of social life of Hong Kong people. Consequently, there is a prevalence of traditional cultural beliefs and myths about life and death originated from a variety of sources, including legends, folktales, historical anecdotes and mythical figures of classical novels. Some are recorded in their ancient writings while others are living myths transmitted verbally in scattered and fragmented forms from generations to generations (Yang & An, 2008). This phenomenon is noticed in the qualitative part of this study in which one of the participating students has heard from his grandfather that a cat can have nine lives (Appendix S) whereas another participating student believes that tortoise is the symbol of ‘longevity’ for its long lifespan (Appendix T).

From the major findings of this study, the themes of ‘ecological senses’, ‘religious or philosophical concepts’, ‘family’, ‘self’, ‘interpersonal relationship’ and ‘death’ have emerged and highlighted for further exploration with the sociocultural factors in the local context of Hong Kong as discussed in the following:

#### **6.4.1 Ecological senses:**

It is claimed that children who live in rural environment spend more time in nature and have more frequent connections with the nature in comparison with those who live in the urban cities (Rosa et al., 2019; Duron-Ramos et al., 2020). The children who live in the rural areas also tend to have stronger ecological senses and environmental responsibility (Evans et al., 2018).

Nevertheless, this study has shown that our new generation have developed the awareness of



the ecological aspects of life even though the great majority of the population live in a highly urbanized milieu. It was noted that 63.3% and 71% of the participating students in the qualitative and quantitative parts of this study had respectively associated the word ‘Life’ with ecological concepts, including ‘Types of life’ (30% in the qualitative part and 39% in the quantitative part), ‘Process of life’ (13.3% in the qualitative part and 14% in the quantitative part), ‘Life characteristics’ (10% in the qualitative part and 13% in the quantitative part), ‘Nature’ (6.7% in the qualitative part and 3% in the quantitative part) as well as ‘Basic needs’ (3.3% in the qualitative part and 2% in the quantitative part). All these figures can be found in Table 26.

Simultaneously, it was demonstrated from Table 29 that 50.1% and 16% of the participating students in the qualitative and quantitative parts of this study had respectively proposed different ways in cherishing life which were embedded with ecological senses, including ‘Survival, growth and be healthy’ (26.7% in the qualitative part and 14% in the quantitative part), ‘Enriching life’ (16.7% in the qualitative part) as well as ‘Environmental protection’ (6.7% in the qualitative part and 2% in the quantitative part).

It is remarked from the aforementioned findings that the local primary students have developed the ecological senses even though they live in the densely populated urban city. Through the active learning and keen observations in their daily life experiences as well as the easy accessibility of information through mass media with advanced information technologies, they can portray many other features of life apart from the more predominant life characteristics in both the qualitative and quantitative parts of this study (Figure 6 in Chapter IV and Table V in Chapter V). The participating students at their young age can understand that various organs in our body are performing different functions to sustain our life and to maintain our daily activities (Appendix D and Appendix Z). They can perceive that various species of living

things may have a variety of needs and desires but they all need love and care (Appendix X). With their creativity, they can also imagine that there may be living things on other planets (Y) in the cosmos and interactive communications may be possible among different types of living things (Appendix AA).

#### **6.4.2      *Religious or Philosophical concepts of life:***

It is reported that over 54% of its population are non-religiously affiliated in the multi-faith diversified society of Hong Kong. Almost 28% of its population are Buddhists or Taoists whereas 12% are Christians, including Protestants and Catholics (Central Intelligence Agency, 2024). Meanwhile, it is illustrated that 61% of the local primary schools are religiously affiliated with the majority of Christianity (55%) as shown in Appendix 6 (School Profiles, 2023). The schools with religious background are opted to provide more opportunities for their students, regardless of their religions, to explore the meaning and purposes in life so as to foster their holistic well beings (Ferris, 2002).

It was noted that 10% of the participating students in both the qualitative and quantitative parts of this study had associated the word ‘Life’ with some religious or philosophical concepts to explore the origin, meaning and goal of life (Table 26). Two participating students from the upper academic levels (Primary 5-6) in the qualitative part of this study had obviously demonstrated that they were not satisfied with only fulfilling their basic needs with materials for survival, growth or staying healthy, but also had a yearning to explore about the essence of their existence, including the origin, meaning and final destination of life (Appendix K and Appendix N). Hence, it is important to encourage and support all the local schools regardless of their background to enhance the learning experiences of their students in LVE so as to offer chances for the development of their spiritual wellness and holistic life orientations.

### 6.4.3 *Family:*

It was noted that 82% of the participating students in the quantitative part of this study had chosen ‘Family’ as one of the three most important items for life (Table 16 in Chapter V). It is absolutely valid because family is the primary, immediate and most significant environment for children to learn how to interact with people. Family is also the salient source of meaning for the children to develop their senses of direction, order and reason for existence in life. For satiating the needs of belongingness, family context provides purpose, values, efficacy and self-worth to its members (Lambert et al., 2009). Meanwhile, the cultural resources and socioeconomic status of a family can also be the major determinants to fulfil and strengthen the educational aspirations and performances of our new generations (Li & Qiu, 2018).

Chinese culture is collectivism oriented which tends to emphasize on social norms to foster interdependent relationships for achieving ingroup goals and thus individualism is more likely to be shunned deliberately in family or in the Chinese society (Caldwell-Harris et al., 2013). Family is the basic social unit and children from the traditional Chinese families have been socialized to place family interest at a higher priority over their personal interests. Children are inculcated with strong family values for social harmony and thus they may try to live up to their parents’ expectations rather than their own inclinations (Lambert et al., 2009).

Apart from the immediate family, the extended family also plays a role in ensuring its members behave well based on Confucian teachings like filial piety. It is encouraged to have mutual sharing of blessings among family members like giving red-pocket money, exchanging gifts and attending family meals during festivals, especially in the long celebration of Lunar New Year (Xu et al., 2018). Nevertheless, Chinese usually avoid sharing their family scandals or problems with others or seek professional assistance for their deep-rooted mentality of ‘saving face’ or dignity as a mutually protective behaviour (Cheung et al., 2005).

It is asserted that close parent-child relationship with parental warmth is a universal contributor to the well-being and healthy development for children (Chang et al., 2003). Parenting style and ways of expressing parental love are predominantly impacted by the parents' sociocultural background which may influence their conceptualization of the interactive relationships between parents and children (Li, 2020). In the traditional Chinese cultures, parental authority is embedded in the parent-child hierarchy. A distant and respectful style of interaction tends to be practiced in most families whereas a kind of friend-like parent-child relationship is more commonly adopted in the western societies (Dixon, Graber & Brooks-Gunn, 2008). Since the traditional family model and cultural notions of parenthood propose that 'strictness is love while leniency means harm' (Chao & Tseng, 2002), Chinese parents prefer to express affection to their children through supportive behaviours rather than verbal appreciations or affective recognitions (Zhang & Wills, 2016). They generally embody kindness, love and devotion to their children in subtle and implicit ways to express their recognition, acceptance, affective care, nurturance and support towards their children (Li, 2020).

Deriving from both the traditional Chinese and modern Western cultural influences, nuclear families with norms of patriarchal family structure as well as the partnership model of family system are commonly found in Hong Kong. Nuclear families consisting of parents and children have been the most predominant type of domestic households in Hong Kong for the congested living environment with limited spaces affordable by the general public. Residing in a city with extremely high living costs which ranked at the fourth position in the year of 2022 (Bloomberg, 2022), both parents of many nuclear families in Hong Kong need to work full time to make a living or to improve their quality of life. A man who takes the role of a husband and a father has to be the espoused head of the nuclear family (Cheung et al., 2005)

while the mother usually has to work to share the heavy economic burden besides being a housewife.

Since the child-centered parenting style is commonly adopted in most nuclear families of the younger generations (Naftali, 2014; Way et al., 2013), it is observed that Hong Kong fathers tend to cultivate physical intimacy and enjoy more leisure activities with their children. This has helped to build up the sense of togetherness among the family members and mitigate children's stress sometimes caused by the busy, frustrated or achievement-driven mothers (Li, 2020). Family life in a warm and relaxed atmosphere is fundamentally important for children's development. There were twelve participating students (40%) in the qualitative part of this study who had drawn the pictorial images of their family or mentioned about their family members in the interactive interviews. All of them had shared with positive attributes about the happy moment of their family life. In the quantitative part of this study, it was indicated that the majority of the participating students were satisfied or very satisfied with their existing family life (Figure 27 in Chapter V) with the mean of 2.43 (Table 12 in Chapter V).

It is also noticeable that many nuclear families need to seek assistance from other family members like grandparents or relatives for running the daily routines. Besides, with the increasing complexities in the family composition caused by the rapid increase in the number of divorces and remarriages (Hung, 2023), many families depend on the outsiders for supportive services. It is reported that over 32% of the local households with children aged 12 or below are employing foreign domestic helpers to take care of their children (The Government of the Hong Kong Special Administrative Region, 2021). Nevertheless, it is indicated that some children may perceive their foreign domestic helpers as inferior to them in terms of the social status as they are just considered as the employees of their parents (Chan,

2005). This phenomenon had also been projected in the qualitative part of this study since none of the participating students had regarded the foreign domestic helpers as family member to be included in their pictures. The foreign domestic helpers might be considered as less inferior to their beloved favorite toys (Appendix V).

On the other hand, the socio-cultural backgrounds of the foreign domestic helpers may affect their ways of caring and disciplining children. Such cultural differences may be in conflict with the child-rearing patterns of the local parents. It may consequently lead to great difficulties in managing the children's misbehaviors as well as worsening the children's emotional wellbeing, such as reinforcing detachment from their parents (Ma et al., 2020; Chan, 2005). Under this circumstance, the amount of quality time for parent-child interactions can be unavoidably diminished. However, the role of the foreign domestic helpers is important at least to provide physical care and safety for the children when their parents are unable to have full-time caring for them.

#### **6.4.4 Self:**

Self-concept is represented by the self-appraisals of one's competences (Chang et al., 2003). It is proposed that cultural values can help to moderate how positive one's self-regard is constructed while self-esteem is derived from the control of one's life in the cultural context with values (Becker et al., 2014). It is suggested that one's perceived cultural norms have significant psychological impacts over his or her personal values for his or her social accountability to others (Chiu et al., 2010).

In the qualitative part of this study, four participating students (13.3%) had obviously demonstrated their awareness of the uniqueness of self (Appendix A, H, I and U). It is illustrated that one's self-esteem can be reflected by the graphical representations in his or her

drawings. It is postulated that the higher the child's perception of his or her own value, the more he or she will treasure his or her existence as an individual by drawing a larger figure of himself or herself alone (La Voy et al., 2001). None of the participating students in the qualitative part of this study had drawn the figure of 'Self' alone in their pictures. Among the three participating students (10%) who had associated the word 'Life' with 'Self' in the qualitative part of the study, only one had drawn a comparatively small figure of himself alone with his toys (Appendix B) while another had used a 'cartoon figure' to represent himself (Appendix Q). Meanwhile, another critical case had also been demonstrated by the boy who had not drawn himself with his family in the picture (Appendix W).

In the collectivist culture of the Chinese society, self is defined in a network of interpersonal relationships, especially in relation with one's significant others. Under the authoritarian style of child-rearing practice with the strong parent-child bonding which values obedience and respect for authority, the individual needs and personal interests of children are frequently subjected to the collective interests. The self is strongly embedded in relationship with significant others. Children are usually expected to fulfil their ascribed roles in the relational network by modifying their 'true self' to fit the 'ideal self' according to their parental aspirations. Disagreement with or challenging the authority is considered as disrespectful or distrustful in the traditional Chinese culture (Chen & Rankin, 2002).

Self-esteem is an evaluative and affective sense of oneself with both cognitive and social constructions since it is correlated with the self-perceived characteristics (Goodwin et al., 2012). It involves an evaluation of oneself to be followed with an emotional reaction towards oneself which is based on one's beliefs about what makes others accept or reject him or her as the perceived relational value (Leary, 2005). It is suggested that there are four major factors contributing to the development of one's self-esteem, including the attitudes from significant

others, one's history of successes, one's perception of success as well as one's general attitude toward devaluation or negative feedback (Wang & Ollendick, 2001). Individuals with lower self-esteem are likely to have weaker capacity in self-control which can profoundly impact one's self-adjustment, academic achievement as well as the quality of interpersonal relationship (Tangney et al., 2018).

It is indicated that Chinese generally gain lower score in one's overall self-esteem in comparison with the scores attained in other Western societies (Boucher et al., 2009) since Chinese tend to derive implicit self-esteem from portraying themselves with a causal role of modesty to form relatively critical self-judgment (Cai et al., 2011). This study had also provided initial evidence to partially support the aforementioned proposition. It was observed that some participating students from all different academic levels in the quantitative part of this study had evaluated the level of satisfaction about their self as 'very dissatisfied' (Figure 25 in Chapter V). If comparing their level of satisfaction with the other four items, including 'family life' (mean = 2.427), 'school life' (mean = 2.327), 'living environment' (mean = 2.409) and 'friendship' (mean = 2.475) in Part 4 of the self-administered questionnaire, the participating students are comparatively less satisfied with their own 'self' with the lowest mean score of 2.125 (Table 11 in Chapter V). It was also observed that the participating students at the higher academic levels in the quantitative part of this study had expressed lower level of self-satisfaction with oneself in both genders (Figure 26 and Table 11 in Chapter V).

On the other hand, it was noted that 21% of the participating students in the quantitative part of this study had recommended studying hard or different methods of self-empowerment as their proposed ways in cherishing life while 22% of them had selected 'academic achievement' as one of the three preferences of priority in life (Table 29 & Table 16 in Chapter V). It was also indicated that 8% of the participating students in the quantitative part of the study had



selected ‘Talents’ as a priority in life (Table 16 in Chapter V) which might be considered as essential for their self-actualization or self-achievement. These findings may have shown that the participating students have taken academic ability or achievement as an influential determinant to attain or treasure their self-value and level of self-satisfaction.

Aligning with the academically competitive ambience, Hong Kong students have been socialized to compete vigorously for academic achievement from childhood. This kind of mentality has been deeply rooted in the traditional Chinese culture that intellectuals are considered as the elite class in the society. The great majority of Chinese parents have put great emphasis on their children’s education as they firmly believe that good academic performance will guarantee their children a secure living in the future as a means to achieve life-satisfaction (Louie, 2001). With the strong mentality of ‘diligence can mend deficiency’ as well as ‘nothing is impossible for a person who is determined with strong will’, tremendous pressures and high expectations have been consciously or unconsciously put on their children. This may hinder the holistic development of ‘self’ which embodies the ‘real self’ with positive self-image and the ‘ideal self’ with self-worth as advocated by the Self-Theory of Carl Rogers (Ismail & Tekke, 2015). Owing to the over-emphasis on academic achievement by their significant others, the children may be deprived of or learn to neglect their development of other attributes of self, like physical abilities, personality traits, social roles and values of life.

#### **6.4.5     *Interpersonal relationships:***

Human beings are social beings who have yearnings for a sense of belongingness and mutual acceptance in social life. Thus, friendship is an inevitable contributor to attain the meaning in life (Lambert et al., 2009). It is stated that social connections and interpersonal relationships through interactions with others within one’s social and cultural groups have played a significant role in the perception of meaning in life among Chinese (Zedro, Williams

& Richardson, 2004).

In the traditional Chinese culture, Confucius has advocated that there are five constant relationships (五倫), including those between ruler and subject, father and son, elder brother and younger brother, husband and wife as well as friend and friend. According to the Three Principles (三綱) of Confucianism in the ancient Chinese hierarchical society, referring to ‘the king is the master of the minister, the husband is the master of the wife and the father is the master of son’, one should be self-regulated with the norms of propriety in conformity to the hierarchy of social relations (Selmer & DeLeon, 2003).

Referring to Confucianism, it is essential for oneself to develop the five core virtues to maintain the harmony of the hierarchical social relationships, including to care about others with humaneness (仁), to avoid undignified behaviours with righteousness (義), to perform and respect social protocols with ritual propriety (禮), to identify appropriate attributes with wisdom (智) as well as to endure firmly all these attributes across a wide range of conditions with integrity (信) (Tiwald, 2018; Wang & Ollendick, 2001). Apart from maintaining the harmonious interpersonal relationships, it is also important to establish and nourish a balance in the universe for embodying its harmony with the three paramount virtues, including compassion (仁愛), moderation (儉樸) and humility (謙讓) as advocated by Taoism (Hennig, 2017; Docan-Morgan & Docan-Morgan, 2009).

To submit oneself in favour of the group to maintain the social harmony, the Chinese generally have learned to have respect for status, face and rank from childhood. They tend to be reserved in behaviours by being not too active, direct, assertive, aggressive or open in relating with others especially the strangers to avoid raising issues or offending others (Willis, 2004). They are taught to be ‘prudent in speech but agile in deeds’ (訥於言而敏於行) (Analects 4:24)

and thus are sensitive to the deeds and words of oneself. They are more used to indirect communications with reticence and are not encouraged to express their emotions verbally (Caldwell et al., 2013) so as to prioritize the needs of the community before their personal needs (Matsumoto et al., 2008). They are more likely to be passive, subtle, polite and attentive in their communication patterns (Cheung et al., 2005) for the ultimate equilibrium to maintain harmonious relationship with others as well as the smooth functioning of the community as required in the collectivist cultures (Li, 2020). Growing up in the cultural context of emphasizing ‘face’ or dignity as the mutually protective behavior to prevent any potentially embarrassing situation or losing prestige, the Chinese people are socialized to keep confidential their own troubles or problems to avoid causing anxiety or distress (Cheng et al., 2005).

It is reported that Hong Kong people are more inclined to have low-relational-mobility with the endorsed destiny beliefs (Lou & Li, 2017). They tend to develop rejection sensitivity and anxiety about whether they will be accepted by others in their social circles (London et al., 2007). They have generally developed prevention-oriented relationality and withdraw to share openly their opinions. This is meant to avoid potential negative consequences in social relationships (Schug et al., 2010; Li et al., 2021) as well as to maintain social harmony by minimizing direct conflicts (Sato, et al., 2014).

The interpersonal relationships especially among family members and peers in the stages of early childhood to adolescent is of utmost importance for the holistic human development (Chang et al., 2003). School is another major component in children’s life and academic achievement is significantly linked to their life satisfaction (Lewis et al., 2011) which is a multi-dimensional construct reflecting the self-evaluation of one’s relationship with self, significant others, living environment and community (Yuen, 2016).

In this study, it is illustrated that none of the participating students in the qualitative part had associated the word ‘Life’ with the schools while only one boy had drawn himself playing football in the field with his friends (Appendix L). Nevertheless, two girls (Appendix Y and U) and two boys (Appendix X and H) had drawn their pets as their companions. Simultaneously, it was observed that most students in different academic levels had rated their ‘school life’ as ‘satisfied’ or ‘very satisfied’ as shown in the boxplot (Figure 30 in Chapter V) in the quantitative part of this study.

Friendship is important in the sphere of interpersonal relationship. We start to make friends in our neighborhood or in schooling from an early age. Children learn through the social interactions with their playmates and school friends. Regarding the level of satisfaction about ‘friendships’, the participating students from different academic levels in both genders of the quantitative part of this study had shown a wide range of responses. It was highlighted that the level of satisfaction with ‘friendships’ of the female students from primary 4 had shown a continuous fall (Figure 34 in Chapter V). It is postulated that primary students in upper academic levels have reached the onset of puberty and they may have higher expectations of their friends. Thus, they may yearn for more satisfaction from getting along with their companions. If their expectation is not fulfilled, then they may feel less satisfied about ‘friendship’.

On the other hand, it was illustrated that 16.7% and 21% of the participating students in the qualitative and quantitative parts of this study had respectively proposed to ‘enhance interpersonal relationships’ as a way to cherish life (Table 29). Meanwhile, 13.3% and 10% of the participating students in these two parts of the study had also respectively suggested to ‘be good, friendly and kind’ for cherishing life (Table 29).

