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A Positive Education Program to Promote Wellbeing in Schools: A Case Study from a Hong Kong School

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Abstract

Students' mental health is an alarming issue in Hong Kong, thereby increasing concern from psychologists, who attempted to implement positive education programs to equip students with skills to counteract mental health problems. This study followed the practice from positive psychology and conducted a Flourishing Life program based on the framework of the PERMA model in a secondary setting. The aims of the present paper are two-fold: to report the effort of the program and to evaluate the program's effectiveness. A mixed-method sequential explanatory research design, including survey (n = 495) and subsequent two focus-group interviews (n = 8), was adopted to assess the program's effectiveness. Results indicated that Forms Two and Three students (Grades 8 and 9) benefited more from the program than the Form One students (Grade 7). Overall, students reported that they had benefitted from the program. Findings provide supporting evidence to the whole-school approach program that operated effectively within the existing curriculum. This research may provide a direction for school curriculum leaders to promote students' wellbeing by infusing essence from positive psychology to the school curriculum.

Keywords: character strengths, curriculum, PERMA model, positive education, wellbeing

1. Introduction

"Going to school was like going to prison." (Huang, 2017).

This yearning was from a fourth-grade primary school student in Hong Kong. This statement reveals the solemnity of academic stress on students' mental health. Since 2015, the frequency of student suicide cases was alarming and the spate of suicides has led the Hong Kong government to establish the Committee on Prevention of Student Suicides in 2016. The stories of students' suicide attempts and academic stress were a common leitmotif in many Asian countries. Undeniably, Asian families place high value on academic success. Education systems are often centered on examinations. In a few countries, test scores alone can determine whether students are admitted to universities.

In addressing the mental health issue of adolescents, positive psychologists (e.g. Bernard & Walton, 2011; Huppert & Johnson, 2010; Peterson & Seligman, 2004; Seligman, et al., 2009; Waters, 2011) tend to design positive education programs that will equip adolescents with skills to enhance their strength and resilience, thereby counteracting the ill effects of mental health problems. Furthermore, governments have encouraged schools to assume a socialization role to promote positive values and attitudes in facing challenges in society. For instance, the Education Bureau of the Hong Kong Special Administrative Region (HKSAR) put emphasis on the overall aims of school curriculum (CDC, 2001), in which schools 'should help students to learn through cultivating positive values, attitudes, and a commitment to life-long learning…' Apart from this proposition, one of the seven learning goals of secondary education is to enable students become informed and responsible citizens to appreciate positive values and attitudes and the Chinese culture, as well as respect pluralism in society (CDC, 2017). Given this background, the present study attempts to report the effort of a positive education program of a secondary school. This study would use a curricular perspective to assess the effectiveness of the

program. This research intends to provide empirical evidence for school administrators in designing positive school environments that will promote students' wellbeing.

2. **Literature Review**

Conceptually, various approaches are available for defining the features of a curriculum. The first approach is to view a curriculum as an organization of study. A curriculum can be a course of study, a set of teaching materials, a subject to be taught, a curriculum integrated with other subjects and even across all subjects or extracurricular activities (Kennedy, 2008). Under this approach, a curriculum is confined to teaching content and likewise refers to a learning process through school activities (Posner, 1998; Lee, 2008). The second approach views a curriculum as a learning orientation. Longstreet and Shane (1993) proposed four types of orientation, namely, society-oriented, student-oriented, knowledge-oriented, and eclectic curriculum. The third approach involves the use of an operational perspective in viewing curriculum in the context of a school. Eisner (1994) typified three perspectives, namely, formal, implemented, and hidden curriculum. Formal curriculum is the official curriculum proposed by the education authority of any government. However, the official curriculum can be modified, minimized or expanded based on the broad goals or characteristics of individual schools. Consequently, the school-based curriculum becomes a means by which to meet the needs of individual schools and regarded as an implemented curriculum. Aside from the explicit teaching curriculum in class, the hidden curriculum can also infuse implicit social norms or political expectations into students as a part of school life. The hidden curriculum can be an effective means for students to learn positive education through socialization. A few examples are the positive classroom climate for open discussion of political or social issues, student's active and participatory attitude toward school activities and the hidden norms that can influence the school authority to carry out reasonable or appropriate policies.

The present study adopted the third approach using an operational perspective in viewing curriculum as formal and informal. A curriculum can be perceived as a formal subject with content learned in classrooms. Meanwhile, a curriculum can operate in an informal manner or with hidden values that can be infused into the school life or in the society that teachers or students experience daily.