#### **6.4.6      *Death:***

Death is one of the major inevitable element of life. Nevertheless, it is a cultural taboo among Chinese because it is considered as a negative life event in their traditional culture. Thinking or talking about death may provoke unnecessary anxiety, hasten the arrival of death or lead to misfortune and thus should be avoided (Cheng et al., 2019; Xu, 2007). Although it is illustrated that the new generation of Hong Kong is less likely to adhere to the folk beliefs (Lee, 2007), fatalistic beliefs or attitudes are still popularly held that one's fate is sealed at birth or determined by deeds (Chow, 2006). It is speculated that specific numbers or timing can influence an individual's fate or luck. Thus, they will choose auspicious time on good dates for conducting any celebration or ceremony for all the big events in life. The digit 'eight' is generally considered as the lucky number for it sounds like the slang Chinese word means 'getting rich'. Contrarily, the digit 'four' is considered as an unlucky number as it sounds very closely with the Chinese word 'death'. This kind of superstitious thought is somehow prevalent in their daily life. It can be explained why some buildings lack a fourth or fourteenth floor as well as the fourth block of some newly constructed estates are commonly skipped in Hong Kong.

Chinese traditions about death are basically derived from the perspectives of Buddhism, Confucianism and Taoism. As Hong Kong people have been exposed to both the Chinese traditions and the Western culture, the concept of death covers a wide spectrum of ideas and varies among individuals. Seniors most probably have held the belief close to the philosophical thoughts of Buddhism, Confucianism or Taoism. The young generations who have been educated in schools with religious affiliations are prone to be open to the concepts of life and death in Christianity. However, it is mostly believed that death is a portal leading to an afterlife and the quality of afterlife is very much dependent upon how one has lived his

or her earthly life before death (Lee & Chan, 2007). No matter the perception of death is based on the Eastern or the Western perspective, everybody wishes to die in peace. Dying with unfinished businesses or unforgiven issues can be considered as detrimental to the deceased or to the others (Chan et al., 2006).

With the concepts of Karam and Samsara, Buddhism considers death as the inevitable finitude of life and one's next rebirth is influenced by the person's state of mind at the moment of death (Jing-yin, 2006). Confucianism emphasizes the harmonious interdependence among family members, friends, other acquaintances and ancestors in our earthly life rather than the afterlife. Taoism fosters a concept of letting go and acceptance of death as a natural part of life to maintain the harmonic relationship with the universe. All these philosophical thoughts seem to be different from Christianity of the Western traditions which values the spiritual life both on earth and in the hereafter with eminent importance (Wittkowski et al., 2011).

The culture of collectivism may lead the Chinese to perceive death as the separation from their significant others in the family and the mentality of caring is extended to the deceased's afterlife (Yin et al., 2017). Thus, the living family members are inclined to believe that the spirits of the deceased continue to remain in the world in another form of existence like ghost or invisible spirit (Panesar & Graham, 2012; Yick & Gupta, 2002) and the continuing bond between them and the deceased does exist. To live the virtues of filial piety and loyalty in family values and social responsibilities, a proper ceremony of funeral service with successive practices of delineated mourning period is still popular to secure the quality of the deceased's life in another world (Chan et al., 2005; Young, 2004).

With the long-standing and widely accepted worships, respect or reverence for the ancestors, the Chinese people in Hong Kong ritually pay visits to the graves of their ancestors for tidying up the place, making sacrificial offerings with lighted incense sticks or candles and burning

joss paper. They do so to express respect and filial piety, to worship and commemorate their dearly departed ones on both the Ching Ming and Chung Yeung festivals which are dated respectively on the fifth day in the fourth month and the ninth day in the ninth month of the lunar calendar (Fang, 2007; Xu et al., 2018). Besides, it is claimed that the gates of hell are open for the hungry or restless ghosts who lost their innocent lives for misfortune to have access to the earthly world to visit their families, feast or look for victims commencing from the beginning of the seventh month in the lunar calendar until Hungry Ghost Festival on the fourteenth day of the month (Panesar & Graham, 2012). It is meant to extend from venerating ancestors to commemorating the hungry or restless ghosts by pacifying them as well as to ensure peace and order to prevail in the local community (Chan, 2018).

It is suggested that the awareness of death as the inevitable ending of life can help individuals to appreciate and cherish life by fulfilling their personal contentment with life qualities and virtues, including care, love and mutual support (Phan et al., 2021). In this study, the two participating students in the qualitative part (Appendix K & N) had mentioned about ‘death’ in both their pictorial and interactive sharing. Both of them were in the upper academic levels and had demonstrated the aforementioned life qualities. In this study, it was indicated that a comparatively lower percentage of students from Primary 1 to 3 had chosen ‘death’ as a characteristic of life (Table 9 in Chapter V). This may reflect that students at a younger age have less opportunity to notice or encounter ‘death’ in their daily experiences. Confucius has stated a phrase with great wisdom ‘how one can know about death before he or she figures out the meaning and purpose of living’ (Analects 11:12). Nevertheless, ‘death’ is an inevitable characteristic of life, it is of utmost importance to enhance the learning about the intertwined relationship between life and death. Parents and educators are embraced with a special mission to guide and support our young generations to develop positive attitudes to treasure

every moment of our earthly life and to prepare for a good death.

In view of the discussion of the impacts of sociocultural factors on the research participants in their perception of life and proposed ways of cherishing life in the six key areas as presented above, it is evident that our cultural heritage can help to link us to the past and guide us to the future (Cheung et al., 2019). The local primary students grow and learn in a society blended with collectivism in the Eastern cultures and individualism in the Western cultures. This can be a challenge and a privilege for the parents and educators to nurture the young generations in the sociocultural context with dual qualities. LVE as a life building and transforming avenue in the educational arena is loaded with cultural values and norms. It is significant and essential to address to the sociocultural influences on the design and implementation of LVE. The special needs of students of different gender and at their various stages of development have to be taken care of so that they can enjoy and benefit more in the learning process.

## **6.5 Contribution and Limitation of the Study**

### ***6.5.1 Contribution of the Study***

The contribution of this study can be summarized in the following aspects:

#### ***6.5.1.1 To Fill the Research Gap***

The major objective of this study is to collect the first-hand information about the perceptions of life and proposed ways of cherishing life for the local primary students since no primary data in this area can be found from the available literatures. In order to design and implement LVE with the student-centered, life-oriented and culture-based approach, students' thoughts, feelings and aspirations are essential and significant to be understood and served as the references for the educators. The findings of the qualitative and quantitative parts of the study have provided valuable data which are rich and insightful for the parents, teachers,



administrators and researchers in the field of LVE to understand the perceptions and anticipations of life among the primary students in Hong Kong. All primary data collected directly from the local primary students enabled us to understand more about how they perceive life and anticipate a life of fulfillment from their concrete life experiences. Even though the sample of the research is not large enough for generalization, the collected data as a source of first-hand information can be well taken as the foundation material for further exploration in LVE.

#### **6.5.1.2 Content of the Collected Data**

The participating students had shared their ideas and feelings about their perceptions of life and their proposed ways of cherishing life with a wide perspective and of great depth considering their age. They did not merely perceive life in their tangible forms and material sense like different ‘Types’, ‘Characteristics’ or ‘Process’ of life. Some of them shared the spiritual dimensions of life, like 10% of the participating students in both the qualitative and the quantitative parts had associated life with the ‘Religious or Philosophical’ concepts (Table 26). In comparison, much fewer participating students in both parts of the study (3.3% in the qualitative part and 2% in the quantitative part) had associated the word ‘Life’ with ‘Basic needs’ (Table 26). Thus, it was indicated that our local primary students have shown concern about the different perspectives of life besides their basic needs. Hence, the participating students had mentioned the psycho-social aspects of life including ‘Significant others’, ‘Self’, ‘Nature’ and ‘Attitudes of life’ in both the qualitative and the quantitative parts of the study.

Meanwhile, it was demonstrated that the majority of the participating students in both the qualitative and quantitative parts of the study were aware of the various ways of cherishing life (Table 29). It was amazing to note that the participating students of both parts of the study (16.7% of the qualitative part and 21% of the quantitative part) had considered ‘Enhancing interpersonal relationship’ as a significant way to cherish life. This indicated that school

children at their young age had already realized they were closely related with other people. The participating students of the quantitative part of the study had proposed to strive hard (21%) for self-empowerment. They had also proposed to be physically healthy (14%) and mentally sound (19%) as well as to be in friendly relationships (10%). Likewise, the participating students of the qualitative part had also emphasized physical wellness (26.7%), positive mindset (20%), enriching life (16.7%) as well as to be friendly and kind (13.3%).

These findings had shown that the local primary students had a potential for developing their capacity to lead a life with fulfillment for self-actualization and even self-transcendence in their different life stages of growth. They had also recognized that life involves social connection and mutual sharing for the common good of people and the environment.

#### **6.5.1.3 Application of the Research Methodology**

The research methodology adopted in this study is instrumental to collect the primary data from the school children at their young age. These methods can be applied in teaching and further research in the area of LVE.

‘Draw and Narrate Approach’ adopted in the qualitative part of this study has been proved to be an effective means to facilitate their expression in the interactive communication to explore their in-depth feelings and thoughts. It is obviously observed that there are lots of trails, openings and possibilities to enhance the holistic human development among the local primary students. Their perceptions of life seem like a diamond reflecting different colors from multiple angles to form various patterns of beauties with many new inspirations which somehow challenge and enrich our own perceptions which may be more static within a familiar framework.

All the participating students of the qualitative part of the study were active and attentive to the

theme in drawing their masterpiece with enthusiasm and they could share the originality in their own personal style. The art of ‘leaving blank’ is an important aesthetic constituent element to portray a picture by leaving empty space for imagination and creativity in silence as inspired in the traditional Chinese paintings. Art is created by the blending of harmonious or contradictory concepts where motion and stillness, blankness and fullness, solitude and resonance can come together and be integrated. This can also be applied in LVE since a spiritual space with self-emptiness without being fully occupied allows a child to have more spare time, mental capacity and energy to be open for further attaining new inspirations, values, concepts, knowledge and skills. Leaving empty space in our life by intentionally creating or allowing time and space for stillness, quietness or emptiness can generate a mental space for the flow of creativity and inspirations with deep levels of imagination and intuition.

The availability of mental space is essential for the development of self as the core of LVE. It can provide opportunities for reflection, introspection and rejuvenation. Thus, the children have time and space to go through their different developmental stages to gain greater self-awareness and compassion to establish their self-identity. In view of the strength of using art as a medium to facilitate the children to express their unspoken feelings or thoughts, it is also recommended for teachers to try various forms of visual arts in encouraging the primary students to participate in the learning process of LVE.

The findings of the quantitative part of the study provided us with some basic statistical data to have a general understanding of the perceptions, levels of satisfaction, importance and values of life among a group of primary students from schools of different backgrounds. It is significant to note that gender and academic level have entailed certain influences on the local primary students to perceive different aspects of life. This is closely related to the uniqueness of each individual in their developmental stage and the impacts of other external factors. Thus,

it is suggested to have more focused exploration into the influences of different academic levels as well as to take gender into an independent variable for future research activities in LVE.

#### ***6.5.1.4 Development of a Four-Dimension Framework for LVE***

Based on the valuable data collected from our research participants, the development of a Four-Dimension Framework with the integrated elements of ‘Stewardship’, ‘Authorship’, ‘Partnership’ and ‘Citizenship’ is recommended to be applied in the future design, implementation and research of LVE.

The concepts of ‘stewardship’ and ‘authorship’ for intrapersonal growth can be introduced or enhanced in LVE for our school children to cultivate in them the fundamental respect for all living beings as well as the quest and responsibility to live a meaningful and fruitful life for oneself and the others. Being the steward of our own life, we human beings have the dignified mission and responsibility to take care of ourselves to live a flourishing life as well as to respect every life no matter it is physically weak or strong, long or short, filled with distress or comfort. Since each earthly life is a mystery with its uniqueness, it is utmost important to cultivate the sense of respect, charity and responsibility for life among all the school children as the fundamental attitude towards life. None of us can abuse our authority to exploit or deprive the basic rights of others. Thus, we are obliged to take good care of our own survival by staying healthy in all aspects and striving for holistic development to live a meaningful and fruitful life with mission and fulfilment. Simultaneously, we cannot strangle the living space of all other living things and thus the sense of environmental protection of making responsible use of resources should be promoted and enhanced among our new generations.

As the stewards of our own life, we human beings are also the authors of our personal life story as well as the co-authors of the life story of others by composition, interpretation and revelation.

By recognizing our own thoughts, feelings and behaviors with the self-awareness of our strengths and limitations, we can determine how to achieve our goals by prioritizing our genuine needs with trade-offs as well as to be responsible for consequences of our decisions and behaviors. With positive mindsets and attitudes, we become more resilient and adaptable in facing all kinds of new challenges and adversities with confidence as well as more capable of overcoming all sorts of difficulties with a sense of hope.

The thematic codes of proposed ways of cherishing life shared by the participating students have shown that personal, interpersonal and social dimensions are included for self-development as well as for nurturing others and the environment. Inspired by these findings, it is recommended that ‘partnership’ and ‘citizenship’ are added into ‘stewardship’ and ‘authorship’ in LVE to develop an integrated approach to enhance the capacity and strength of our primary students to build on and move beyond the foundation of a healthy selfhood with embracing love for social collaboration and commitment for nurturing others and contributing to the world.

‘Partnership’ is an extension from oneself to reach out to others for mutual sharing and support so that all parties can grow and co-operate together to achieve a common goal. No life can exist alone and we are all interdependent with one another. Similarly, none of us can be perfect and thus we need to be aware of our imperfections by identifying, acknowledging and accepting our limitations as well as to appreciate our gifts and strengths. We need to be open to improve ourselves with our limitations and utilize our potential for collective welfare through mutual sharing and support. Being a member of the family, school, community and the world, we have a social responsibility to live together with a spirit of mutual sharing and support. We contribute to building a harmonious ambience through learning how to share with others respectfully and responsibly in the intellectual, material, emotional, collaborative

or environmental aspects. In the process of mutual sharing with the art of openness, generosity and humbleness, both the receiving party and the giving party can contribute for each other. We bring forth the true meaning of life by empowering everybody to overcome our challenges as well as to get out of the dilemma with empathy and effective interpersonal skills to nurture one another.

‘Citizenship’ is a social attribute in our personal identity which encourages and facilitates our moral responsibility and communal obligation to work towards the public welfare. In the historical and cultural background of Hong Kong, some common characteristics of strengths and admired virtues have been rooted and well-recognized among its citizens, including the tenacious vitality with remarkable resilience in face of challenges to adapt, persevere and overcome obstacles; the unyielding diligence with the strong sense of practicality, efficiency and adaptability; the inclusivity of embracing the multicultural diversities with respect; the conscientiousness with civil mindedness and social engagement as well as the chivalry and righteousness with benevolence, etc. (Kuang, et. al., 2023). All these valuable characteristics and spirit of life should be cultivated and inherited among our students from generations to generations for sustainability in contributing to the well-being of the whole community with the mission of life.

In summary, it is revealed from this study that our local primary students have the ability, readiness and aspiration to receive and to be actively involved in the delivery of LVE for their holistic human development. The study has collected valuable and relevant data directly from the research participants for the research topic. The content of the information shared by the participating students are inspiring and rich. It is shown that the adopted research methodologies with the active participation of the primary students have enhanced the effectiveness of the process of data collection. A Four-Dimensional Framework for the

practice and research of LVE is developed at an initial stage based on all the research findings of this study. The four dimensions have their individual characteristics to be operated as an integrated whole to nurture the holistic development of our young generations. It is envisioned that the primary students can learn to take best care of their personal life and all other living beings, to establish and maintain trustful relationships with mutual sharing and to contribute positively with social collaboration for the wellness of the humanity and our world.

### **6.5.2 *Limitation of the Study***

The major limitation of this study was to a large extent due to the special circumstance of the pandemic COVID-19. Both the qualitative part and the quantitative part of the study had to be adapted in the process of data collection with some implications on the research findings.

#### **6.5.2.1 *The Qualitative Part of the Study***

For the qualitative part of the study, the participating students and the researcher could only interact through the virtual context of using zoom during the pandemic of COVID-19 instead of the initially planned ‘package arrangement’ of ‘face-to-face’ drawing session and the subsequent interview. The participating students were invited to draw the picture to be sent to the researcher and then to attend an online interview at a later time. Several incidents had shown the drawback of not being able to have direct and individual meeting with the students during their drawing time and in the delayed interview.

BB could not find her drawing when she was invited to add something on it to propose her ways of cherishing life. Mutual impacts were obviously observed among siblings like C and D, F and G as well as S and T who drew their pictures together at home. In addition, four participating students (13.3%) had not added or could not add anything to their pictures at the later part of the interview to show their ways of cherishing life. Two of them, including E

and DD could not add anything into their original pictures because the paper was already fully occupied and thus no spare space was available while K believed that his original picture had already been drawn perfectly well and he had no more idea for adding anything. In case the researcher was present physically with them, some ad hoc measures could be taken, for example, they could be encouraged to add something into their pictures by cutting and pasting or extending the physical space of the original pictures to show their ways of cherishing life. Last but not least, potential parental intervention during the interview could also be avoided or minimized. More in-depth conversation between the student and the researcher would be possible in the case of W who had excluded himself from the image of his family in his original picture while his mother had explained on his behalf for his absence.

#### ***6.5.2.2 The Quantitative Part of the Study***

The major limitation of the quantitative part of the study was the recruitment of a relatively small number of participating students due to the limited response of the local schools in the pandemic of COVID-19. It was reported that a total of 348,994 primary students were studying in 591 primary schools of both the public sector and the Direct Subsidy Scheme in Hong Kong in the academic year of 2021/2022 (Education Bureau, 2022). Owing to the school suspension as a public health safety measure, it was very difficult to get in direct contact with the school personnel. To participate in a research study was understandably not a priority for the schools during the prevalence of COVID-19. Finally, there were 4 primary schools from different backgrounds supporting and joining in the study and 576 primary students had become the research participants. Even though the absolute number and percentage of participation were not high, the number of participating students had reached the minimum required number and their responses had provided valuable information for the



statistical analysis. The findings had provided a batch of systematic and objective statistical data for us to understand the research theme though not for simple generalization at this stage.

## **6.6 Future Directions: Implications for Practice and Research of LVE**

This study was a preliminary exploration of the perceptions of life and the proposed ways to cherish life among the local primary students as primary data in this area was not readily available. The findings of the study had generated valuable first-hand data not only for answering the research questions but also for providing insights for the implementation of LVE and for future research design to support the delivery of LVE.

### ***6.6.1 Interactive Approach with Visual Arts***

The interactive approach adopted in the qualitative part of the study was found effective for young children to express themselves through individual drawing and an interactive interview with two-ways communication. It was amazing to realize that the participating students could manage well to address ‘Life’ with their creativity and insightful thinking.

It is highly recommended that an interactive approach instead of a passive approach of transmitting concepts to deliver LVE to the students will benefit them more to yield more fruitful learning outcomes. Interactions at the ‘one-to-one’ individual level or at the small group setting with a few students and one teacher or one researcher can be a feasible method to launch activities or research of LVE. Through interactive learning experiences, school children are encouraged to be less self-centered in leaving their comfort zone of a familiar social context to adapt to the interpersonal dynamics in a group context.

The ‘Draw and Narrate Approach’ and the ‘Narrative and Drawing Intervention (NDI) Approach’ had been applied as the effective research tools for data collection and data analysis in the qualitative part of this study to explore the perceptions of life among the primary students.

It is suggested that visual arts can be more widely used as the media to conduct LVE learning activities as well as in the related research. There are a variety of art materials like crayons, watercolors or oil-paints as well as different forms of artwork like photography, collage, digital art or sculpture for providing multiple ways of expression to suit the characters and needs of different students in various academic levels.

The application of art in interactive activities will enable the school children to have greater involvement than using the traditional model of presentation by the teachers. The students are encouraged to participate actively with interactive artwork activities in the LVE lessons. These activities help to stimulate the students to have a deeper reflection of their own life and to develop their potentials of imaginations and creativity in exploring, expressing and sharing their inner world. Through mutual sharing among other classmates and teachers, their perceptions will be enriched with more inspirations and the teachers will also be benefitted to understand more about the feelings, viewpoints, values and struggles of their students. This is a mutual learning experience for both the students and the teachers.

It is remarked that not all teachers are gifted or trained to conduct activities with visual arts. Thus, learning opportunities have to be provided for teachers to be well-equipped to design and implement various sorts of LVE activities. Likewise, teachers have to be trained with active listening skills so that they are able to understand the students at a deeper level. In the long run, it is anticipated that teachers will be well prepared to design more relevant learning materials and activities for their students through the interactive model of teaching and learning.

### **6.6.2 Focus on Specific Academic Level or Gender**

As discussed in the earlier sections that the participating students had expressed great variations in their level of satisfaction of life in certain aspects at different academic levels as well as

between boys and girls. The pressures of study may be a major factor to influence the overall level of satisfaction of life for the local primary students within the competitive and demanding educational environment. However, it is important to take note and explore the underlying factors of these variations. Thus, it is suggested that the various developmental stages of students at different academic levels and the difference in gender of the students have to be addressed in the design and implementation of LVE.

In order to respond to the specific needs of male or female primary students in different academic levels, it is recommended to have an individual subject with integrated, systematic and interactive course curriculum of LVE with comprehensive coverage for students of different academic levels. It is important and necessary to start conducting LVE for school children at a young age so as to build up the foundation for the local primary students at the lower level to enhance their progress at the successive academic levels for holistic development.

### ***6.6.3 Companionship Model of Learning***

LVE is a process of nurturing the holistic development of our young generations. It is not merely the conceptual learning of definitions and meaning of life. With the advanced information technologies, the school children can access various kinds of resources by themselves to retrieve information. It is rather a kind of experiential learning about how to appreciate, respect and be responsible to take care of all living beings with love. Thus, the companionship model of learning is recommended to fulfill the aspirations of the learners for enhancing their interpersonal relationship and for building the spirit of mutual support in the future. The companionship model can be conducted either on a ‘one-to-one’ basis between one student and one teacher or on a ‘one-to-few’ basis to form a small group of students with one teacher depending on the needs of the students, the availability of teachers and the progress

of the LVE curriculum. The companionship model is similar to the discipleship model with the teachers as the guide and resource person to navigate and support the integral human development of individual students.

Human beings need companionship at all ages to nurture or strengthen our holistic wellness with social interactions, emotional support, and sense of belonging to thrive for a fulfilling life. We learn about various forms of sharing since our childhood, including to share resources, ideas, experiences and emotions for mutual support in different kinds of interpersonal relationships. Through mutual sharing, children learn how to articulate their thoughts and feelings with enhanced interpersonal skills. They learn how to put themselves in others' shoes to understand others' perspectives with empathy, respect and acceptance. They also learn to collaborate with different individuals to work towards a common goal with team spirit. With a sense of connection and belongingness, they can foster the spirit of social awareness and generosity. By receiving and giving through mutual sharing, children gradually learn to develop their self-identity, self-esteem as well as the meaning and purpose of life.

#### ***6.6.4 Development of Self as the Core of LVE***

Enhancing interpersonal relationships is a significant way of cherishing life proposed by the participating students of both the qualitative and quantitative parts of the study. Each child is a unique and multi-dimensional individual with a rational mind, emotional mind and spiritual mind (De Souza, 2016). Interpersonal and intrapersonal relationships exist within every child in the form of child-self, child-others, child-world and child-supernatural beings. Thus, the educators or parents are called to enhance the cultivation of integral harmony at the interpersonal and intrapersonal levels as well as in various types of relationships among our local primary students to attain their holistic wellness that involves the physical, psychological, social and spiritual or transcendental perspectives.

The self is the fundamental entity to be nurtured in relationship building and so the development of the self is the core of LVE. The finding of the quantitative part of the study had illustrated that the participating students were generally at a relatively low level of satisfaction with various aspects of life. Thus, it is important for the educators and parents to pay special attention in facilitating the cultivation of positive sense of ‘Self’ among our local primary students as the core of LVE. In essence, there is a significant relationship between self-esteem and quality of life. It is illustrated that an individual with a higher self-esteem will get a higher score in life satisfaction (Pérez-Fuentes, et. al., 2019). Likewise, individuals with greater self-satisfaction with life tend to develop better interpersonal relationships with others and thus can more easily attain and maintain psychosocial wellness in their holistic wellbeing.

Meanwhile, it was reported that 7% of the participating students in the quantitative part of the study had recommended ‘Being true self’ as the way of cherishing life (Table 29). Some primary students may have misunderstood that ‘Being true self’ means they can do freely whatever they like without any restrictions. As a matter of fact, ‘Being true self’ refers to embracing one’s uniqueness as well as living in alignment with his or her personal values and belief with respect towards others. It involves a long process with self-reflection to explore the authentic self by listening to our inner voice with intuitions and acquired knowledge, identifying our values and beliefs as well as recognizing our strengths and limitations with the support and guidance of others. This process somehow is oriented towards the life-long journey of self-reconstruction and development of self-identity.

To summarize the directions of future development in teaching or in the research activity of LVE, it is highly recommended to have special concern on the specific needs of students in the different developmental stages at the lower, middle or upper academic levels of study as well

as among the male and female students. Besides, the core element of the content of LVE is the formation of self-identity and respect for others. It is also suggested to adopt the companionship model and interactive approach with visual arts as the major methodology of implementing or undertaking research in LVE.

Even though it is quite difficult to generalize the diversity of feelings and thoughts of the participating students, it is still worthy, essential and valuable to explore their perceptions and values of life for conducting student-oriented curriculum of LVE. With the insights generated from their experiences, beliefs and values, we as both the educators and parents can be more aware of the inner voices of our young generations. This is a relevant reference for those who are responsible for or dedicated in designing the curriculum of LVE to facilitate better resonance with students in their hearts and promoting their engagement in the learning process. With more empathetic understanding, it is easier for us to identify their genuine needs as well as their uniqueness, potentials, challenges or barriers in their human development. By addressing all these factors, we are more ready to provide timely support and constructive guidance in their learning journey. It is highly significant to provide a positive and inclusive learning environment with mutual respect, appreciation and openness among the diversities. As LVE is a life-long developmental process for both the educators and the students, to be the companion to walk along with our young generations on their paths of growth and lead them towards goodness is also a great and valuable learning opportunity for us.

#### ***6.6.5 Further Investigation in the Practice and Research of LVE***

In view of the generally low level of self-satisfaction among the local primary students as illustrated in the major findings of this study, another research study can be conducted with the theme of ‘Self’ to explore the perceptions of self-images and self-identities among the local primary students as well as the contributing factors of their perceptions.

Since LVE is a life-long transforming journey in love, similar studies can also be conducted with different categories of students, for example the local secondary or tertiary students. Since teachers can be considered as the most significant person in the learning process of students, it is also relevant to conduct research on the perceptions of teachers and their practice in LVE. It is also recommended to apply a variety of visual arts as the methodology for data collection since the provision of multiple ways of expression besides written or verbal expressions can be helpful to suit the needs of various types of research participants.

## VII. Conclusion

‘Life influences life’ with enlightenment through interactive learning and mutual sharing is the core of education, especially in LVE which is the education of ‘life’ and ‘values’. It is ascertained that school environment makes a major contribution to the psychosocial development among children and their behavioral changes are often more successful with teachers’ guidance and peer support rather than under parental influences at home (Stewart, et. al., 2004). Hence, the quality of LVE needs continuous refinement and improvement within the local school settings so as to foster the holistic development of the primary students in Hong Kong.

To enhance the capacity of students to live a flourishing life, LVE is highly recommended to be conducted as an independent subject with well-structured, systematic and spiral curriculum as well as ample opportunities for students’ active participation in the learning process. The content of LVE should include the key topics about nurturing the positive values and people-oriented attitudes as well as learning life skills for personal and community development, like respect, responsibilities, positive thinking, problem-solving skills, resilience, conflict resolution and others. It is also suggested to have clear learning objectives, relevant interactive activities, proper assessment criteria and feedback mechanisms in the course materials for implementation and evaluation of the local students’ learning progress which can exert life-long impacts on the different dimensions of their life.

LVE is a student-oriented process of learning about mutual caring relationships which involves the experiences of being cared for, self-care as well as caring for others (Fang, 2008). The findings of this study have demonstrated that the participating students value interpersonal relationships and they perceive that relationships are significant for cherishing life. The foundation of relationships is the self and personhood of each individual as well as the mutual



sharing of love. Thus, the development of self and interpersonal relationships can be considered as the key element of LVE while the companionship learning model with interactive approach is recommended as effective and beneficial for children's learning.

This exploratory study has achieved its objective to obtain a preliminary understanding of the perceptions of life and the proposed ways of cherishing life among the local primary students. Both the qualitative and quantitative parts of the study have been complementary for each other to collect the ideas and feelings of the participating students from the subjective and in-depth as well as the objective and statistical dimensions. The primary data were collected from a total of 606 primary students, including 30 students from different families in the qualitative part and 576 students from four local primary schools in the quantitative part of the study. All these valuable information can be served as concrete and timely reference materials for educators and even parents to review and refine the quality of LVE for our children in terms of the direction, content and methodology. The scope and scale of application of the research findings may be very focused and limited at the present stage. However, the overall research process is an experiential journey of investigation and reflection of LVE with the active involvement of both the participating students and the researcher. The insights generated from the research findings can be shared, applied and further explored in the design and implementation of LVE for our young generations in the school context.

This concluding chapter is a condensed summary of the findings in the whole study as well as a reflection of the essence of LVE from the philosophical perspective.

### ***7.1 LVE as a Life-transforming Journey in Love***

LVE is a life-transforming journey for both the educators and the learners for self-fulfillment and nurturing others. Apart from the challenges of personal developmental tasks arising from

the onset of puberty, the young generations in the 21<sup>st</sup> century have to face the overwhelming changes in different spheres of life. Thus, there is an urge and serious concern to strengthen their inner self with positive life values, to develop loving and mutual caring relationships as well as to empower their potential and capacities to encounter various types of life challenges.

LVE for primary students is a foundation to enhance their capacity with courage, wisdom and mutual support to get out of their comfort zones for life transformation. They start to develop their competence of resilience and emotional management skills to gradually form a healthy self-identity, to build up harmonious intrapersonal and interpersonal relationships, including ‘self-self’, ‘self-others’, ‘self-world’ and ‘self-God or the transcendent being’, as well as to adapt successfully to the changing environments.

Teachers and parents are endowed with a special mission to accompany our children with love, understanding, support and guidance along their journey of self-exploration and transformation. Love and understanding are inextricably linked with each other. With love, we can reach out to our students to have a better understanding of their inner world. We always have to be aware that every child is a precious and unique individual with human dignity. By active listening and empathetic understanding, we can treat all our children with respect and create space for them to think, feel and express themselves as they are. Therefore, love with understanding is the most powerful means to empower our students to transcend over different challenges for their personal growth.

The companionship model with interactive approach in delivering LVE enables primary students to learn the art of loving and caring as well as developing their own selves at the personal or the group level. They can learn how to give and receive through the interactions among their peers, especially for those who have no siblings to share in their daily life experiences. Mutual respect, group support and team building are some significant elements

of LVE which can be learned together through the group dynamics with the teacher and their schoolmates.

## **7.2    *The Development of Self as the Core of LVE***

Primary students who are generally in the age group between 6-12 years old are typically more curious with a growing awareness and wonder of the world around them. They view life through the lens of their immediate environment. They begin to develop their unique understanding of life over time through their observations in daily experiences, interactions with others and learning from different sorts of media. The formation of their personal beliefs and values are influentially impacted by their significant others. At a youthful age, they tend to envision life as a fantasy or adventure filled with fun and excitement. They are inclined to learn more about their external environment or to explore other parts of the world with strong curiosity. Along their explorations of the outside world, they also develop a sense of self and focus more on interpersonal relationships, social norms and social expectations in their community. They gradually strive to become more independent with autonomy over their life and start to assume their social roles and responsibility. Then they move on to set goals for themselves and work out the plans for their future life achievements.

Referring to Table 26, it is noted that more participating students have associated the word ‘Life’ with ‘Significant others’ (13.3 % in the qualitative part and 6% in the quantitative part) rather than with ‘Self’ (10% in the qualitative part and 4% in the quantitative part). This may indicate that our primary students consider more about the existence and importance of interpersonal relationships rather than their intrapersonal relationships. The boy who has drawn his family with the absence of himself in the qualitative part of the study (Appendix W) is a critical example to illustrate that the child is not aware that his selfhood is important.

Simultaneously, more participating students had proposed ‘Enhancing interpersonal relationship’ (16.7% in the qualitative part and 21% in the quantitative part) for cherishing life whereas a few of them had proposed ‘Be true self’ (Not applicable in the qualitative part and 7% in the quantitative part) for cherishing life (Table 29). It is shown that the level of satisfaction with ‘Self’ among the participating students was inversely proportional to their academic levels. A number of them across different academic levels even had rated their level of satisfaction with self as ‘very dissatisfied’ (Table 11 & Figure 26 in Chapter V). These findings have alerted us to develop the self and personhood as the core of LVE to explore the different aspects of ‘Self’ according to the needs of the local students. The purpose of development of the ‘self’ is not motivated by self-centeredness to satisfy personal desires. It is for nurturing a well-balanced, healthy and positive personality of an individual so that each member of the society is able to respect and care for one another and to participate actively to build our community.

The ‘self’ is considered as the central ingredient in human personality and personal adjustment as advocated by Carl Rogers. It is the basic need of human beings to have positive regard from others and from oneself (Othman & Leng, 2011). ‘Self’ is composed of different dimensions: self-esteem, self-concept, self-image, self-identity and self-efficacy. Self-esteem is the subjective self-evaluation involving self-acceptance and self-respect (Orth & Robins, 2014). It is an evaluative construct of one’s self-concept and self-image which are intimately related to one’s past experiences and future aspirations. Self-concept is an experiential sense of the reflective activity of the self which involves an organized collection of various beliefs, feelings, identities and attributes present in oneself (Bailey, 2003; Oyserman, et. al., 2012). It is an overarching idea describing who we are in physical, emotional, social and spiritual sense (Neill, 2005). Meanwhile, self-image is how an individual perceives oneself based on

concrete and measurable accomplishment as well as the level of self-confidence (Bailey, 2003). It is an integrated component made up of self-concept, along with self-esteem or self-worth as well as one's ideal self (McLeod, 2008).

It is suggested that high self-esteem is typically associated with a positive self-image, a stronger sense of self-concept and self-worth while low self-esteem is often associated with a negative self-image and a weaker sense of self-concept and self-value. Meanwhile, an individual with a higher self-esteem is generally associated with higher academic competence or greater motivation to practice moral virtues and thus subsequently he or she may have a higher self-efficacy which is an individual's belief in his or her capability to exercise control over challenging demands or feel confident about his or her own functioning (Schwarzer & Luszczynska, 2008).

An individual who has balanced development in different dimensions of the 'self' with realistic and positive appreciations as well as with optimistic and responsible attitude to overcome threats or challenges in life will be able to develop a positive self-identity. The self-identity of an individual will entail far-reaching impacts on one's perceptions of life, the quality of interpersonal relationships and the performance of social roles.

'To be true self' is a way of cherishing life proposed by our local primary students. It is an inner yearning from the depth of a person to move from 'to do what we are expected to do' towards 'to be who we are'. Similar to the collaboration of different systems within an organism for its survival and optimal functioning (Hamed & Abu-Naser, 2017; Hakan, 2013), our children need to learn to identify and assume their individual role and social responsibility in the family, school, community and society. To accompany our students to be aware, accept and embrace their own imperfections as well as to leverage their strengths to contribute to personal and societal endeavors are the ways to become their true self. Thus, the development

of the self for enhancing our young generations to live their true identity as a dignified person with fulfillment is the essence of LVE.

### **7.3      *Enhancing Intrapersonal and Interpersonal Relationships for Collectivism***

With reference to the Confucian's pathway of 'Cultivate the Self', 'Regulate the Family', 'Rule the State' and 'Lead the World to Peace' (Li, 2008), cultivation of both intrapersonal and interpersonal relationships is considered as the basis and the initial step of self-enhancement in the predominantly Chinese society of Hong Kong. Cultivation of the self is a morally transforming process of pursuing an ideal personality with high ethical standards for both the independence and interdependence of the self (Tan, 2017). It requires a series of intrapersonal dynamics to explore, discover and manage the values, attitudes and behaviors of oneself through self-reflection, self-exploration, self-awareness, self-regulation, self-improvement and self-dedication (Duan, et al, 2022) to foster the sense of 'Stewardship' and 'Authorship' for attaining self-reliance and self-sufficiency to live out one's perfect self with uniqueness for achieving one's personal goals with his or her own styles, interests and values. With the internalized transformative power of self-acceptance, self-compassion and resilience, we can navigate challenges and overcome obstacles for self-actualization and self-transcendence.

Referring to the Maslow's Hierarchy of Needs, human beings are not only satisfied with the 'Physiological needs' and 'Safety needs' for life sustainment but we are also yearning for the needs of 'Love and Belongingness' which are nurtured and developed in relationships. Since individual is closely linked with one another in our specific social and cultural contexts, the moral transformation process of the cultivated self in the social dimension is also required through observing the social rituals and norms for the holistic wellbeing of oneself and other individuals in a collective sense. To foster the development of a community with social

harmony, mutual respect and common good, it is significant to connect individuals with one another by consolidating the sense of ‘Partnership’ and ‘Citizenship’ to find ways for cooperation and collaboration with others. By developing our interpersonal relationships, individuals in a society can establish and maintain successful social connections grounded on a basic understanding and respect of the feelings, motivations and desires of people who are different from us (Behjat, 2012). By adopting the effective interactions for communication, negotiation and collaboration, we can contribute to build up constructive interdependence for enhancing the respectful conformity to the social rules and norms.

Living in Hong Kong as an international metropolis located in China with the blending cultures from both the East and the West, it is recommended to cultivate twelve priority values and attitudes as laid down by the Education Bureau of the Government of Hong Kong Special Administration Region, including ‘Perseverance’, ‘Respect for Others’, ‘Responsibility’, ‘National Identity’, ‘Commitment’, ‘Integrity’, ‘Benevolence’, ‘Law-abidingness’, ‘Empathy’, ‘Diligence’, ‘Filial Piety’ and ‘Unity’. To enhance the well-being of all individuals in a society, it is utmost important to help our students to understand the meaning and spirit of the above priority values and attitudes as well as to put them into actions. There can be far-reaching benefits for the self, family, community, country and the world by cultivating proper values, instilling positive attitudes towards life and practicing appropriate behaviors with the balanced integration of cognitive knowledge, affective emotions and practical actions (EDB, 2023b). Thus, the nurturing of both intrapersonal and interpersonal relationships is fundamental and essential for the healthy and fruitful development of individuals and the whole society.

#### **7.4      *Encountering Life Challenges especially Death***

The primary students are facing many challenges or obstacles along their life journey of growth from childhood to adolescents and then to adulthood. When children grow up, they will experience challenges caused by biological, psychological, interpersonal, social and environmental changes. Discrepancies between their self-perceptions and the observed interpersonal experiences can create disturbances to them especially during their puberty. Teachers and parents can help to empower our young generations for self-improvement and self-actualization in developing a balance among the ‘id’, ‘ego’ and ‘super-ego’ for self-fulfillment. As advocated by the Psychoanalytic Theory of Freud, the ‘id’ consists of primary drives, primitive desires and hidden memories. The ‘super-ego’ operates as a moral conscience whereas the ‘ego’ is the realistic part mediating between the desires of the ‘id’ and the conscience of ‘super-ego’ (Frosh, 2012). To apply other theories of developmental psychology in LVE will also be helpful for understanding and interpreting the thoughts and feelings of the primary students to enhance their journey of development.

Life is a complex and dynamic process from birth to death. ‘Death’ is an unpredictable and irreversible phenomenon and characteristic of life. Death can be very threatening, stressful or mysterious to many people especially to children who have little or no experience of loss of their significant others. It is essential to assist our young generations to learn about death since it is closely connected with survival and growth. Thus, the teachers need to be well-equipped and psychologically prepared to accompany and guide our children to explore this important dimension of life.