2.1 What is wellbeing?

Literally, wellbeing is defined as "the combination of feeling good and functioning well" (Huppert & Johnson, 2010: 264). Keyes (2002) proposed three components of wellbeing, namely, emotional, social and psychological components. Diener and his associates (2009) regard it as a psychological construct, which is operationalized through rewards and positive relationships with others or having a feeling of competent or confident, and a belief that life is meaningful and purposeful. Subjective wellbeing refers to a person's cognitive and affective appraisal of one's life to be satisfying or not. Hence, the perception towards the extent of life satisfaction could be a valid measure to assess a person's subjective wellbeing (Diener, Lucas & Oishi, 2002). However, the preceding research was based on adult study. Recently, nascent research on wellbeing and positive education of children and adolescents was conducted (Parker et al., 2015). Among all the proposed wellbeing models, Seligman's PERMA model (Seligman, 2011) was a salient one with voluminous supporting evidence. He proposed five elements of wellbeing derived from the essence of positive psychology and to be incorporated into school curriculum thereby promoting students' wellbeing and enabling them to flourish and master traditional academic skills for achievement. The five elements are positive emotions (to have positive emotions such as joy, gratitude, interest, hope), engagement (to be fully absorbed in activities that use one's skills to meet challenges), relationships (having positive relationships with others), meaning (to have a sense of belonging and to serve something that an individual believe to be bigger than oneself), and accomplishment (pursuing success, winning achievements and mastery). The bourgeoning research evidence indicates the positive effects of the PERMA model in promoting wellbeing in emotions, relationships, academic motivation and skills (Norrish et al., 2013; Seligman, 2011; Seligman et al., 2009). Furthermore, the PERMA model has demonstrated its applicability in genuine school and classroom settings (Kern et al., 2015; Norrish et al., 2013; Shoshani, Steinmetz, & Kanat-Maymon, 2016).

2.2 Role of Schools in Promoting Wellbeing

Seligman (2011) proposed that the nurturance of wellbeing originates from the environment. Schools are an ideal setting to teach wellbeing because adolescents spend the majority of their time in schools. Three scientific grounds were identified to justify the reason for teaching wellbeing. The enhancement of positive strengths among adolescents in positive emotion, engagement and meaning in life serves as an antidote to depression, increase life satisfaction and facilitate improved learning and positive thinking (Seligman et al., 2009). Yates (2007: 35) argued that apart from learning the traditional skills in schools, education has a significant goal to

assist adolescents to develop skills and abilities to live well and enhance social cohesion. The National Scientific Council on the Developing Child (2006) states that focus should be given to children's emotional wellbeing and social capabilities, which are linked to their cognitive and academic abilities. These findings suggest that wellbeing as an indicator to promote the mental health of adolescents should be taught in school.

Other researchers hold different views and cast doubts on the effectiveness of the wellbeing programs. A few of them may worry that the programs waste money, resources and manpower. Others argue that positive education programs may divert students' motivation, energy and resources from mainstream academic subjects, thereby lowering their academic achievement (Spence & Shortt, 2007). However, numerous studies indicate a positive relationship among wellbeing education, students' academic achievement and good character. Kuhl (1983, 2000) argued that an enhanced wellbeing is synergistic with improved learning. Students with high levels of wellbeing also have improved learning attitudes and attention, as well as substantially divergent and holistic thinking in their study. Seligman and his associates (2009) reported that wellbeing programs could facilitate students' engagement in learning, thereby enhancing their academic achievement; increasing their levels of happiness and enjoyment in school and improving their levels of life satisfaction, meaning in life, positive emotion and social skills (e.g. empathy, cooperation, assertiveness and self-control). Huppert and Johnson (2010) implemented a meditation school-based program to promote wellbeing, thereby improving attention, concentration, creativity and self-regulation among students. Nidich and his associates (2011) investigated the effectiveness of the transcendental meditation wellbeing programs and determined that it could improve academic performance in mathematics and English among middle school students. Wagner and Ruch (2015) also supported the positive relationship of the PERMA model (Seligman et al., 2009) by concluding that wellbeing programs that cultivate character strengths contribute to a positive classroom, thereby enhancing school achievement because students enhance their character strengths in the aspects of love for learning, perseverance, zest, gratitude, hope and perspective.

In a nutshell, voluminous research indicates that wellbeing could be taught in schools. Schools play a critical socialization role in cultivating positive cultural values, promoting whole person development and facilitating the teaching of wellbeing in a positive classroom. Teachers can serve as role models to develop the 'whole student' to have wellbeing in social, moral, emotional and intellectual developments (Waters, 2011). Norrish and his associates (2013) also emphasized the important role of schools in nurturing a positive environment and cultivating wellbeing among students to promote their physical and mental health.