Death is a special stage of life which is not easily comprehended by the primary students especially at the lower academic levels as shown in the findings of this study (Table 9 in Chapter V). It is important to explore the types of factors and their impacts on the perception



of ‘Death’ among the local primary students. It is highly recommended to include ‘Death’ with special attention in the design and delivery of LVE for our school children. Without proper guidance, ‘death’ can be wrongly interpreted as an effective or easy way to get out of the unresolved conflicts in our stressful social milieu. It is of urgency to enhance LVE for inculcating positive life values in the local students for them to respect and cherish life through ‘encountering death or loss’.

### **7.5 *Four Dimensions of LVE***

Referring to the epistemological Theory of Blank Slate (Tabula rasa) proposed by John Locke, the mind is postulated the mind to be a piece of clean, white paper which is void of characters or any idea since every human being is born without any built-in mental content. Human minds cannot create ideas but only combine the learned ideas. So, all knowledge is acquired from experiences or perceptions (Androne, 2014).

Nevertheless, all the findings in the study have shown that the minds of the participating students are not just like a sheet of blank paper. Instead, it is demonstrated that all of them are gifted with talents and they have portrayed the originality of ideas in their drawings or sharing. With their unique talents and personal characters, they have exercised their potentials incisively with acquired knowledge and skills as well as their innate potential and intuitions to express a wide range of perceptions of life and the recommended ways in cherishing life. The responses of the participating students have provided valuable insights for designing LVE curricula and teaching materials for local primary students.

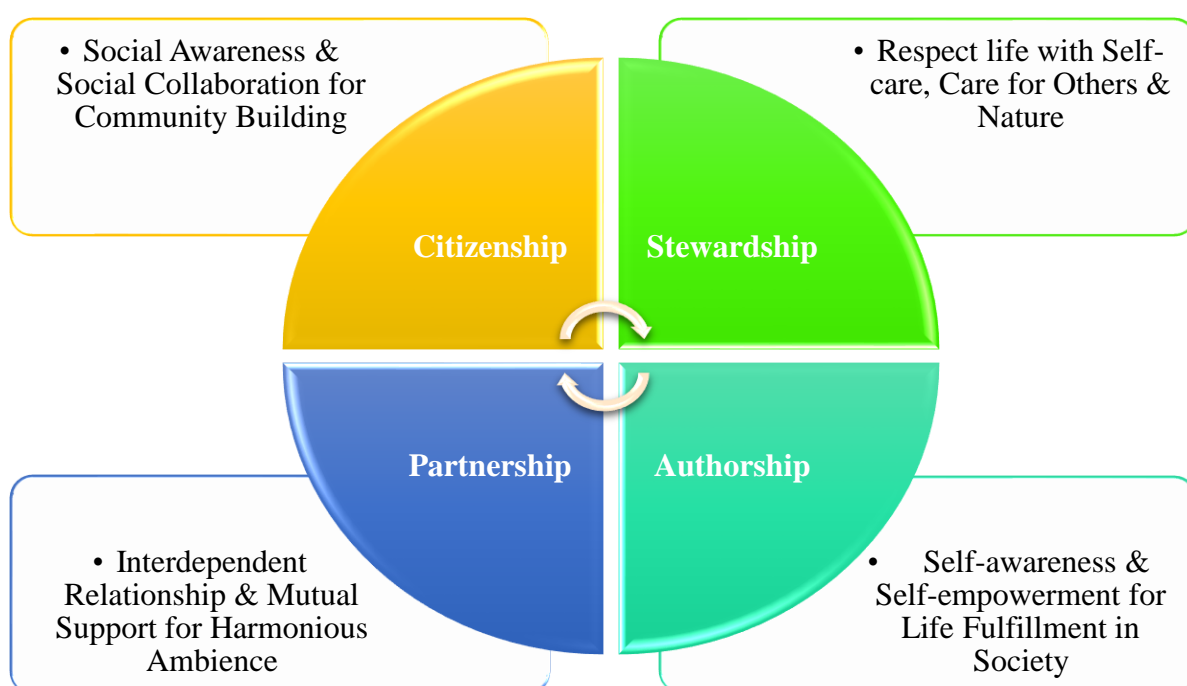
Aligning all the findings in the qualitative and the quantitative parts of this study, it is highly recommended that teachers, school personnel and parents try to implement LVE in the local primary schools or home settings by exploring the meanings of life and promoting the core

values of life with the children together and for the children in the following four dimensions of LVE: ‘Stewardship’, ‘Authorship’, ‘Partnership’ and ‘Citizenship’.

‘Stewardship’ involves self-exploration, self-management and self-care for learning to respect life and take best care of all living beings, including self, others and the nature. ‘Authorship’ refers to the self-awareness and self-empowerment with discernment and innovative autonomy to attain life fulfilment for oneself and the others. ‘Partnership’ is a further step to reach out to others in a wider scope and deeper sense by developing interdependent relationships and mutual support for harmonious ambience with immense respect, interpersonal skills and embracing love in diversities. ‘Citizenship’ is the cultivation of social awareness and collective commitment with self-engagement for building up the community or society through collaboration for the common good of everybody.

The relationship among the four dimensions of LVE can be summarized and depicted in the following diagram.

**Figure 43.** *Four dimensions of LVE as a life-transforming journey in Love*



It is tremendously significant for educators to continuously improve the quality of LVE to embrace the ‘ultimate concern and practice’, ‘ethical thinking and reflection’ as well as ‘exploration of integrity’ (Sun & Lee, 2021, p.43) through enhancing the self-understanding capacity of our students. The young generations are inspired to explore and identify the uniqueness of their own characteristics, potentials and limitations by listening to their inner voices. They are encouraged to navigate their own destiny for self-actualization or self-transcendence with specific and achievable goals. They are guided and accompanied to utilize their will power in making discernment of their own choices to determine the proper ways to satisfy their needs by self-determination.

Nevertheless, self-determination does not imply just doing according to our wishes or wants. We need to listen to our inner voice to explore what is really good for us and what we really want to do. It is undoubted that the viewpoints of an individual about one’s life and reality do not only reflect personal perceptions about oneself but also our external context. The inner voice of an individual can also remind and indicate what kind of moral person or character he or she has opted to be or to become gradually.

It is comprehensible that children want to remain as a beloved kid like what we all want to live our true self like a child. In fact, there is always a little kid inside each of us who always makes a mess in different stages of our life. Thus, it is a great responsibility of the educators and parents to guide our children to examine their conscience and reflect their visions for recognizing what is the greatest treasure with incomparable value and worth in their life which can bring them true happiness, peace and security. In uniting our intellect of wisdom, sentiments of love and moral power of free will to respect ourselves and others, we can discern what is either true or false as well as good or bad so as to decide what to do without causing harms or interference to ourselves or others.

Simultaneously, the art of sharing with empathetic interpersonal skills as well as the sense of belonging are also needed to be cultivated in LVE for fostering a compassionate, harmonious and inclusive society sustained with the common virtues and community spirit.

Life is diversified in forms and colors with multidimensional perspectives. Regardless of how colorful a picture is painted with meticulous composition and exquisite artistic attainments or how skillful writing an article is presented, the meaning of life is still not exhausted and it cannot be fully expressed with artistic conceptions or verbal expressions. Similarly, none of us can master every issue encountered in our life because of our limitations and other external factors, neither in our past history nor for the future visions. Hence, there are still a lot of room for enrichment of experiences and continuous exploration in the area of LVE for the local primary students with the lens of the specific sociocultural context of Hong Kong.

Last but not least, it is to reiterate that Hong Kong people are considered to be in a privileged position to benefit from the strengths of collectivism in the Chinese traditions and individualism in the Western cultures owing to the unique geographical, historical and sociocultural backgrounds. Thus, LVE is recommended to have greater emphasis on the development of the ‘self’ with intrapersonal skills to empower our young generations in the dimensions of ‘authorship’ and ‘stewardship’ to become mature and independent adults. Meanwhile, it is equally significant to nurture the local primary students with positive attitude and interpersonal skills to respect the cultural diversities for maintaining a peaceful milieu with inclusivism and harmony. All parents and educators are embraced with a valuable mission to foster our new generations to be responsible citizens to build up a brighter future in the dimensions of ‘partnership’ and ‘citizenship’. In the long run, all these merits are anticipated to be the social inheritance to be passed on from generations to generations.

Life is never a smooth path but with both high and low tides. In views of the existing

unprecedented global socioeconomic changes, different kinds of new issues and unexpected difficulties are coming up with various moral confusions and blurred values, it is mostly urgent for us adults to accompany our new generations to cross over the endlessly new hurdles with persistent resilience, courageous endeavors and an open heart with faith, hope and charity.

To end up this study, I would like to conclude that the mystery of maintaining any interpersonal relationship is not how well we can express in words but how much we can love. Love is the source of unspeakable joy uniting us with blessings. Similarly, love is the most powerful driving force to teach into the heart of our students, the depth of our core not only for emotions, but also the mind, will, thought and intentions. Teaching with a burning heart of love can encourage our students to behave well and live joyfully with a heart burning of love. We can love as we are loved. We have been understood and thus we know the importance of mutual understanding among one another.

Life influences life since we all learn from experiences and role modelling. Thus, our children can learn how to love with understanding, acceptance and respect in the process of being loved, understood, accepted and respected. Without understanding, we can hardly love one another. Hence, empathetic listening to our students with open hearts and minds is fundamentally important for us to understand more about their viewpoints, uniqueness and constraints so as to take into account of their perspectives. It is important to nurture our young generations in a way that they can understand and accept, instead of stressing what we would like to share or teach from our own perspectives. With love, we can motivate our students to learn how to go beyond their personal and environmental constraints. Let us teach our students to respect and vitalize life with Love, Innovation, Faith and Enthusiasm for cherishing their own life as well as nurturing others.

(Word Count: 66,098)

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### The Annual Themes of ‘MPA’ for the academic year of 2011-2021 in the HKSAR

Academic Year	Annual Themes of ‘My Pledge to Act (MPA)’	Philosophy of Confucius
2020/ 2021	Be Grateful and Treasure what we Have. Stay Positive and Optimistic	Cultivate the self
2019/ 2020		
2018/ 2019	Let’s Build a Harmonious Society together through Care and Respect	Lead the world to peace
2017/ 2018	To Live a Healthy and Green Life	Lead the world to peace
2016/ 2017	Love and Care – from Self to Others	Cultivate the Self
2015/ 2016	Love our Home and Clean Hong Kong	Rule the State
2014/ 2015	Build the Future with our Family	Regulate the family
2013/ 2014	To Love and Care for our Family	Regulate the family
2012/ 2013	To Set our Goals towards a Fruitful life	Cultivate the self
2011/ 2012	To Get our Dream to Set our Goal to Live a wonderful life	Cultivate the self

According to Confucian Philosophy in the moral development, it should be ‘Cultivate the self’, ‘Regulate the family’, ‘Rule to the state’ and ‘Lead the world to peace’. However, it is observed that regarding the annual themes of the ‘MPA’ for the academic year from 2011 to 2021 as shown in the above Table, they were established without any comprehensive and systematical structure, neither in the chronological order moving from the core of inner self outwardly to the external world, from external world inwardly to the inner depth of self, nor cyclical moving from and to the core and the external world.



**THE EDUCATION UNIVERSITY OF HONG KONG**  
**Graduate School**

**CONSENT TO PARTICIPATE IN RESEARCH**

**Research on the Perceptions of ‘Life’ among Hong Kong Primary Students -  
 Interview**

I hereby consent to my child \_\_\_\_\_ to participate in the captioned research co-supervised by Dr. Lam Chi Ming and Dr. Wu Siu Wai which is conducted by Yuen Wing Ching.

I understand that information and the drawings obtained from this research may be used in future research and may be published. However, our right to privacy will be retained, i.e., the personal details of my child will not be revealed.

The procedure as set out in the attached information sheet has been fully explained. I understand the benefits and risks involved. My child’s participation in the project is voluntary.

I acknowledge that we have the right to question any part of the procedure and can withdraw at any time without negative consequences.

Name of Parent or Guardian

Signature of Parent or Guardian

Date

**For Children aged 9-15:**

Name of Participated Child

Signature of Participated Child

Date

## INFORMATION SHEET

### *Research on the Perceptions of ‘Life’ among Hong Kong Primary Students – Interview*

You are respectfully invited to participate with your child in the research co-supervised by Dr. Lam Chi Ming and Dr. Wu Siu Wai, conducted by Yuen Wing Ching, who are staff and student of Graduate School in The Education University of Hong Kong.

This research is conducted as a preliminary study to explore Hong Kong primary students’ perceptions of ‘life’ and their personal viewpoints to live quality life. All the collected information as first-hand information will be used as reference materials for developing curriculums in Life and Values Education for different levels of primary students.

A total number of twenty primary students will be recruited by the researcher. In this research, each child will be invited to draw a picture with the theme of ‘Life’. After drawing, an individual and semi-structured interview will be subsequently conducted with some guiding questions for the child to share about the drawing.

The interview will be conducted with audio-recording for report-editing. All the collected data, including the drawings, will be sorted and categorized for further analysis and compilation. Pseudonyms will be shown in any published dissemination so as to protect the confidentiality of all participants.

Your child’s participation in the project is voluntary. Neither risk nor discomfort is foreseen in the research. However, withdrawal from any participant will be accepted at any stage of the research without negative consequences.

All the participating students and their parents or guardians are required to sign the consent form. If you would like to obtain more information about this research, please feel free to contact me by email at [REDACTED] or telephone number [REDACTED], or my principal supervisor Dr. Lam Chi Ming by email at [chiming@eduhk.hk](mailto:chiming@eduhk.hk).

If you have any concerns about the ethical conduct of this research study, please do not hesitate to contact the Human Research Ethics Committee by email at [hrec@eduhk.hk](mailto:hrec@eduhk.hk) or by mail to Research and Development Office, The Education University of Hong Kong.

Thank sincerely for your support and participation in this research.

Yuen Wing Ching

Researcher

茲同意敝子女\_\_\_\_\_參加由林志明博士和胡少偉博士負責監督，阮永青負責執行的研究計劃。她/他們是香港教育大學的教員和學生。

本人理解此研究所獲得的資料和圖畫可用於未來的研究和學術發表。然而本人有權保護敝子女的隱私，其個人資料將不能洩漏。

研究員已將所附資料的有關步驟向本人作了充分的解釋。本人理解可能會出現的風險。本人是自願讓敝子女參與這項研究。

本人理解本人及敝子女皆有權在研究過程中提出問題，並在任何時候決定退出研究，更不會因此而對研究工作產生的影響負有任何責任。

父母姓名或監護人姓名:

\_\_\_\_\_

父母或監護人簽名:

\_\_\_\_\_

日期:

\_\_\_\_\_

**(9-15歲參加者適用)**

參加學生姓名:

\_\_\_\_\_

參加學生簽名:

\_\_\_\_\_

日期:

\_\_\_\_\_

## 有關資料

### <本港小學生對生命的認知>研究 - 面談

誠邀閣下及 貴子女參加由林志明博士和胡少偉博士負責監督，阮永青小姐負責執行的研究計劃。她/他們是香港教育大學的教員和學生。

本研究旨在探索本地小學生對「生命」的認知，以及對美好生活的觀點。所有蒐集的第一手資料，經整理後，將用作日後發展小學生命教育課程綱要和教材之參考資料。

研究員將邀請廿位小學生參與是項研究。在研究中，每位參加者首先繪畫一幅以「生命」為主題的圖畫，然後在個別面談之中，在研究員的帶領之下，就其作品作出分享。為方便日後分析和編撰研究報告，面談的過程將進行錄音。

完成後，研究員將所有收集的圖畫和資料分類、整理和分析後，再撰寫研究報告。為保障個人私隱，所有參加者將以佚名方式出現於任何報告或文獻中。

閣下及 貴子女的參與純屬自願性質。研究過程中，在可預知的情況之下，不會對閣下及 貴子女可構成任何風險或不適。然而，閣下及 貴子女享有充分的權利，在任何時候皆可以退出是項研究，並不會因此引致任何不良後果。

如閣下欲獲得更多有關是項研究的資料，歡迎以電郵 ( ) 或電話 ( ) 與本人或本人的導師林志明博士 ([chiming@eduhk.hk](mailto:chiming@eduhk.hk)) 聯絡。

如閣下或 貴子女對是項研究的操守有任何意見，可隨時與香港教育大學 人類實驗對象操守委員會 聯絡 (電郵: [hrec@eduhk.hk](mailto:hrec@eduhk.hk); 地址: 香港教育大學研究與發展事務處)。

謝謝閣下及 貴子女的支持和參與是項研究。

阮永青  
研究員

**Invitation Letter to all the Local Primary Schools**

Dear Headmaster/ Headmistress,

This is to request respectfully for your kind support and participation in the ‘Research on the Perception of Life among Hong Kong Primary Students’ which is conducted by the Graduate School of the Education University of Hong Kong.

This research is aimed at exploring the acquired knowledge on the perceptions of life among Hong Kong primary students. Around 400 local primary students will be invited to join the research and no potential risks will be involved. All the collected data of the first-hand information will be used as reference materials for developing the curriculum of Life and Values Education for different levels of primary students.

We request for the great assistance of your school personnel to help in disseminating and collecting a standardized questionnaire to your students of different levels from Primary 1 – Primary 6 as well as to distribute and collect an enclosed consent form to the parents or guardians of your students. Your students are invited to complete the enclosed questionnaire and the anticipated time of completion is around 15-20 minutes. The participation of your students is completely voluntary and their responses are anonymous so as to protect their confidentiality. All the collected questionnaires will only be used for statistical purposes and be reported in aggregated form in the final report which will then potentially be disseminated in academic presentations and journal publications. In case the participating students ask for withdrawal from the research, please help to convey the request to the undersigned researcher.

If you would like to obtain more information about this research, please feel free to contact me by email at [REDACTED] or WhatsApp at [REDACTED] or my principal supervisor Dr. Lam Chi Ming by email at [chiming@eduhk.hk](mailto:chiming@eduhk.hk). If you have any concerns about the ethical conduct of this research study, please do not hesitate to contact the Human Research Ethics Committee by email at [hrec@eduhk.hk](mailto:hrec@eduhk.hk) or by mail to the Research and Development Office, The Education University of Hong Kong.

The time slot for data collection in this research is scheduled between 2 January 2022 and 30 June 2022. Should you accept this invitation or have any enquiry, please feel free to contact the undersigned by email: [REDACTED]

Thanks sincerely for your kind attention and consideration. I look forward to having a favorable reply from you very soon.

Yours sincerely,

Yuen Wing Ching


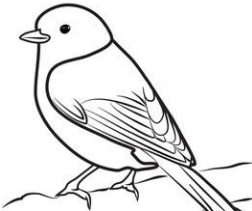








Researcher

*Questionnaire on the Perceptions of Life among Primary Students*

**GENDER:** \_\_\_\_\_ **AGE:** \_\_\_\_\_ **PRIMARY LEVEL:** \_\_\_\_\_

**Part 1: What is your immediate association with the word 'Life'?**

**Part 2: Which of the following do you think have 'LIFE'? Please put a '✓' in the following appropriate boxes**

<input type="checkbox"/>	 <b>Bee</b>	<input type="checkbox"/>	 <b>Bird</b>
<input type="checkbox"/>	 <b>Cloud</b>	<input type="checkbox"/>	 <b>Grass</b>
<input type="checkbox"/>	<b>Mountain</b> 	<input type="checkbox"/>	 <b>My beloved toy</b>
<input type="checkbox"/>	<b>Streamed fish</b> 	<input type="checkbox"/>	 <b>Robot</b>
<input type="checkbox"/>	<b>Unborn baby</b> 	<input type="checkbox"/>	 <b>Virus</b>

**Part 3: Which of the following are the characteristics of 'Life'? Please put a '✓' in the appropriate boxes.**

<input type="checkbox"/> Breathing	<input type="checkbox"/> Communication	<input type="checkbox"/> Death
<input type="checkbox"/> Feelings	<input type="checkbox"/> Growth	<input type="checkbox"/> Movement
<input type="checkbox"/> Need nutrients/ Water	<input type="checkbox"/> Reproduction	<input type="checkbox"/> Senses
<input type="checkbox"/> Thinking	<input type="checkbox"/> Other (Please specify) _____	

**Part 4: How well are you satisfied with the following? Please put a '✓' in the appropriate box of each item.**

	Very Dissatisfied	Dissatisfied	Satisfied	Very Satisfied
A. Myself				
B. Family life				
C. School life				
D. Living environment				
E. Friendships				

**Part 5: Please choose 3 items which are the most important for your life from the following and put a '✓' in the appropriate boxes.**

<input type="checkbox"/>	Happiness	<input type="checkbox"/>	Family	<input type="checkbox"/>	Friends	<input type="checkbox"/>	Health
<input type="checkbox"/>	Morality	<input type="checkbox"/>	Academic achievement	<input type="checkbox"/>	Talents	<input type="checkbox"/>	Wealth

**Part 6: Please describe briefly how you can enjoy a better life.**

---


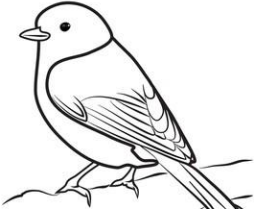








**\* Thanks \***

## 問卷調查：小學生對「生命」的認知

性別： \_\_\_\_\_ 年齡： \_\_\_\_\_ 年級： \_\_\_\_\_

第一部份： 「生命」二字，使你即時想起甚麼？

第二部份： 以下哪些擁有「生命」？請在適當的方格內填上「✓」號。

<input type="checkbox"/>		<input type="checkbox"/>	
蜜蜂		鳥兒	
<input type="checkbox"/>		<input type="checkbox"/>	
雲		草	
<input type="checkbox"/>		<input type="checkbox"/>	
山		我喜愛的玩具熊	
<input type="checkbox"/>		<input type="checkbox"/>	
蒸魚		機械人	
<input type="checkbox"/>		<input type="checkbox"/>	
未出生的嬰兒		病毒	



第三部份：「生命」有甚麼特徵？請在下列適當的方格內填上‘✓’號。

<input type="checkbox"/>	呼吸	<input type="checkbox"/>	溝通	<input type="checkbox"/>	死亡
<input type="checkbox"/>	感覺	<input type="checkbox"/>	生長	<input type="checkbox"/>	移動
<input type="checkbox"/>	需要營養和水	<input type="checkbox"/>	生育繁衍	<input type="checkbox"/>	知覺
<input type="checkbox"/>	思考	<input type="checkbox"/>	其他 (請註明)		

第四部份：你對下列各項有多滿意？請在下列各項的適當方格內填上‘✓’號。

	很不滿意	不滿意	滿意	很滿意
A. 自己				
B. 家庭生活				
C. 學校生活				
D. 居住環境				
E. 朋友關係				

第五部份：請從下列選出你認為生命中最重要的一項，並在適當的方格內填上‘✓’號

<input type="checkbox"/>	快樂	<input type="checkbox"/>	家庭	<input type="checkbox"/>	朋友	<input type="checkbox"/>	健康
<input type="checkbox"/>	品行	<input type="checkbox"/>	學業	<input type="checkbox"/>	才能	<input type="checkbox"/>	財富

第六部份：請簡述你如何可以活得更好。

---

\* 謝謝 \*

CONSENT TO PARTICIPATE IN RESEARCH

Research on the Perceptions of 'Life' among Hong Kong Primary Students - Questionnaire

I hereby consent to my child \_\_\_\_\_ to participate in the captioned research co-supervised by Dr. Lam Chi Ming and Dr. Wu Siu Wai which is conducted by Yuen Wing Ching.

I understand that information obtained from this research may be used in future research and may be published. However, our right to privacy will be retained, i.e., the personal details of my child will not be revealed.

The procedure as set out in the attached information sheet has been fully explained. I understand the benefits and risks involved. My child's participation in the project is voluntary.

I acknowledge that we have the right to question any part of the procedure and can withdraw at any time without negative consequences.

Name of Parent or Guardian

\_\_\_\_\_

Signature of Parent or Guardian

\_\_\_\_\_

Date

\_\_\_\_\_

**For Children aged 9-15:**

Name of Participated Child

\_\_\_\_\_

Signature of Participated Child

\_\_\_\_\_

Date

\_\_\_\_\_

## INFORMATION SHEET

### *Research on the Perceptions of 'Life' among Hong Kong Primary Students - Questionnaire*

You are respectfully invited to participate with your child in the research co-supervised by Dr. Lam Chi Ming and Dr. Wu Siu Wai, conducted by Yuen Wing Ching, who are staff and student of Graduate School in The Education University of Hong Kong.

This research is conducted as a preliminary study to explore Hong Kong primary students' perceptions of 'life' and their personal viewpoints to live quality life. All the collected information as the first-hand information will be used as reference materials for developing curriculums in Life and Values Education for different levels of primary students.

In this research, a total number of 400 primary students will be recruited to complete a questionnaire as shown in the attachment. All the collected data will be compiled for further analysis and report editing. No personal information of all the participated children and their parents or guardians will be disclosed in any published dissemination.

Your child's participation in the project is voluntary and withdrawal is allowed at any stage of the research. Neither risk nor discomfort is foreseen during the research. A consent form is required to be signed by the parents or guardians of each participating student. If you would like to obtain further information about this research, please feel free to contact me by email at [REDACTED] or telephone number [REDACTED], or my principal supervisor Dr. Lam Chi Ming by email at [chiming@eduhk.hk](mailto:chiming@eduhk.hk).

If you or your child have/ has any concerns about the ethical conduct of this research, please do not hesitate to contact the Human Research Ethics Committee by email at [hrec@eduhk.hk](mailto:hrec@eduhk.hk) or by mail to Research and Development Office, The Education University of Hong Kong.

Thanks sincerely for your support and participation in this research.

Yuen Wing Ching

Researcher

香港教育大學

<研究學院>

參與研究同意書

<本地小學生對生命的認知>研究-問卷調查

茲同意敝子女\_\_\_\_\_參加由林志明博士和胡少偉博士負責監督，阮永青小姐負責執行的研究計劃。她/他們是香港教育大學的教員和學生。

本人理解此研究所獲得的資料可用於未來的研究和學術發表。然而本人有權保護敝子女的隱私，其個人資料將不能洩漏。

研究員已將所附資料的有關步驟向本人作了充分的解釋。本人理解可能會出現的風險。本人是自願讓敝子女參與這項研究。

本人理解本人及敝子女皆有權在研究過程中提出問題，並在任何時候決定退出研究，更不會因此而對研究工作產生的影響負有任何責任。

父母姓名或監護人姓名:

\_\_\_\_\_

父母或監護人簽名:

\_\_\_\_\_

日期:

\_\_\_\_\_

**(9-15歲參加者適用)**

參加學生姓名:

\_\_\_\_\_

參加學生簽名:

\_\_\_\_\_

日期:

\_\_\_\_\_

## 有關資料

### <本港小學生對生命的認知>問卷調查

誠邀閣下及 貴子女參加林志明博士和胡少偉博士負責監督，阮永青負責執行的研究計劃。她/他們是香港教育大學的教員和學生。

本研究旨在探索本地小學生對「生命」的認知，以及對美好生活的觀點。所有蒐集的第一手資料，經整理後，將用作日後發展一套完整的小學生命教育課程綱要和教材。

在本研究中，400 位小學生將被邀請填寫一份問卷(詳見附件)。所有收集的資料將用作整理和分析。為保障個人私隱，所有參加者將以佚名的方式參加，故他們及其家長或監護人的個人資料，將不會於任何報告或文獻中被公開。

閣下及 貴子女的參與純屬自願性質。研究過程中，在可預知的情況之下，並不會對閣下及 貴子女構成任何風險或不適。然而，閣下及 貴子女享有充分的權利，在任何時候皆可以退出是項研究，並不會因此引致任何不良後果。

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謝謝閣下及 貴子女的支持和參與是項研究。

阮永青

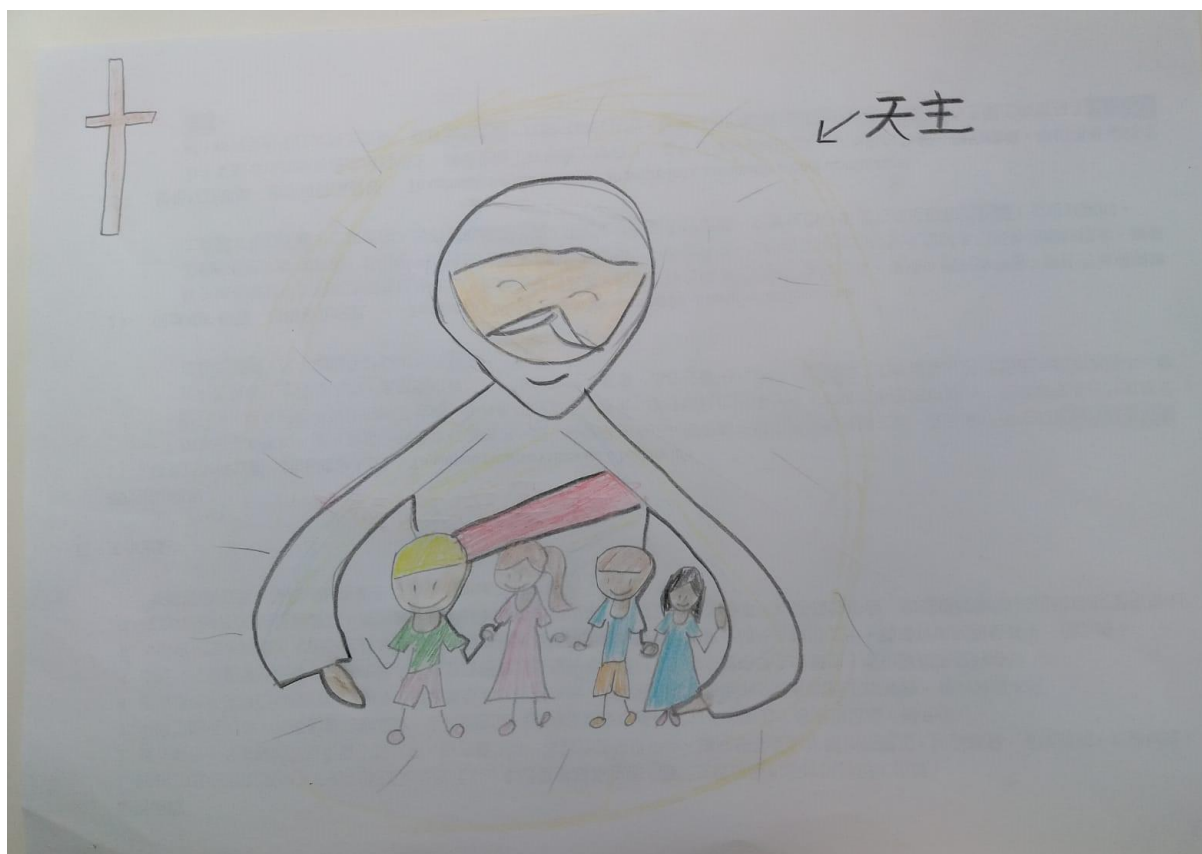
研究員

***Statistical Information about the Religious Backgrounds of the Local Primary Schools***

Types/Religions	Government	Aided	DSS	Private	Total	Percentage
<b>Buddhism</b>	0	15	0	0	15	3%
<b>Catholic</b>	0	95	1	12	108	21.3%
<b>Confucianism</b>	0	1	0	0	1	0.2%
<b>Islamism</b>	0	8	0	0	8	1.6%
<b>Protestantism</b>	0	149	9	17	175	34.4%
<b>Others</b>	0	4	0	0	4	0.8%
<b>Non-religious</b>	34	148	11	4	197	38.8%
<b>TOTAL</b>	34	420	21	33	508	100%

A is an eight years old girl who studies Primary 3 in a local school. She is the only child in a middle-class Catholic family. She is a cheerful, smart and expressive girl who can manage well to describe the whole picture by her own self.

In the middle of her picture as shown in *Picture A1*, she drew the God with labeling in Chinese words and four children, including two boys and two girls. At the left top corner of the picture, she also drew a brown cross. The God and the children are surrounded by a thin yellow line. All the children have different characteristics with different colors and they are all in the arms of the God. The children are closely together with one another with hand-in-hand.



*Picture A1*

In the interview, A had a full description of the picture by herself. Firstly, she indicated the



bigger man with beard was the God who gives us life. In His arms, there are four children from different nations including British, America and Chinese. They are all loved by God. When A was asked why there was a yellow line, she explained that it was the glory from God. Therefore, we have to cherish our life.

After A's brief presentation of her picture, she was invited to add something into her drawing to show how to cherish life. As shown in *Picture A2*, she painted the background colorful with different colors to indicate the diversities of life. She added the sun, the moon and some clouds in the sky. Other living things, including flowers, grass and a bird were also drawn. Apart from these, a pair of praying hands was also added into the picture. She explained that prayers can help us improve our life with faith.



*Picture A2*



B is a six-year-old boy who studies in Primary 1. He drew a big green rectangle in the middle of his picture (*Picture B1*). The red sun is at the left top-corner of the picture and there are two pieces of blue cloud on the right. There is a figure between the sun and the clouds which the interviewer could not make a good guess about what it is. Inside the big square, there are a big yellow trapezoid, two purple rectangular patterns, a human figure and some toys.



*Picture B1*

In the interview, B described that he drew the sun, the helicopter and some clouds in the sky. He explained that the big green rectangle represents his home. One purple rectangle on the bottom is the door while the other is the bed. The big yellow trapezoid is the lamp. He

himself was playing with his beloved toys, including the bear, the toy car, the ball and the train.

He said that home is the most important in his life and thus he drew it in his picture.

At the end of the interview, B added some Legos into the picture (*Picture B2*) when he was asked how he can cherish his life. He explained that he wanted to have Legos as his new toy by that time. Therefore, he would be very happy if he could get them in hand.



*Picture B2*



(Appendix C)

C is the younger sister of D. She is six years old and studies Primary 1 in an international school. She is cheerful and active.

In her picture (*Picture C1*), C drew the playground where she had spent a happy weekend with her family. There were different types of recreational facilities located on the grassland, including roundabout, slide, bench, Ferris wheel and playhouse. She drew her family, including her parents, her elder sister and herself on the bottom of the picture with clear labeling. The parents were in a bit higher position comparing with the sisters. Even though the father was a bit far apart from the others, they were all close to one another. All of them had smiling faces with similar postures. Besides, there was another person without any facial expression drawn apart from the C's family and the person's identity was not shown.



*Picture C1*

At the top of the picture, C drew a blue sky with a new moon, many yellow stars and a light blue piece of cloud. At the right bottom of the picture, C wrote the verse ‘We have to cherish life’. It was added after she had taken a look at her elder sister’s picture.

In the interview, C described that it was one of the happy moments to be with her family. She loves her family very much. The unlabeled person is someone else they met in the playground. When C was asked why she drew the scene of nighttime instead of daytime. She designated that they spent the happy day in the playground from day to night and it was the time for them to leave for home.

At the end of the interview, C added more stars, some grass and some other people into the picture (*Picture C2*). She illustrated that more stars could make the world brighter and more beautiful. The grass is to indicate that there are other living things. Some more people were added because C wanted to share the happiness with others.



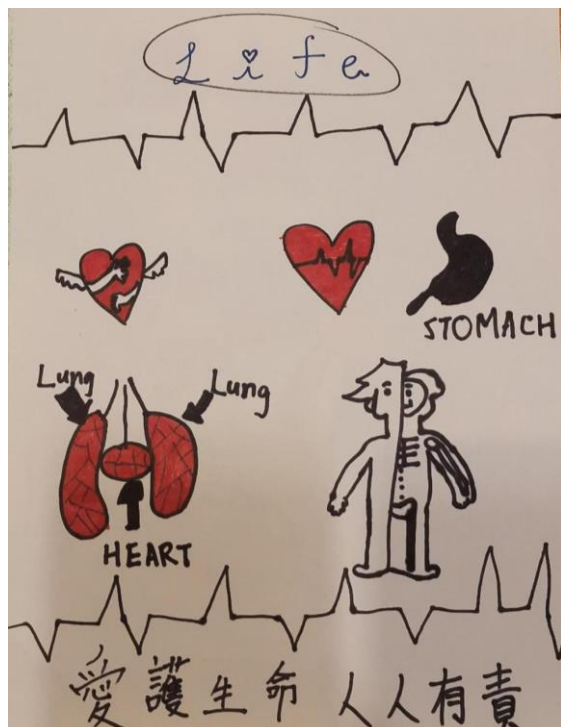
*Picture C2*



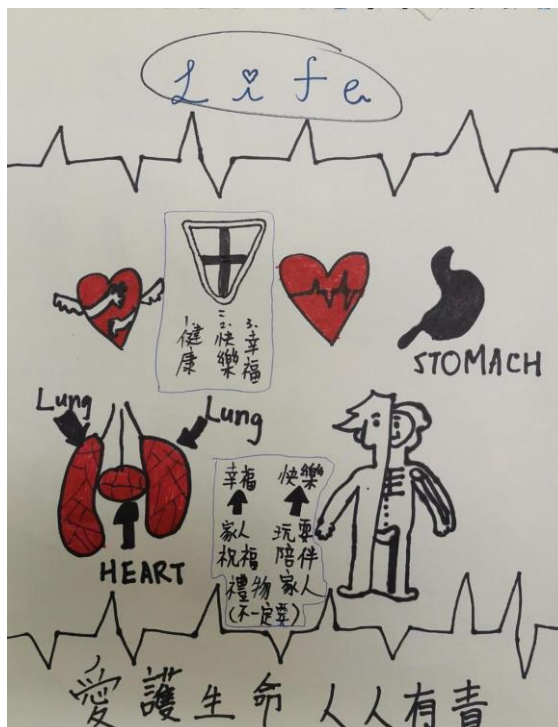
## (Appendix D)

D is a ten-year-old girl who studies Primary 5 in an international school. She lives with her parents and her younger sister, C.

D drew her picture (*Picture D1*) in only two colors, red and black. In her picture, some organs of a human body were drawn in the middle part while two lines with V-shapes were drawn horizontally on the top and bottom edges. There are three red hearts: The first one has a pair of wings. The second one has a line like pulses inside it. The third one is labelled as heart though it is circular in shape and is located in between two lungs. The stomach in black is located next to the red heart with pulses. There is also a figure of a human being who is composed of two different patterns. One is shown with a skeleton structure while the other is basically empty inside the body. The word 'Life' is written as the header while the text of 'Everybody is responsible to cherish life' as the footer.



Picture D1



Picture D2

In the interview, D shared that the heart is the most important organ to sustain one's life. Life will come to an end when the heart was hurt as shown in the first figure of heart. However, when the heart functions well with other organs, including stomach and lungs, life can be maintained well. The human figure composed of two different patterns is to indicate the different physical formats of a human being, the left is the normal outlook when he is alive while the skeleton on the right is the outlook when he is dead.

At the end of the interview, D added the shield with thematic texts of good health, delight and happiness for cherishing life as shown in *Picture D2*. She also explained that there are differences between delight and happiness. In her concept, we are delighted when we play or are accompanied by our family. Happiness can only be secured if we are blessed by our family. Presenting gifts can sometimes but not necessarily be an illustrative symbol to express our blessings to others.

(Appendix E)

E is a ten-year-old girl who studies Primary 4 in a local school. She is a smart girl who has her own strong views. She is the eldest child who lives with her parents, her younger sister and the foreign domestic helper.

E's picture is colorful as shown in *Picture E1*. The background is painted in light blue as the sky with a big piece of white cloud. There is a tall tree with many red fruits and a scrub with green leaves. Two different flowers in different colors are drawn between the tree and the scrub. All these plants are drawn on the fresh green grassland.



*Picture E1*

In the interview, E explained what she had drawn was the yarn in her dream-house. Apart

from the apple tree as drawn in the picture, she also wanted to have many other fruit trees like pears and strawberries which are her favorite food. She only drew plants in the picture with the theme of life because she likes the nature.