2.3 How is Wellbeing Taught in School?

Waters (2011) reviewed 12 school-based positive psychology intervention programs. Evidence shows that positive psychology programs are significantly related to student wellbeing. These programs include Penn Resiliency Program (Seligman et al., 2009) and the Strath Haven Positive Psychology Curriculum (Seligman et al., 2009), 'You Can Do It' program (Bernard & Walton, 2011) and so on. Among them, there are some salient and effective whole-school approach program that adopted by the Geelong Grammar School (GGS) and Maytiv positive psychology school program. Both were based on the PERMA model (Hoare, Bott & Robinson, 2017; Shoshani, Steinmetz, & Kanat-Maymon, 2016). To promote students' wellbeing, the GGS model focuses on six areas, namely, positive emotions, positive engagement, positive accomplishment, positive purpose, positive relationships, and positive health (See Figure 1). The GGS model indicates that it can be implemented in four levels: Learn it; live it, teach it and embed it (Hoare, Bott & Robinson, 2017).

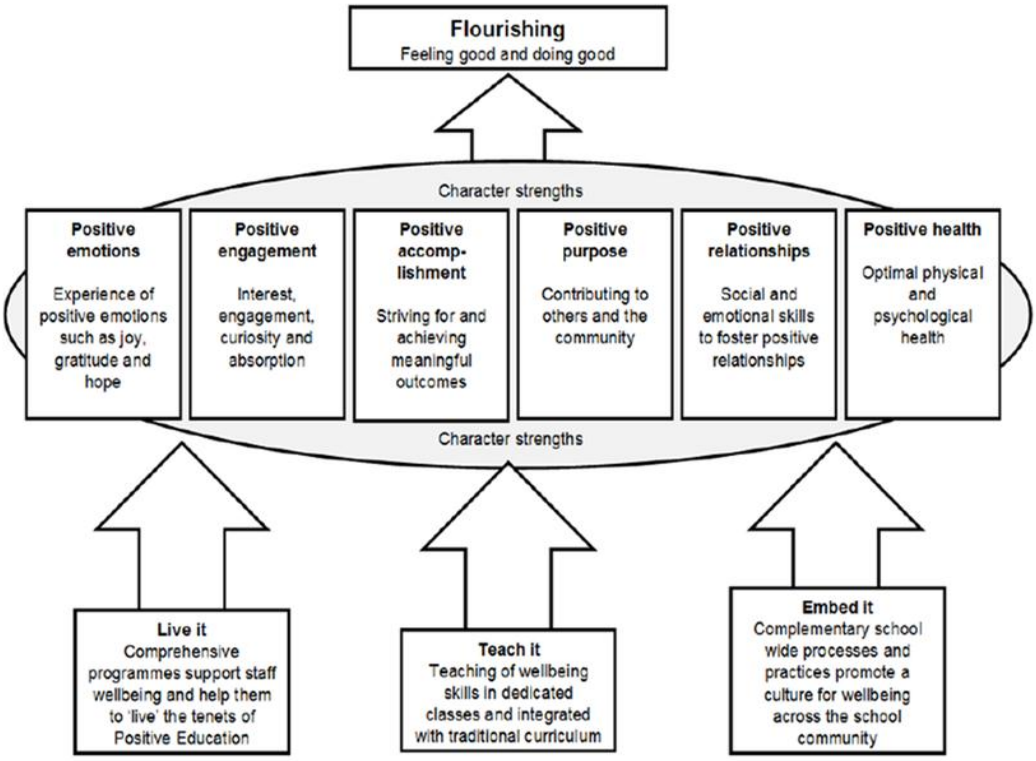

Figure 1. Summary of the Geelong Grammar School applied Model for Positive Education Program

Source: Norrish, J. M., Williams, P., O'Connor, M., & Robinson, J. (2013), p. 151

Learn it and Teach it

A school is an effective learning community because students spend the majority of their time in it. The aims of a positive education program are to equip students with positive mind-sets, copying skills and character strengths, thereby enabling them to have a flourishing life. The teaching of flourishing was divided into explicit and implicit learning through formal and informal curricula. Explicit learning requires students to attend regular lessons on positive education, whereas implicit learning refers to positive education infused into the existing formal curriculum in a wide range of subjects, such as languages, mathematics, humanities and the sciences. Teaching pedagogies may include exploration, reflection, group discussion and mindfulness practices and so on (Norrish et al., 2013: 151). In the present study, the Flourishing Life programme was implemented through formal and informal curricula (refer to Appendix 1 for details).

Live it

The program supports students and staff members' wellbeing. Staffs were trained with skills to teach positive education in class and act as genuine role models for students. Thus, training programs and workshops were conducted for all teaching and non-teaching staffs. (Norrish et al., 2013: 150). The present program (Flourishing Life program) also offered positive education workshops and talks to parents.