At the end of the interview, E was asked what she would like to add into her picture to show the ways of cherishing life. She answered that she would like to draw all her family staying in the camp with lots of food if necessary. She explained that it was a happy moment for her family to spend their leisure time in the rural area during holidays. However, there is no space for her to add any figures in her original picture.



(Appendix F)

F is G's younger sister who is six years old and studies in Primary 1. Similar to her sister, F also drew some living things in her picture (*Picture F1*), including some animals, plants and insects. All these figures were drawn in random positions.



*Picture F1*

In the interview, F told me that she drew a butterfly, a snail, a pig, a lion, a flower and some grass because they have life. They can grow and thus they are alive. She added her English name in blue and wrote the text 'My name is Piggy' next to the pig because she has a pig toy as her most favorite toy. She did not draw herself in the picture. She mentioned that she would like to choose to be the butterfly among all these living things because it is colorful and it can fly. When she was asked if she could list out some life characteristics, she answered that living things could grow and require food.

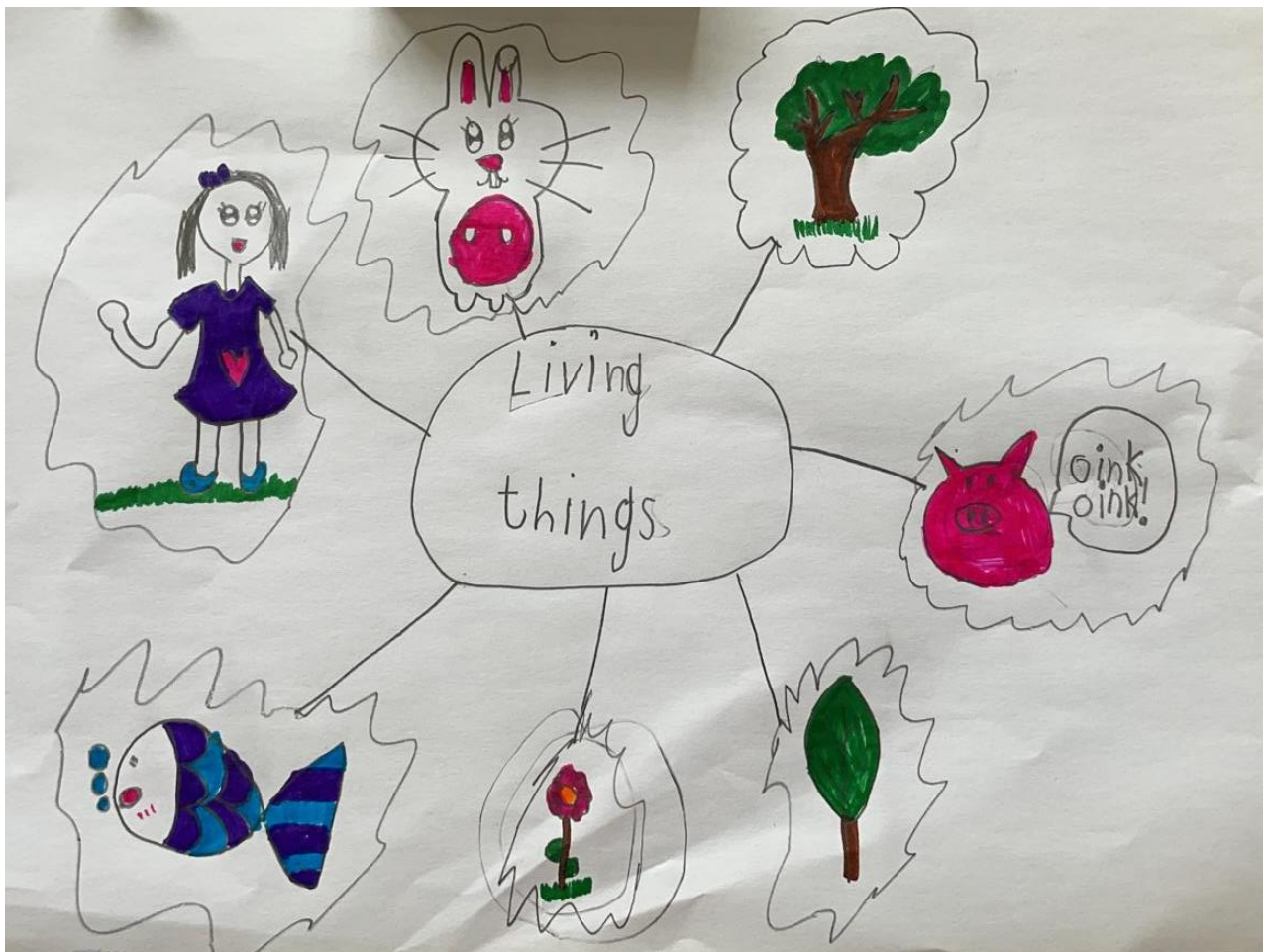
At the end of the interview, F was asked to add something into her picture for cherishing life. She added some meat for both the lion and the pig while a flower for the butterfly and a leaf for the snail (*Picture F2*). Like her sister, F also thinks that food is very important for life to grow.



*Picture F2*

(Appendix G)

G is an eight-year-old girl who is the elder sister of F. She studies in Primary 3 in an international school. She drew a radial diagram (*Picture G1*) to indicate different types of living thing, including a girl, a rabbit, a tree, a pig with its characteristic grunting sound ‘Oink’, a leaf, a flower and a fish. The picture is colored with some basic colors: blue, pink and green.

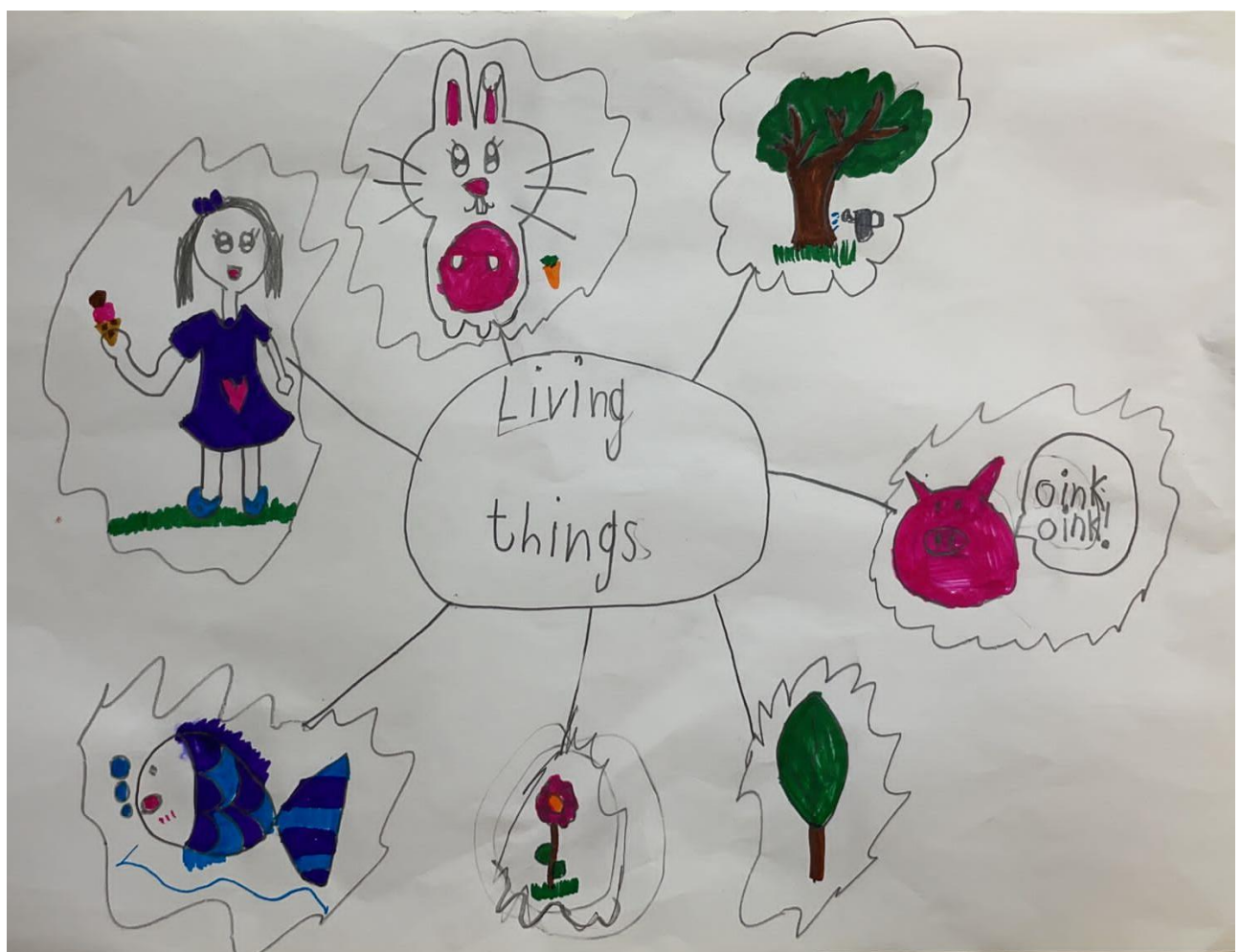


*Picture G1*

In the interview, G explained that she drew different types of living things because they have ‘life’ and they can grow. She introduced the girl as herself who has a smiling face and a raising hand to cheer up. She is wearing a blue dress with the pattern of heart to indicate that ‘love’ is important to human beings.



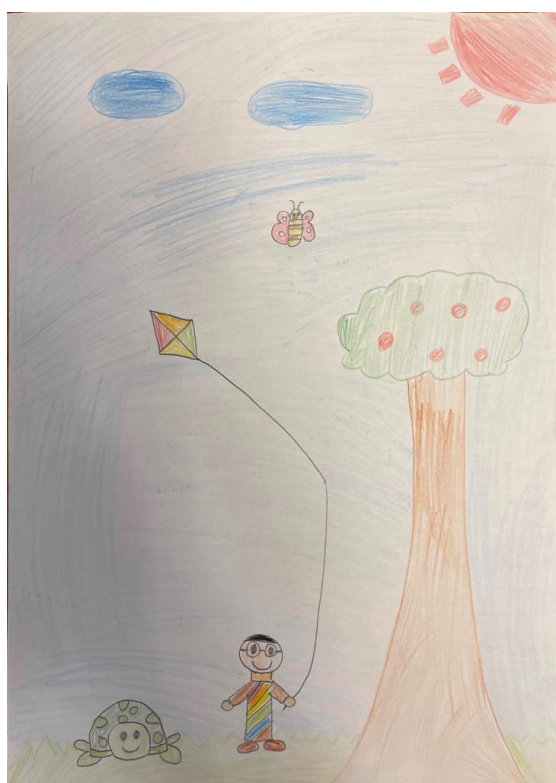
At the end of the interview, G was asked to add something into the picture for cherishing life, she drew a carrot for the rabbit, water for the tree, the sea for the fish as well as an ice-cream for the girl (*Picture G2*). She did not add anything for the pig, the leaf and the flower because she had no idea about what they need for their growth. She emphasized that food is the most important for all living things to nurture their growth. Apart from food, appropriate living environment for different living things is also important for their survival. Therefore, she believed that growth, required food and shelter are the characteristics of life.



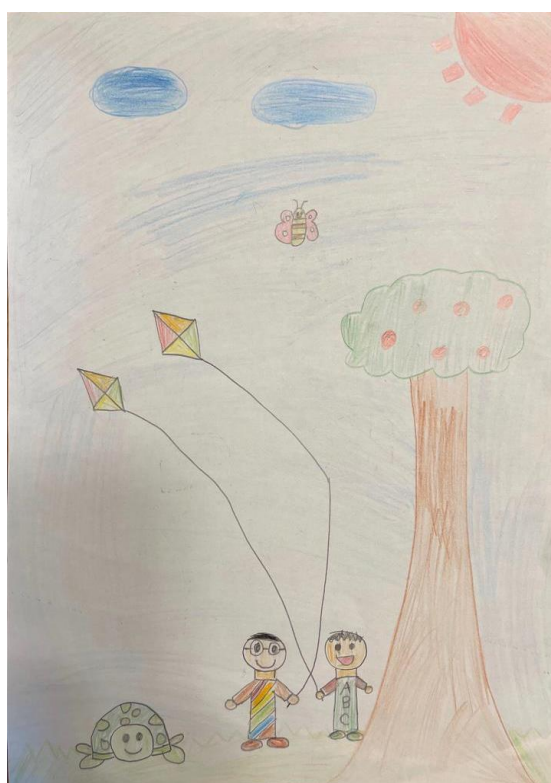
*Picture G2*

## (Appendix H)

H is a twelve-year-old boy who studies Primary 6 in a local school. He drew a tall tree, a boy flying a kite, and a tortoise on the green grassland. A red sun and two pieces of blue clouds are high up in the sky while a beautiful butterfly is flying in the upper middle part of the picture (*Picture H1*). The tall tree with a strong trunk has six red fruits. Underneath the tree is the boy who wears a pair of glasses and is in colorful dressing. Both the boy and the tortoise have big round eyes and are smiling happily.



*Picture H1*



*Figure H2*

In the interview, H associated the word ‘life’ with a happy scene where a boy is flying a kite in the natural environment freely. He believed that life is good with freedom. The boy with glasses and a smiling face was in colorful dressings because he enjoyed his life. He understood that there are many different types of living things in the world, including plants, animals and insects. Therefore, he drew a tall tree with plenty of red fruits to show its strong

vitality. He also wanted to draw a rabbit that jumps rapidly around and a bird flying high up in the sky. However, he did not know how to draw them. So, he drew a tortoise to replace the rabbit because it moves slowly towards its target which is easier for him to draw it out. He drew a butterfly to indicate that small insects were also living things, regardless of their size.

When H was asked why he drew the sun and the clouds, he replied that they were parts of the nature that nourish all the living things on earth. He claimed that he had not drawn himself in the picture. Among all the figures in the picture, he would like to choose the tortoise to represent himself because he behaved slowly like a tortoise. When he was asked if he could list out some characteristics of life, he answered that living things have senses, can feel and move.

At the end of the interview, H added another human figure into the picture for cherishing life (*Picture H2*). He explained that it was happier to have a friend to play with because companionship was very important for human life. It is noted that H drew another boy who looks similar to the first boy in size with a smiling face and flying a kite happily except not wearing spectacles and with a different dressing. The height and direction of both kites are the same which seems to show a kind of harmony and sharing of friendship between the two boys. It is interesting to see that there is space in between the tortoise as well as the two boys and the three of them have formed an enjoyable atmosphere in the natural surroundings.

## (Appendix I)

‘I’ is a six-year-old girl who studies Primary 1 in a local school. She drew eight human figures with smiling faces, the sun, a piece of blue cloud, a colorful flower and two blue triangular patterns on the two corners of the picture (*Picture II*). Five female figures are standing on the green grassland while the other two female and one male figure with wings flying high up in the sky.



*Picture II*

In the interview, ‘I’ shared about the colorful flower first because she thought that it was beautiful. She liked it most. She indicated that flowers have life because they can grow. Apart from flowers, humans are also alive and thus she drew seven girls and one boy. All the girls had long hair and most of them had ribbons on their heads. They wore dresses in various styles and colors because they have their special flavors. Two girls and one boy with wings were flying high up in the sky. ‘I’ explained that they could fly high up with their wings to broaden their viewing angles and acquire more knowledge about the world. The sun, the piece of cloud and the two blue triangular patterns at the two corners revealed that it was a sunny day. She said that with sunshine, we can enjoy our lives because we can see more clearly in the sunlight.

‘I’ mentioned that she had not drawn herself in the picture. As per request, she would like to choose the second girl with a different hairstyle on the left-hand side at the bottom to represent herself because she considered herself as the prettiest one among the others. When she was asked if she could list out some characteristics of life, she answered that living things could move, share with love and have senses.

At the end of the interview, ‘I’ was asked to add something to the picture to cherish life. She added one more human figure in a butterfly shape in orange color to indicate that there are various living things. She also added wings to all human figures and thus all of them can fly to explore more about the world. A heart inside the bubble of thoughts of the female figure on the upper left side of the picture was drawn to signify that both love and happiness are important for life. A lot of blue curved lines in spiral shape and some scattering orange or pink patterns around the human figures were also added to demonstrate different types of linkages among them to facilitate communication with one another (*Picture I2*). ‘I’ expressed that with mutual sharing of love, life can be cherished with diversities.



*Picture I2*



## (Appendix J)

‘J’ is a six years old girl who studies in Primary 1 of a local school. She drew a big tree in the middle of the picture. On the trunk of the tree, there is a round spiral pattern and different lines and dots in different brown colors. Many branches in dark brown or light brown together with different sizes of green leaves were scattered on the thick tree trunk. A big yellow round shaped object was hanging down from a branch of the tree on the right side of the picture. Two red flowers were drawn at the bottom part on each side of the tree. A human figure in red was located at the top of the flower on the right-hand side. A small red rectangle was placed next to the human figure with a worm on top of it. An exceptionally big beetle with a black head and antennae was linked up with the tree with a light blue broken line. The beetle seemed to be crawling toward the leaves on the other side of the tree (*Picture J1*).



*Picture J1*



*Picture J2*

In the interview, ‘J’ expressed that she had drawn a big tree because it could grow and move. She indicated that it was the ‘tree of life’. It was a tall tree with a thick trunk, many branches

and green leaves. The round spiral pattern and different lines and dots in different brown colors on the trunk symbolized that the tree had been alive for many years. Two red flowers had been drawn on both sides of the tree to reveal that there are different types of plants are filled with life. She explained that the yellow round figure hanging down from the tree was a beehive and the worm-like object was a bee. The beehive was hanging high up from the branch for protection from being eaten by other animals on the ground. The bee was flying out of its hive to search for food.

Apart from the bee, she drew a big red beetle on the other side of the tree because there were different types of insects. The light blue broken line indicated that it was flying round and round. She further elaborated that insects had life even though they were small in size. The only human figure was the symbol of J herself who was joyfully playing in nature. The small red rectangle next to her was a table for her to have meals. When she was asked if she could list out some characteristics of life, she answered that living things could grow, move, feel, eat and find shelter for protecting life.

At the end of the interview, ‘J’ was asked to add something to the picture to cherish life. She added three hearts, two were in red while the other was in blue. Besides, she added the sun and some clouds (*Picture J2*). She disclosed both the sun and the clouds could help the plants to grow while the hearts symbolized happiness. She believes that happiness is important in life. When she was asked how to be happier, she replied that eating and playing could make her feel happier.

## (Appendix K)

K is a twelve years old boy who studies in Primary 6 of a local school. He drew the whole process of the life journey of a human being, from his birth to his death. A baby is drawn at the bottom left corner. Then the baby has grown up to become an adult who is facing a traffic light and a zebra-crossing with a blue car on the road. On the other side of the road, there is a human figure who is helping an elderly to cross the road. Finally, the human figure flies up and then stays at the top of a big piece of cloud after completing different tasks in his life. All along the life journey, the human figure wears a smile on his face but he has no hair or clothing (Picture K1).



*Picture K1*

In the interview, K confirmed that he drew the process of life of a human being from his birth to his death. He grows up from a baby to an adult and lives until his death. During his life

process, the human being needs to have mutual support like helping an elderly to cross the road. In his life journey, there are many different tasks for him to perform until his life comes to an end. When he dies, he flies up to another world which is represented by the huge white cloud. There is nothing in the cloud and he has no idea of what will be in that world.

When K was asked to list out some characteristics of life, he answered that living things could give birth and die, move and grow as well as mutual sharing and support. At the end of the interview, K was asked to add something to the picture to cherish life. He thought for a while but he still had no new idea. He is confident that his picture is already perfect in cherishing life and thus it is not necessary to add anything to it.