Embed it

A culture of wellbeing was cultivated in the whole-school community through multifarious school-wide processes via school assemblies, chapel services, projects, workshops; propaganda activities were likewise arranged to build up the culture (Norrish et al., 2013: 151).

Character Strengths

Character strengths are defined as a set of personality traits with moral values, such as perseverance, gratitude and hope and so on. Everyone is believed to possess distinct abilities to flourish and attain their best performance (Wood et al., 2011). Park and Peterson (2006) operationalized the 24 morally abstract character strengths through the Values in Action Survey. Individuals with numerous character strengths are associated with improved psychological wellbeing and healthy development (Linley et al., 2010). A few adolescent studies determined that

persistence, honesty, prudence and love were negatively correlated with aggression, anxiety and depression (Park & Peterson, 2008). Other character strengths, such as perseverance, hope and perspective, were related to academic achievements (Linley et al., 2010; Park & Peterson, 2009).

3. Research questions

Does the positive education program based on the PERMA model operate effectively in existing curriculum among secondary school students?

Background: Brief introduction of the Flourishing Life program in Lam Woo Secondary School

The Flourishing Life program was implemented from November 2016 to May 2017 for all Forms One to Four students from a subsidized grammar co-educational secondary school with nearly 70 teachers and supporting staff in Hong Kong SAR, China. The elements of the PERMA model and the values from character strengths were infused into the existing formal (e.g. in Form Teacher Periods, Life Education and academic subjects) and informal curricula (e.g. school activities, campaigns and competitions) (Refers to Appendix I).

3.1 Research Methodology

The present study adopts a mixed-method sequential explanatory research design, including surveys (conducted in May 2017) and subsequent focus-group interviews (conducted in October 2017), to assess the effectiveness of the positive education program. The strength of this design is to use subsequent qualitative research to obtain more updated data for the complementary purpose to support the quantitative data analysis.

3.1.1 Quantitative Approach

Participants

The samples were 495 student respondents from Forms One to Four (Grades 7 to 10).

Table 1. Details of the sample students from each form

Form	Female	Male	Total no. of target students	Total no. of response students	Response rate
Form 1	70	57	127	121	95.3%
Form 2	70	59	129	123	95.3%
Form 3	73	59	132	118	89.4%
Form 4	81	54	135	133	98.5%
All	294	229	523	495	94.6%

Measures

Three measures were adopted in the quantitative study. Among them are two standard international measures, namely, Flourishing Scale (*F-S*) (Diener, 2009) and Satisfaction With Life Scale (*SWLS*) (Diener et al., 1985). The two scales are commonly used to assess the overall wellbeing of students in many positive education studies (Diener et al., 1985; Diener et al, 2010; Hone et al, 2014). Furthermore, the current study used the Form Teacher Curriculum Survey (*FTCS*), which is a local scale to assess the curriculum of the positive education program.

The Flourishing Scale (F-S)

Flourishing refers to a global view of wellbeing which covers satisfaction with life, self-acceptance, personal growth and a sense of purpose (Keyes 2002). Diener and his associates (2009) used the psychological theories of human flourishing from humanistic approaches (Ryan & Deci, 2000; Ryff, 1989; Ryff & Singer, 1998) and the concept of "social capital" (Helliwell et al., 2010; Putnam, 2002), as well as such concepts as optimism, purpose and meaning of life (Ryff & Singer, 1998; Seligman, 2002), to develop the *F-S* in assessing those concepts. *F-S* is drawn from an integrative perspective and it has the economy of time in its application (Sumi, 2013). It has been proved to be psychometrically adequate in different countries (Diener et al, 2010; Hone et al, 2014). The measure has eight Likert-type items ranging from the strongest negative preference (strongly disagree) to the strongest positive preference (strongly agree) and uses options from "1" to "7". Scores of 33 or above indicate that the samples have chosen satisfied responses (Diener, et al., 2009). The Cronbach's alpha coefficient of the present study is 0.94.

Satisfaction with Life Scale (SWLS)

SWLS was developed to assess overall satisfaction and happiness with life. It composed of five Likert-type items ranging from the strongest negative preference (strongly disagree) to the strongest positive preference (strongly

agree) by using options "1" to "7". Summed scores yield a life satisfaction total score ranging from 5 to 35. The normative mean score on the *SWLS* is 23.5 with a standard deviation of 6.43 (Diener et al., 1985). In this study, the Cronbach's alpha coefficient of the sample is 0.91 .

Form Teacher Curriculum Survey (FTCS)

FTCS is composed of 14 Likert-type items ranging from the strongest negative preference (strongly disagree) to the strongest positive preference (strongly agree) and uses options "1" to "4". The survey aims at assessing students' preference towards the effectiveness of the curriculum in areas like strengthening the interaction between teachers and students, among students, improvement in moral and citizenship education, and the design of the curriculum and so on (For details, refer to Table 4).

Data Analysis

Various statistical analyses including descriptive statistics, correlational analysis and ANOVA, were used to assess the effectiveness of the positive education program.

3.1.2 Qualitative Approach

A subsequent qualitative study using focus-group interviews was performed to further explain the quantitative findings. Only two focus-group interviews were conducted owing to the constraints in time and manpower. The targets were Forms One and Two students. Eight students (i.e. five females and three males), who were randomly selected from each Forms One and Two classes, participated in the interviews. A total of 10 open-ended interview questions were asked (for details, see Appendix II). The interviews were conducted in Cantonese, the native language of the participants. Each interview lasted for 30 to 40 minutes and was audio recorded. Each interview transcript was transcribed into English. The constant comparative method was adopted to analyze the data (Au & Chow, 2012).

4. Findings

4.1 Results from Quantitative Data Analysis

4.1.1 Descriptive Statistics

Table 2 shows that the three highest mean ratings of the Flourishing Scale (*F-S*) are items '*F-S* 6' (I am a good person and live a good life), '*F-S* 8' (People respect me) and '*F-S* 2' (My social relationships are supportive and rewarding). Table 3 shows that the two highest mean ratings of the Satisfaction With Life Scale (*SWLS*) are items '*SWLS-3*' (I am satisfied with my life) and '*SWLS-4*' (So far I have gotten the important things I want in life). Table 4 indicates the percentage of students' rating using the Form Teacher Curriculum Survey (*FTCS*). The findings of the survey indicate that nearly 85% of the respondents specified that they had positive attitude towards the activities and curriculum of the Form Teacher Periods, and school assemblies. Over 70% of the respondents had positive comments on all the items of the survey (except item 13). In particular, item '*FTCS-1*' (the curriculum can 'Strengthen communications between teachers and students', item '*FTCS-2*' (Strengthen communications among students) and item '*FTCS-14*' (Students agree to have the Form Teacher Period and School Assembly) got the highest percentages.

Table 2. Means and Standard Deviations of the Flourishing Scale (F-S)

Items	Mean	S.D.
F-S 1: I lead a purposeful and meaningful life.	4.80	1.27
F-S 2: My social relationships are supportive and rewarding.	4.86	1.19
F-S 3: I am engaged and interested in my daily activities.	4.77	1.21
F-S 4: I actively contribute to the happiness and well-being of others.	4.64	1.23
F-S 5: I am competent and capable in the activities that are important to me.	4.75	1.19
F-S 6: I am a good person and live a good life.	4.91	1.26
F-S 7: I am optimistic about my future.	4.72	1.35
F-S 8: People respect me.	4.89	1.25

Table 3. Means and Standard Deviations of the Satisfaction with Life Scale (SWLS)

Items	Mean	S.D.
SWLS 1: In most ways my life is close to my ideal.	4.31	1.29
SWLS 2: The conditions of my life are excellent.	4.37	1.26
SWLS 3: I am satisfied with my life.	4.56	1.24
SWLS 4: So far I have gotten the important things I want in life.	4.48	1.24
SWLS 5: If I could live my life over, I would change almost nothing.	4.14	1.58

Table 4. Percentage of both agree and strongly agree ratings of the Form Teacher Curriculum Survey (FTCS)

Items	Percentage (%)
FTCS 1. Strengthen communications between teachers and students	83.85
FTCS 2. Strengthen communications among students	84.50
FTCS 3. Strengthen values education	72.60
FTCS 4. Improve moral education	74.15
FTCS 5. Improve inter-personal relationship	74.55
FTCS 6. Improve academic ability	70.48
FTCS 7. Improve citizenship	69.17
FTCS 8. Meet students' growth needs	75.04
FTCS 9. Students were engaged in the lesson	75.85
FTCS 10. The curriculum was well design with clear instruction	73.74
FTCS 11. The pedagogy was appropriate	75.69
FTCS 12. The frequency the lessons was appropriate	70.80
FTCS 13. The number of lessons was too many	52.20
FTCS 14. On the whole, students agree to have the Form Teacher Period and School Assembly	84.99

4.1.2 Correlational Analysis

Tables 5 and 6 show that the two wellbeing measures had high reliability (α = .94 and .91) and high inter-item correlation respectively. There is no significant correlational relationship between the two measures. This indicates that each scale had its unique measure and was independent to one another.