## (Appendix L)

L is a nine-year-old boy who studies in Primary 4 at a local school. L is the younger brother of M. He drew some of his daily activities in the picture. He drew a few human figures playing football game on a grand piece of grassland which occupies the bottom half of the picture. The top half of the picture is composed of three parts. At the left is a human figure sitting leisurely under a tree which bears many fruits. The human figure is reading a book while one of the fruits is just falling down from the tree but does not hit him. Then a big rectangular shape in a house with a group of human figures standing side by side in the middle part. There are eight human figures who seem to represent a family with members of different ages and genders. At the right side are two human figures playing music at a piano and a few musical notes are clearly shown. All the human figures in the picture are smiling joyfully and enjoying their activities. L signed his name at the top left corner which has been deleted by the interviewer to protect his privacy (*Picture L1*).



*Picture L1*

In the interview, L described that he had drawn himself playing football happily on the playground. He is kicking the football in the middle of the court. He enjoys playing football

with his friends. He also likes reading, being with his family and playing the piano. Therefore, he drew himself reading under a tall tree. He believes that trees are also living things because they can grow. There are many fruits in the tree and one of the fruits is falling down. He explained that when the fruit falls down, it no longer has life.

The big house drawn in the middle top part is filled with L's family members, including his grandparents, elder brother, auntie, cousin, father, himself and mother standing from the left to the right. He expressed that he enjoys being with his parents while his elder brother usually plays with their cousin. The two human figures playing music represent that he likes very much to spend time on playing piano with his mother.

When L was asked if he could list out some characteristics of life, he answered that living things could grow, sense, move from place to place, play and die. At the end of the interview, L was asked to add something to the picture to cherish life. He added the sun onto the left top corner of his picture. The sun is just shining brightly at the fruit-bearing tree. He knows that the sun itself does not have life but it gives out light and heat which are beneficial for life to grow and prosper (*Picture L2*).



*Picture L2*



## (Appendix M)

M is a twelve-year-old boy who studies in Primary 6 at a local school. He is the elder brother of L. He drew a big house with a blue roof with windows. There is a family of four members inside the house. In M's picture, a huge house with a blue triangular roof and one blue framed window is a predominant figure. Four human figures of two adults and two kids are inside the house. There are two big and tall trees located at each side of the house. The sun and some clouds are high up in the sky shown at the top part of the picture (*Picture M1*).



*Picture M1*

In the interview, M described that he had drawn his family in the middle of the picture, including his parents, his younger brother and himself. He believes that family is the most important thing in his life. He is the one who is next to his mother. They are all close to one another at home. He stressed that he treasures the interpersonal relationship among his family which can be symbolized by the two yellow objects found inside the house, i.e., his family photo and the table. The family photo is a nice souvenir keeping the happy memories of his family while they always enjoy their meals around the table. He drew the sun and the clouds

in the sky because they are parts of nature which nourish our life. When he was asked if he could list out some characteristics of life, he replied that living things could grow and breathe. Air, water and nutrients are important to them.

At the end of the interview, M was asked to add something to the picture to cherish life. He added some flowers in different colors on the ground and three yellow stars in the sky (*Picture M2*) because they are beautiful and can enlighten our life.

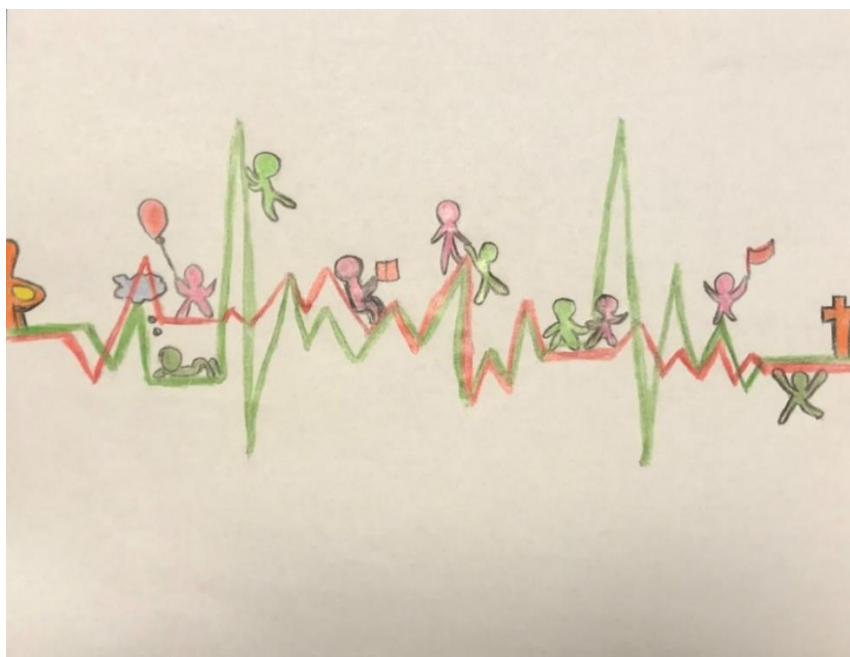


*Picture M2*



(Appendix N)

N is an 11-year-old girl who studies Primary 5 in a local school. She is a smart but quiet girl. She drew two fluctuating lines in the middle of the picture, one in green colors while the other is red. There were many human figures performing different activities along the lines as shown in *Picture N1*.



*Picture N1*

N only shared her plentiful ideas by asking the questions one by one in the interview. She introduced the two fluctuating lines are the different pulse lines of two people. She explained that our pulses fluctuated in different patterns when we were alive. There would be no more pulses when we died. Therefore, the pulse lines could be represented as our life journeys which were also going up and down. Two different pulse lines were drawn to indicate different people might have different patterns of pulses as well as different experiences in their lives. However, the start and the end of their lives were exactly the same which were represented by the orange and yellow figure of a pregnant woman on the left and the brown cross on the right which implied the birth and the death respectively. She mentioned that all

living things should begin with life moving toward death. She admitted that these ideas were inspired from the mobile game she recently played.

She further elaborated on different human figures in pink from the left representing playing, studying, helping others, sharing with others and achieving goals while those in green from the right represented dreaming, challenging, needing help, sharing and struggling. When she was asked to list out some characteristics of life, she answered that living things needed air, food and water to grow. They needed interrelationships with others and they would finally die. When she was asked to choose one of the lines to represent her life, she replied that she would like to choose the red one because she enjoyed achieving goals.

At the end of the interview, N added some musical notes as shown in *Picture N2* when she was requested to add something to her picture to show how to cherish life. She indicated that achieving goals is the best way to cherish life while music could help to release stress and celebrate during happy moments.



*Picture N2*

## (Appendix O)

O is an 8-year-old girl who studies Primary 3 in a local school. She is a lovely and cheerful girl who always smiles. In her picture, she drew a curved rainbow with different colors, including purple, blue, green, yellow and red from the bottom to the top as shown in *Picture O1*.

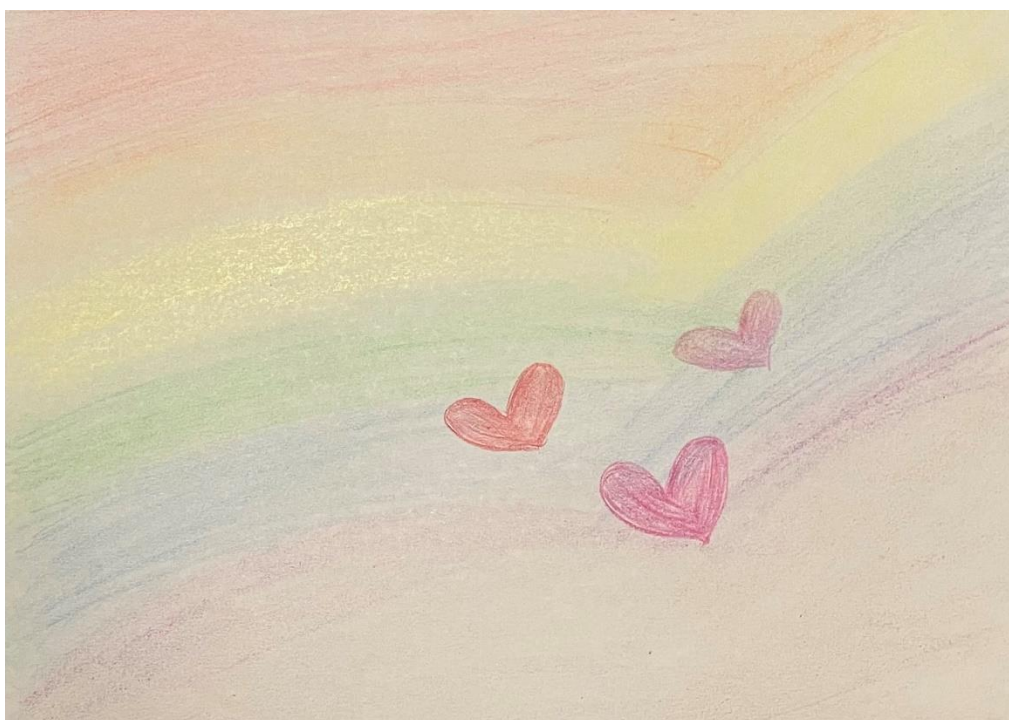


*Picture O1*

O expressed that she associated ‘life’ with ‘rainbow’ because she believed that life is colorful and beautiful. When she was invited to share more about the rainbow, she indicated that different colors might represent different experiences in life, such as red referring to joy and blue as sadness. She could not elaborate more about the other colors but she learned that bright colors could be represented positive emotions while dull colors could be used to express negative emotions. When she was asked about the shape of the rainbow, she explained that she thought life should be up and down, instead of a smooth curved one.

When O was asked about the characteristics of life, she replied that only living things had life, because they could breathe and grow. She indicated that all living things needed water, oxygen and food for survival. Without them, they would die very soon.

At the end of the interview, O added three hearts in different types of red as shown in *Picture O2* when she was requested to add something to her picture to show how to cherish life. She revealed that the three hearts represent the three spiritual elements which were essential for cherishing life, including faith, love and perseverance.



*Picture O2*

(Appendix P)

P is an 11-year-old girl who studies Primary 5 in a local school. She is smart and cheerful. She drew the four different phases of the life process of a butterfly with the support of the different growing stages of the plants as shown in *Picture P1*.



*Picture P1*

In the interview, P explained that she associated the word ‘life’ with the word ‘growth’. She understands that there are different growing processes among various types of living things. Therefore, she chose to draw the growing processes of a butterfly because it was the most impressive for her to learn from her previous study. When she started to draft the four changes in shape at different phases of the metamorphosis of a butterfly, she wanted to draw some leaves as the food for the caterpillar. After considering it for a while, she decided to redraw the picture.

In *Picture P1*, she drew the four different stages of a butterfly, involving eggs, caterpillar, chrysalis and adult butterfly as well as the different patterns of the growing process of plants



from seed to flowering plants and fruit tree. When she was asked to list out some characteristics of life, she replied that all living things had life and they need food, water and air to nourish their lives. All of them could breathe and grow but only animals, including insects could move.

At the end of the interview, P added some blue and yellow lines to the picture as shown in *Picture P2* when she was requested to add something for cherishing life. She clarified that the blue lines represented rain while the rays of light were illustrated by the yellow lines. She further elaborated that both light and water are essential for plants to carry out photosynthesis to nourish their growth while the leaves of the plants can nourish the life of other insects or animals. On the left bottom corner of the picture, she drew the recycle bins to remind the importance of environmental protection.



*Picture P2*

## (Appendix Q)

Q is a 7-year-old boy who studies Primary 2 in a local school. He is the only child in the family. He drew a yellow human figure sitting on a chair with a purple blanket who was saying 'I'm reading' with a spelling mistake. There was a snail with a red round bowl on the floor, a round object on the left and a black cave-like shape pattern on the right as shown in *Picture Q1*.



*Picture Q1*

In the interview, Q introduced that the human figure was SpongeBob as the representative figure of himself. It was one of his favorite cartoon characters who was the main character of the storybook her mother recently shared with him at bedtime. He was lying in his bed with a purple blanket and waiting for his mother to share another story with him before he could fall asleep. Indeed, he was waiting for his mother's reading instead of reading himself. It was the most exciting moment in his daily life.

Then he indicated that there was a snail which was the only living thing excluding himself in the picture. It was alive because it needed food. Therefore, it was moving slowly on the

ground to look for food. The dots on the floor were the features of the carpet of his bedroom. The blue circle on the left was the window while the black cave-like shape pattern on the right was the door of his bedroom. When he was asked to list out some characteristics of life, he answered all living things had life like snails. They needed food and they could move. They have feelings and senses.

At the end of the interview, Q added a set of television to the picture as shown in *Picture Q2* when he was requested to add something for cherishing life. He clarified that he could watch cartoons while he was waiting for his mother's story time in the bedroom.



*Picture Q2*



(Appendix R)

R is an 11-year-old girl who studies Primary 5 in a local school who is the cousin of P. She drew some living creatures in the sea, including fishes, jellyfishes, starfish, a crab, a turtle, octopuses and seagrass as shown in *Picture R1*.



*Picture R1*

In the interview, R explained that she associated the word ‘life’ with the different types of living things. She mentioned that there are many different living things not only on earth but also in the sea. There are many different living things in the sea even though we cannot see them from its surface.

In *Picture R1*, she drew different types of living things in the sea, including two fishes, two jellyfish and two octopuses which are in different colors or shapes. There are also some seagrasses, a crab, a starfish, a turtle and some shells in the picture. She introduced that all these are living things which have life because they can grow and breathe. That’s why she drew some air bubbles among them. She mentioned that there are some empty shells without

any air bubbles because they are alive longer. She confirmed that the seagrasses are still alive even though they do not have air bubbles because they can grow. When she was asked to list out some characteristics of life, they replied that living things could breathe and thus had life. They needed food and water to grow and they would die. She also expressed that she would like to be the red fish which was swimming deeper in the sea.

At the end of the interview, R added a yellow plastic bag with the sign of 'no' in red as well as a plastic glass and a straw with a red cross as shown in *Picture R2* when she was requested to add something for cherishing life. She claimed that it is necessary to avoid using plastic bags, plastic utensils and straws because they are not eco-friendly products which can cause harm to the living things in the sea as well as the natural environment.



*Picture R2*

## (Appendix S)

S is an 8-year-old boy who studies Primary 3 in a local school. He is the elder brother of T. He drew a big cat sleeping on the floor. There was a bowl of food at its back as shown in *Picture S1*.



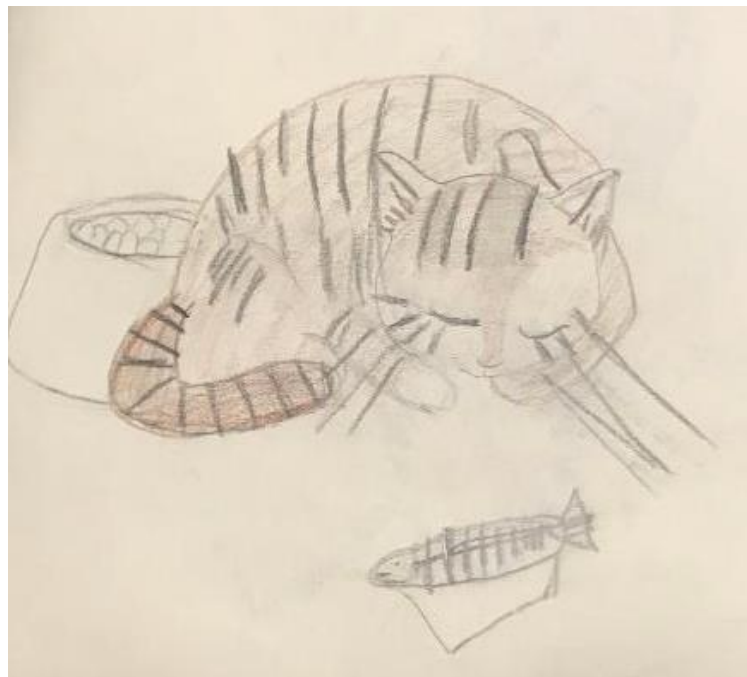
*Picture S1*

In the interview, S described that he drew a cat sleeping sweetly after dinner. It was the cat kept by his grandparents. He explained that he liked cats because they knew how to enjoy their life. According to his observation, the cat spent most of its time eating, playing and sleeping. However, it had special characteristics. It was arrogant and it only behaved according to their moods. It had its likes and dislikes. It was a picky eater as it only ate what it liked. It liked to play with other cats. He remembered that his grandfather had told him that a cat could have nine lives. However, S still had doubts about its truth. When he was asked to list out some characteristics of life, he answered breathing was the most critical characteristic of life. If a living thing stopped breathing, then it would no longer have life.

He also believed that living things should have feelings, require food, water and shelter.

At the end of the interview, S added some a fish in front of the cat as shown in *Picture S2* when he was requested to add something for cherishing life. He explained that most cats like fish.

The cat might be very happy when it saw the fish after it was awakened from its snooze.



*Picture S2*

## (Appendix T)

T is a 7-year-old boy who studies Primary 2 in a local school. He is the younger brother of S in the family. He drew a big tortoise on the sandy ground. The sun was shining high up in the blue sky as shown in *Picture T1*.



*Picture T1*

In the interview, T disclosed that he associated ‘tortoise’ with the word ‘life’ because it can be symbolized ‘longevity’. He explained that a tortoise could enjoy a very long lifespan for its strong vitality and great perseverance. He described that the tortoise walked slowly on the beach to enjoy the sunbath. There were also many shells on the beach. When he was asked if the shells were living things, he thought for a while and replied ‘no’. He justified that they were not alive because they could not move. When he was requested to list out some characteristics of life, he immediately replied that living things could breathe, grow and move. He also believed that living things could feel in different ways. When a living thing could not breathe, it could neither grow nor move and could be considered as its life was over.



At the end of the interview, T added some grasses as shown in *Picture T2* when he was requested to add something for cherishing life. He explained that the tortoise might be hungry. It might be very exciting if he found some grass for food on the beach.



*Picture T2*

## (Appendix U)

U is an 11-year-old girl who studies Primary 5 in a local school. She is an only child who lives with her parents.

In the picture of U as shown in *Picture U1*, she drew two girls with their pets standing on the top of two opposite green highlands which are linked with a bridge. The girl on the left-hand side has a long plait, dressed in blue and red shoes. A yellow dog is with her. On the right-hand side, the girl has a pair of plaits and dresses in red and green. She wore blue a pair of shoes and a cat is with her. There were pieces of black objects on the backs of both girls. In the sky, there was a bright sun and two pieces of clouds are closely attached to each other.



*Picture U1*

In the interview, U described that the two girls were strangers who did not know each other. They went up to two different mountains separately with their pets and saw each other apart



from their locations. However, there was a bridge over the river. Therefore, both girls could choose whether to stay alone in their own positions or to meet the other by passing through the bridge. U believed that not only the girls, the dog and the cat have life but also the mountains. She explained that mountains are alive as they nurture different types of living things on them. When she was asked to list out the characteristics of life, she replied that all living things could grow, move, communicate, have relationships among others and thus could nurture one another. At the end of the interview, U drew some birds in her original picture when she was asked to add something to show how to cherish life as shown in *Picture U2*. It was because she thought birds could fly freely to a relaxed environment. Enjoying herself in a natural place is her general practice to release her stresses.



*Picture U2*



## (Appendix V)

V is a 6-year-old boy who studies Primary 1 in a local school. He is the youngest child in a middle-class family which has three children. He is the younger brother of W. This family was undergoing their plan of immigration. So, he could not find any colour-pencils and could only draw by a ball pen. He is a cheerful boy who always smiles.

In his picture as shown in *Picture VI*, he drew five people with a rabbit standing closely with one another on the grassland in front of a big house. The two adults are leaning towards the others with a curved shape. There is a big sun in the middle of the sky with some clouds. A flower is drawn in the grassland.



*Picture VI*

In the interview, he introduced that the five people are all his family members, from the right to the left as his father, mother, elder brother, himself with his favorite toy bunny rabbit and his eldest sister. All of them have smiling faces and he himself has the biggest round face. Then he shared mostly about his beloved toy bunny rabbit by repeating how he played with it. He sometimes played the bunny with his elder brother and he played different games with different

family members. They always played at home and in the garden but he enjoyed more to play at home. He drew the sun and clouds as he knew that they are important to life but he could not elaborate more.