Table 5. Inter-Item Correlation Matrix of the F-S

Item	*F-S 1*	*F-S 2*	*F-S 3*	*F-S 4*	*F-S 5*	*F-S 6*	*F-S 7*	*F-S 8*
F-S 1	---							
F-S 2	.688	---						
F-S 3	.685	.745	---					
F-S 4	.633	.664	.695	---				
F-S 5	.674	.628	.726	.622	---			
F-S 6	.694	.704	.682	.699	.673	---		
F-S 7	.706	.611	.694	.616	.658	.697	---	
F-S 8	.619	.696	.622	.604	.611	.691	.636	---

Note: All are significantly correlated at 1 % level ($p < .01$)

Table 6. Inter-Item Correlation Matrix of the SWLS

Item	*SWLS-1*	*SWLS-2*	*SWLS-3*	*SWLS-4*	*SWLS-5*
SWLS-1	---				
SWLS-2	.819	---			
SWLS-3	.766	.828	---		
SWLS-4	.670	.736	.737	---	
SWLS-5	.550	.530	.578	.489	---

Note: All are significantly correlated at 1 % level ($p < .01$)

4.1.3 ANOVA

A one-way between-group analysis of variance was conducted to explore the impact of positive education program on different forms of students as measured by the *SWLS* and *F-S*. The subjects were divided into four groups according to their forms. A statistically significant difference existed at the $p < 0.05$ level in the *SWLS* scores in different forms of students (for item '*SWLS-1*', F (3, 491) = 9.21, $p < 0.01$, for item '*SWLS-2*' , F (3,491) = 5.47, $p < 0.01$, for item '*SWLS-3*', F (3, 491) = 5.23, $p < 0.01$, for item '*SWLS-4*', F (3, 491) = 3.61, $p < 0.05$ and for item '*SWLS-5*', F (3, 491) = 5.97, $p < 0.01$ respectively). Post-hoc comparisons using the Tukey HSD test indicated that the mean score for Forms One and Four students had no significant difference in all items. However, Forms One and Two students had significant difference in items '*SWLS-1*', '*SWLS-2*' and '*SWLS-5*'. Significance difference were also observed between Forms One and Three students in items '*SWLS-1*', '*SWLS-2*', '*SWLS-3*' and '*SWLS-4*'. This reflects that Form One students got significantly lower scores than the Forms Two and Three students. Additional adjustment programs may be implemented to all Form One students.

One-way ANOVA was conducted to assess the impact of the positive education program through the *F-S*. A statistically significant difference existed at the $p < 0.05$ level in the *F-S* scores in different forms of students in five items. They are '*F-S 2*', '*F-S 3*', '*F-S 5*', '*F-S 7*' and '*F-S 8*' (for item '*F-S 2*', F (3, 491) = 2.92, $p < 0.05$, for item '*F-S 3*', F (3, 491) = 2.67, $p < 0.05$, for item '*F-S 5*', F (3, 491) = 4.12, $p < 0.01$, for item '*F-S 7*', F (3, 491) = 4.31, $p < 0.01$ and for item '*F-S 8*', F (3, 491) = 5.23, $p < 0.01$). Post-hoc comparisons using the Tukey HSD test indicated that the mean scores from Form One were significantly lower than those of the other forms. For instance, Form One had lower scores than Form Two in item '*SWLS-5*', which got lower scores than Form Four in item '*SWLS-8*' and also got lower scores in all items than with the Form Three students. Among all forms, Form Three students got the highest mean scores in all items of the *F-S*.

4.2 Results of the Qualitative Data Analysis

Effectiveness of the five elements of the PERMA model

All interviewees (n = 8) could recall all the elements of the PERMA model and understand the key tenets of each element. Two out of three Form One (67%) and two out of five Form Two (40%) interviewees regarded 'positive emotion' as facilitating their positive thinking, especially when they experienced frustrations and maintained persistence in accomplishing tasks. For instance, a student (S3) from Form One expressed that 'When I feel disappointed, I need to have positive emotion to make me feel happier and less depressive.' Another student (S4) from Form Two also said that 'When we think positively and we will have better emotion… For example, after exams, I might find I had poor grades in some subjects. Positive emotion will help me to accept my poor results … to have more reflections and think of more solutions to improve my work.'

All interviewees in the two focus-group interviews claimed that they had gained positive experience from the Flourishing Life program. They might use considerably active means to overcome difficulties rather than putting problems aside without solving them. Furthermore, all of them thought that they could further understand their own character strengths and gain familiarity with coping strategies amidst adversities in life. For instance, an interviewee (S1) from Form One explained that 'When joining group event competitions, I am afraid if I do it poorly, it will affect the (performance of the) whole team. I am the one who did it badly…. That experience is my adversity. I don't want to spoil the whole team. I have tried hard but it is still ineffective. Then, I will use what I have learnt in positive education to think positively to handle it… I take the initiative to ask other group members' opinions and to find out more solutions instead of thinking negatively…' Another student (S4) from Form Two also used positive inter-personal relationship to handle conflicts and said that 'Positive emotion and relationships can effectively help me get along with others … Sometimes, when we have conflicts or quarrels with others, I think of the five elements of PERMA. It can help me solve those problems'.