After the brief interpretation of his picture, V was invited to add something into the picture to show how to cherish life. He paused and thought for a while. Then he replied that he would like to protect the bunny rabbit because it was his best friend. He shared the experience that the bunny was once lost. He was sad and the whole family, including his foreign domestic helper helped him to find it out. Nonetheless, he did not draw the domestic helper in his picture. Then he drew the bunny lying comfortably in bed with a pillow and covered with a blanket as shown in *Picture V2*. V mentioned that he always slept with it and it was always seen in bed when he returned home. When he was asked whether he thought the bunny was alive, he kept silent. When he was asked about the characteristics of living things, he replied that living things could breathe and grow.



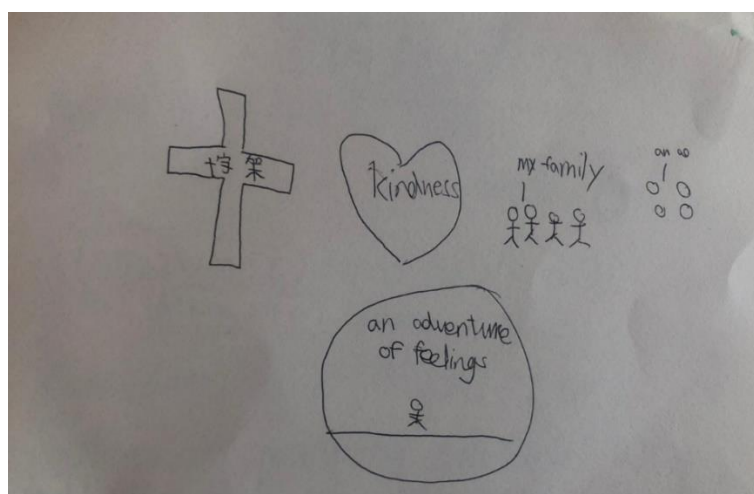
*Picture V2*

P.S. The name of V marked on the left bottom of the paper has been removed to protect his privacy.

## (Appendix W)

W is an 8-year-old boy who studies primary 3 in an international school. He is the second child in the same family of V. He is introverted and cannot express himself fluently in Cantonese but much better in English. Therefore, the interview was conducted in bilingual shifting from Cantonese to English.

W drew five groups of graphics including a cross, a heart, a group of four people and a group of four small circles placed in two lines in his picture as shown in *Picture W1*. All these items were placed horizontally. Besides, there is another big circle in the middle position under the aforementioned figures.



*Picture W1*

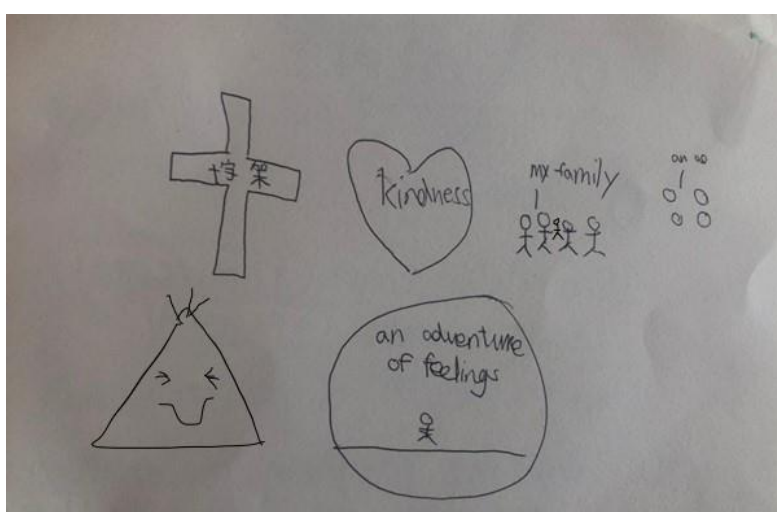
In the interview, W explained that he firstly drew the cross which was marked with Chinese words to indicate his God, Jesus Christ who crucified for us on the cross. He thought God is important because ‘God had done something’ which can be interpreted as God has created and redeemed life. He claimed that it was learnt from the Sunday school of the church.

Then he continued to explain his second figure of the heart. The English word ‘kindness’ was marked inside the heart. He further elaborated that it reminded us to do good deeds with love because life should be with love. Thirdly, he introduced the group of four people representing

his family, including his parents, elder sister and younger brother. He felt that family was the most important in life, especially his mother who gave birth to him. When the interviewer asked him why he did not draw himself in the picture, he kept silent and his mother then answered for him by saying that he might have forgotten to do so.

Fourthly, the four circles were drawn to represent different feelings in life. W could only name three of them as happy, sad and excited. Lastly, he described the image of the big circle. A person was drawn on a straight line within the circle and texted as ‘an adventure of feelings’ in it. When he was invited to disclose more about the adventure as well as the feelings, he gave no answers but repeated the word ‘adventure’ for several times. He believed all living things were created and loved by God. They have feelings and emotions.

At the latter part of the interview, W was requested to add something into his picture to show how to live a happy life. He added himself in the midst of his family with limited space. He also drew a triangle with a smiling face as shown in *Picture W2*. He explained that it is necessary for us to be happy. He believed that a smiling face could help to maintain better relationships with others. When he was asked why a triangle was added, he further elaborated that it referred as the interpersonal relationships among the ‘I’, ‘you’ and ‘the others’.



*Picture W2*

(Appendix X)

X is an 8-year-old boy who studies primary 3 in a local school. He is the only child in the family. In X's picture, he drew a boy on the grassland with a dog. Both the boy and the dog have different desires as shown in *Picture XI*.



*Picture XI*

In the interview, X shared that he drew himself and Bobby, his dog playing football on the soccer field. He associated the needs with the word 'life'. He further elaborated that there were many different types of living things, including animals, plants and human beings. All these are alive because they can grow, breathe and eat. He indicated that different types of living things might have different needs and desires. It was observed in the daily life of his dog. He further elaborated that his dog, Bobby would be very happy when it was fed with meat, bones and water or had someone to play with. However, he himself would like to have different types of food, such as burgers, ice cream and coke, etc. He needs to study hard to attain better academic achievement. He would like to have different types of games, such as

riding a bicycle, playing computer games, having trips with his family etc. Therefore, he thought that the life of a dog might be comparatively simpler than that of himself. When X was asked if he could list out some characteristics of life, he replied that living things could breathe and play. They needed food and water to grow. He also believed that different living things have different needs.

In the latter part of the interview, X was invited to add something into his picture which could help to enhance life. He added several red hearts between the dog and himself as shown in *Picture X2*. He explained that love is the most important for life because with love we would take care of others and help them to fulfill their needs. He elaborated that he loved his dog and thus he fed it and played with it.



*Picture X2*



(Appendix Y)

Y is an 8-year-old girl who studies in Primary 3 in Hong Kong. She drew the space with a big sun on the right top corner and some other planets and stars. A dog, a boy, a girl, a cat and some trees were drawn on the earth at the bottom of the picture as shown in *Picture Y1*. There were also a spaceship and a rocket.



*Picture Y1*

In the interview, Y explained that she associated the word ‘life’ with many different types of living things on the earth, including humans, animals and plants. However, she thought that there should also be some other living things outside the earth of the cosmos. Then she drew the sun, other planets, a rocket and a spaceship. She also drew an alien inside the spaceship as shown in the cartoons. When she was asked to list out characteristics of life, she replied that living things could only survive and grow when there was enough oxygen, water and nutrients. Otherwise, they would no longer be alive. When Y was asked if she had drawn

herself in the picture, she introduced that she was the girl while the boy was her elder brother. She shared that she liked to be with him even though they both had different favorites. Therefore, she drew the cat to stay with her and the dog to stay with her brother.



*Picture Y2*

When the interviewer asked Y to add something more into the picture to cherish life in the picture, she drew two more trees on the left as well as the swing on the right as shown in *Picture Y2*. She explained that planting more trees could be beneficial to all living things on earth. Besides, there should be some more recreational facilities for them to play and thus she drew the swing.



(Appendix Z)

Z is an 8-year-old girl who studies primary 2 in a local school. She is the eldest daughter who lives with her parents and younger sister. In Z's picture, some colorful graphic images were drawn as shown in *Picture Z1*.



*Picture Z1*



*Picture Z2*

In the interview, Z described that the biggest graphic element she drew in blue and red to represent a heart which is the most important to every life. Blue and red colors represent that there are two sides of a heart to indicate the two different types of blood vessel, i.e. arteries and veins. She understood that both types of blood vessel have their own functions to maintain life even though she could not label the names of the vessel or explain how they work for maintaining life.

Besides, the skeleton of a hand was drawn in yellow. Z explained that it was linked up with the heart because the hand is related closely with life. Only the skeleton of the hand was

drawn, without any muscle or skin, to show the joints which could help to control the activities of the hand. She indicated that she had just read a relevant book and thus she achieved the related information. She likes reading different types of books, especially storybooks.

When Z was asked to explain the other graphic images in the picture, she disclosed that they were leaves of different plants represented by different green colors which gave her a fresh impression. She then associated it with the idea of health as well as the importance of environmental protection. She claimed that we should not litter into the sea was an example of how to protect our environment.

When she was asked to list out some characteristics of life, she answered that something could breathe, grow in size and number as well as absorb nutrients and water to maintain their life, then they could be considered as living things. All living things would die at the end of life.

In the latter part of the interview, Z was invited to add something into her picture which could help to enhance life. She added some abstract graphics into the picture in orange lines as shown in *Picture Z2*. She explained that they were red blood cells which nourish our body for maintaining life.

(Appendix AA)

AA is a 9-year-old girl who studies Primary 4 in a local school. She is a lovely and happy girl. She drew a frog, a butterfly, two ducklings, some grasses and lotuses on the pond as shown in *Picture AAI*.

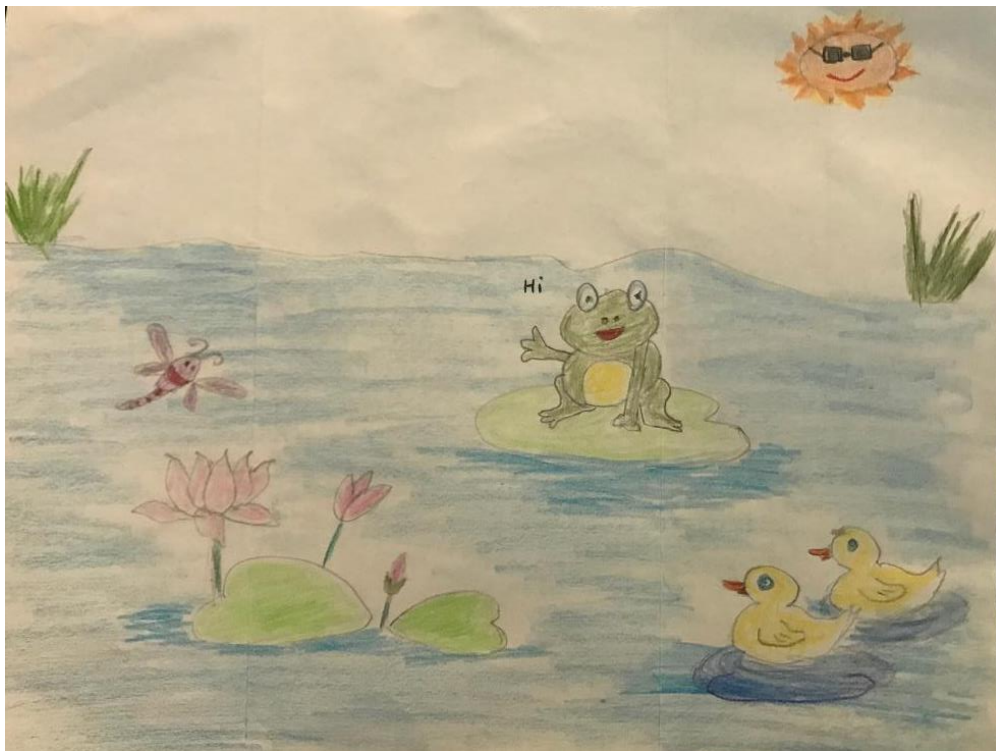


*Picture AAI*

In the interview, AA explained that she associated the word ‘life’ with one of her trips to China with her family when she was six. It was the happiest vacation in her life. She remembered that there was a beautiful pond near the park where she had been as shown in *Picture AAI*. She introduced that it was a pond of lotuses and there was a frog sitting quietly on a large piece of the lotus leaf and staring at her. She thought it wanted to greet her and thus she drew it with a waving arm and wrote the word ‘hi’ as in her imagination. She believed that animals could communicate with one another by their ways. On the other hand, two ducklings were swimming happily while there was a dragonfly flying around the big lotus. There was grassland near the pond which was revealed by the two piles of grass. She mentioned that all

living things can breathe and grow. Animals, like the frog, dragonfly and ducklings in her picture can move from place to place while plants, such as grass and loti cannot move.

At the end of the interview, AA added the sun with sunglasses as shown in *Picture AA2* when she was requested to add something for cherishing life. She disclosed that the sun could bring us light and warmth which were very important to life. Without the sun, many living things can no longer be alive and the weather will be very cold.



*Picture AA2*

**(Appendix BB)**

BB is a 9-year-old girl who studies in Primary 3 in Hong Kong as a cross-border student from Mainland. She is smart and cheerful but introverted who cannot express her own ideas by herself in the interview. She can only share her idea with the guided questions asked by the researcher. Maybe she is shy to do so.

In her picture as shown in *Picture BB1*, she drew the growing process of a tree from seed to a fruitful tree. There are beautiful flowers in different colors among the different stages of the tree with an increase in numbers. A beautiful butterfly is flying among the flowers. She also drew the sun and the clouds in the sky.



*Picture BB1*

In the interview, BB mentioned that she associated the word ‘life’ with the growing process because all living things with life can grow. As the seed in her picture, it grows from a seed



gradually to a big fruitful tree. In the process, sunlight and water are essential for the tree to grow. That is why she drew the sun and some clouds in the sky. The sun provides sunlight for the plants to carry out photosynthesis for producing nutrients while the droplets of the clouds can supply water for the plants to grow. Flowers and a butterfly were drawn to indicate different types of living things.

It is noted that the trees in different stages of the process were drawn in different shapes with different properties and are filled in different colors to demonstrate their different outlooks. The new plant is painted in light green leaves with thin roots while the adult tree is in dark green leaves with thicker roots and many fruits.

When the interviewer asked if BB was in the picture, she replied no. Then the interviewer invited her to choose either to draw herself into the picture or to find something in the picture which can be represented her best. She chose to be the seed as she thought it is the most energetic and lively. She indicated that all living things had life because they could grow in number and size. They could also breathe as well as absorb nutrients and water in their own ways.

When the interviewer asked BB to add something more into the picture to cherish life in the picture, she would like to draw an animal into it. She thought for a while and decided to draw a rabbit. She explained that a rabbit was active and nimble.

P.S. The interviewer allowed BB to add the rabbit into the picture later as per her request because it was almost time for her piano lesson. However, the picture was then lost and thus she could not add anything into it.

## (Appendix CC)

CC is a six years old girl who studies primary 1 in a local school. She is the eldest daughter who lives with her parents, younger sister and her foreign domestic helper. She is a conscientious, lovely and smart girl.

In CC's picture as shown in *Picture CC1*, CC drew a tree, three different flowers and two butterflies. The tree and flowers are located in a horizontal line while the two butterflies are drawn in different positions to indicate that they can fly. All graphic elements are drawn in different patterns, sizes and colors to imply the diversity of different living things.



*Picture CC1*

In the interview, CC described what she had drawn in chronological order from the right to left. She enlightened that all these are living things as they have vitality and they can grow. She also drew two butterflies because they can fly. When she was asked why she only drew plants and insects without any other animals and people, she replied that her picture had not yet been

completed. She would like to draw her family, some dogs and cats.

With the agreement from the interviewer, she spent some time to complete her drawing by adding her family in the upper space of the picture as shown in *Picture CC2*. All the family members are close with one another with happy faces. A heart is drawn separately on both the dresses of her mother and herself to demonstrate their love to her younger sister. They always play happily together. However, she has not included her foreign domestic helper drawn in the picture. When she was asked to list out the characteristics of life, she replied that all living things had life and they can grow and breathe.



*Picture CC2*

When CC was requested to add something into her picture to indicate how she cherish life. She drew one more tree and some more butterflies to accompany with the others. She also

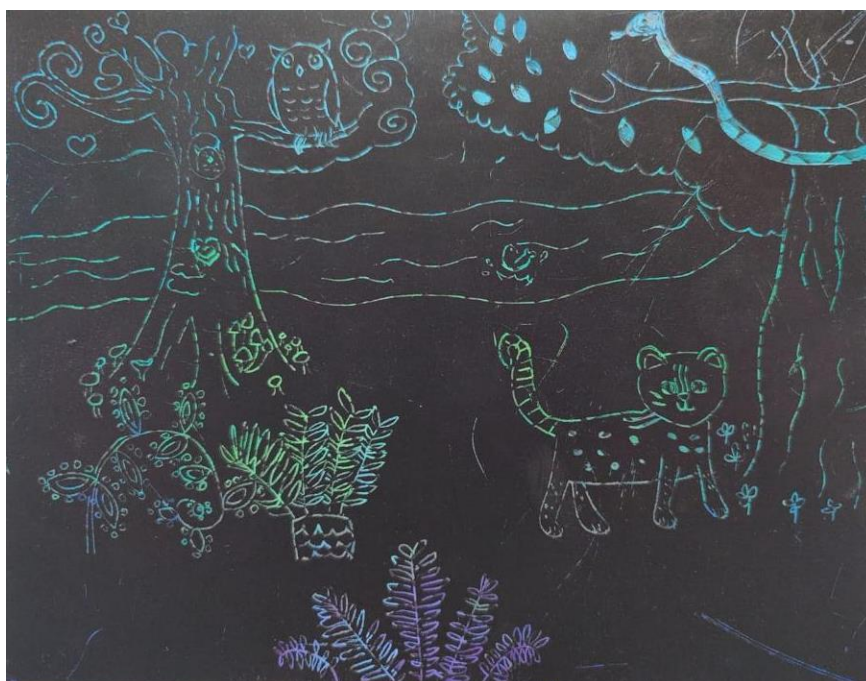


drew one of the butterflies on the pink flower. She replied that it was fed by the flowers and it helped to spread the pollens. This shows that CC is so smart to be aware of the interactive relationship among different living things, not only the interpersonal relationship among human beings. She also gave a positive answer when she was asked if she would protect the life of plants. She mentioned that she would water them and would not destroy their lives by picking them up. All these were learnt from her actual living experience, including her family and school.

## (Appendix DD)

DD is a twelve-year-old girl who studies primary 6 in a local school. She is a cheerful and smart girl.

As shown in *Picture DD1*, DD drew the picture on a piece of black paper by scratch art. She elaborated that she was inspired by the creation story in the Bible learnt from the church. She believed that everything including life is created by God out of the formless void and darkness as described in the Bible (Genesis 1:1-2). She drew different types of living things in the picture, including both plants and animals. There are two trees, some flowers, grass and fungi. All these are in different patterns. A snake is crawling on one tree while an owl is standing on another tree. A fish is swimming in the river and a leopard is walking on the ground.



*Picture DD1*

In the interview, DD explained that she had drawn different species of animals and plants. She believes that life is neither good nor bad in its original self because they are all created by God. Every creature is initially beautiful in its own way.

When she was asked about the characteristics of life, she mentioned that all living things were created. They can breathe and grow. They need nutrients, water and air to survive. Otherwise, they will die. She believes that they will be in the heaven after their death. She could not explain why she did not draw any human being or herself in the picture. When she was asked if she would like to choose any figure in the picture to represent herself, she thought for a while and then replied that she would like to be the owl. She thinks the owl can fly freely in the sky and it can have a broader view from a higher position.

At the end of the interview, DD was asked what she would like to add into her picture showing how to cherish life. She replied that she would like to add some more plants and different varieties of animals to illustrate the diversity of life. She aspired that all living things could share their goodness with one another to make life become more fruitful.