Effectiveness of the program through the curriculum

All interviewees reported they had learnt positive education through formal lessons such as Form Teacher Period (Life Education), academic subjects and informal curriculum in school assemblies and activities. A Form One student (S3) reported that 'I think it (the form teacher periods or school assemblies) can help me solve daily life issues …'. One Form Two student (S2) expressed that 'Last year, my class teacher taught us two words. One is "happy" and the other is "honest". This year, I think I have done well because we can communicate honestly. And, I have a happy school life as I use a positive perception to look at questions, to handle every issue'. Apart from this finding, students also learnt positive education in some academic subjects. For instance, a student (S3) from Form One explained that 'I think during History and Chinese History lessons, we can …learn from mistakes or contributions from historical figures. We know what is good or what is wrong from history so that we can improve and learn to become a better person.' Overall, students reflected positively as they had learnt

happily in some school activities or used simple strategies to learn team building and cooperation in different occasions.

Overall evaluation on the Flourishing Life program

Although all the Form one interviewees agreed that the Flourishing Life program was effective to them, nearly 40% of the Form Two interviewees had reservations on its effectiveness. Accordingly, they raised two concerns. One was related to the transference of school knowledge to non-school environment. The other was related to the role of teacher counselors. A student (S5) from Form Two said that 'When we face challenges, we may not so easily associate our life experiences with the teachings in school.' Doubts were raised on the applicability of the positive education knowledge to genuine setting in real life outside the classroom. The student further explained other worries that 'we have an age gap. When sharing with my form teacher, she usually uses an adult perspective to counsel me…Yet, I am still young, I am a teenager. Try not to use a very mature manner or adult perspective to think of my questions. I just feel very bored. The form teacher used her teaching style to communicate with me'. Teachers may act as a barrier to positive education socialization. Hence, teacher training may be critical to make the program successful.

Finally, all interviewees suggested ways to improve the Flourishing Life program. For instance, they hoped to have more out-going, interactive activities or play other interesting games to gain additional memorable experience.

5. Discussion

5.1 Effectiveness of the Flourishing Life Program in Promoting the Students' Wellbeing

The findings of the Form Teacher Curriculum Survey (*FTCS*) indicated that nearly 85% of the student respondents had positive attitude towards the activities and curriculum of Flourishing Life Program. Over 70% of the students had positive comments on all in the items of the survey (except item 13), thereby indicating that they benefited from the activities and curriculum. All interviewees claimed that they learnt to establish positive emotion and relationships with others. They had gained positive experience from the program in both the formal lessons and school activities. This finding could help students to utilize active means to overcome difficulties or to handle problems in a positive manner.

The wellbeing measures were based on the results of the *SWLS* and the *FS*, which had high reliability (α = .94 and .91) and high inter-item correlation, respectively. However, no significant correlational relationship exists between the two measures. Thus, each scale had its unique measure and was independent to one another. This finding facilitates the explanation of the different results from the two scales.

From the descriptive statistics, all mean scores of the *SWLS* are above the middle stance. Item '*SWLS-5*' has the lowest mean score of 4.14 (*SD* =1.58) and the item '*SWLS-3*' has the highest mean score of 4.56 (*SD* =1.24). For the F-S, item '*F-S 6*' has the highest mean score of 4.91 (*SD* =1.26), whereas item '*F-S 4*' has the lowest mean score of 4.64 (*SD* = 1.23). For the results of the *SWLS* in each form, 52.1%, 64.2%, 66.1% and 50.4% of the Forms One to Four students, respectively, had scored from satisfied to very satisfied options. Overall, 58.4% of the student respondents indicated having slightly satisfied to extremely satisfied option using *SWLS*. This finding implies that the Flourishing Life program can still be improved given that nearly 40% of the student respondents had less satisfactory ratings.

For the *F-S*, 64.5%, 75.6%, 83.1% and 78.2% of the Forms One to Four students, respectively, scored from satisfied to very satisfied options. Overall, 75.6% of the student respondents scored satisfied to extremely satisfied options using *F-S*. Thus, the results revealed that the majority of the student respondents had satisfied to high level of wellbeing. In fact, it was a promising start after the launch of the program for seven months. Perhaps, further statistical analysis could be done to identify the aspects of wellbeing that should be reinforced and revise the present positive education program to enhance its effectiveness. The two focus-group interviews also explained the concern of the interviewees. They hoped to improve the Flourishing Life program. For instance, they commented that most of the activities would be boring if they were conducted inside the classrooms. They also aspired to have more activities outside schools to gain extensive interactive experiences and participate in numerous competitions with interesting games, thereby gaining other memorable positive experiences.

The one-way ANOVA indicates that the positive education program was more effective in Forms Two and Three students because they had high mean score rating in the *SWLS* and *F-S* whereas the Form One students reported the lowest mean score rating among all forms. Further research should be conducted to explore the reasons, which may be related to adaptation problems. For instance, students need to adjust to the use of medium of

instruction from mother tongue to English, additional subjects to study and high demand on self-management and so on. These adjustments would be sources of stress to all Form One students.

5.2 How is Wellbeing Education Implemented in School?

Students' subjective wellbeing was learnt through Flourishing Life program that was infused into the formal and informal curricula. Aside from the explicit teaching curriculum in class, the hidden curriculum also allows infusing implicit social norms or expectations into students as a component of school life. The findings of the present study reveal that students learned positive education through vicarious learning from teacher models. In fact, hidden curriculum can be an effective method for students to learn positive values and attitude through socialization (Eisner, 1994; Hoare, Bott & Robinson, 2017; Huppert & Johnson, 2010; Seligman, et al, 2009).

For the formal curriculum, the PERMA elements (Seligman et al., 2009, Seligman, 2011) and character strengths (Peterson & Seligman, 2004) were infused in the moral education, life education and different academic subjects. For instance, gratitude education and the seven character strengths (i.e. curiosity, honesty, self-discipline, kindness, fairness, modesty and citizenship) were taught during the Form Teacher Periods in different forms (an hour for each session from Forms One to Five). The values of gratitude and other character strengths were infused in twelve academic subjects (e.g. Chinese and English Languages, Religious Studies and so on) (See Appendix I). Interviewees also reported that they learnt from History, English and Chinese languages lessons to use positive thinking and means to handle life issues and to learn from historical figures and other life models, thereby enabling them to improve as better persons.

The topics related to the elements of PERMA model, particularly positive emotion, positive relationships and growth mind-set and so on, were taught during the morning assemblies. Apart from the formal curriculum, gratitude education and other positive education programs were embedded into school activities like Thanksgiving activity (November 2016), Cookie Selling Service (December 2016), Form Six Graduation Farewell Service (February 2017), Display Board Design Competition (March 2017), 30-day morning sharing (March and April 2017), Art work Exhibition (April and May, 2017) and collection of gratitude journal (May, 2017). Students benefitted from these programs. For instance, all Form One students from the focus-group interview expressed that they perceived the program as effective in aspects of enhancing inter-personal relationship in school, team spirit, cooperation among peers, handling academic school work and understanding of the meaning of accomplishing tasks and challenges. Meanwhile, 60% the Form Two interviewees claimed that the Flourishing Life program was effective. A student reported that he had applied the five elements of the PERMA in daily life, for example in academic work or in family, and to face challenges bravely. Another student evaluated the program and said that he could understand his classmates better, establish better cooperation and build up team spirit. Another student perceived that he could completely engage in tasks earnestly and experienced "flow" in doing homework, participating in musical instrument class or completing group projects. Lastly, other positive education programs were delivered to parents and teachers (e.g. talks on positive education were delivered to parents, workshops on character strengths were conducted for staff development).

6. Limitations and Future Direction

The present study follows a mixed-method research design. The quantitative assessment merely relies on two international measures (i.e. *F-S* and *SWLS*). The two scales are general measures of students' overall wellbeing. Hence, whether the two measures adequately assess students' specific aspects of wellbeing remain uncertain. Perhaps, other measures related to academic scores or GPA, students' mental health could be assessed. Second, other validated wellbeing measures could be used to assess the samples of Chinese children and adolescents. Third, assessment could be done after a longer period of program implementation to enable substantial analysis based on the pre-post test results or to conduct a longitudinal study. Lastly, further systematic follow-up qualitative interviews are recommended to those identified high- or low-life satisfaction groups or flourishing groups for more in-depth analysis in future wellbeing studies.

7. Conclusions

In view of the alarming mental health issue, the present study used a mixed-method approach to examine the effective implementation of the Flourishing Life program based on the PERMA model and character strengths in a local secondary school. The program was a strength-based positive education program combining both formal and informal curricula. The study provides supporting evidence to the effectiveness of the program that operated within an existing curriculum. Evidence indicated that the program could be an effective measure to enhance the students' positive strengths and their thinking and practice to face challenges. More future systematic follow-up wellbeing studies are suggested to identify other effective means to those high- or low-life satisfaction groups or flourishing groups.

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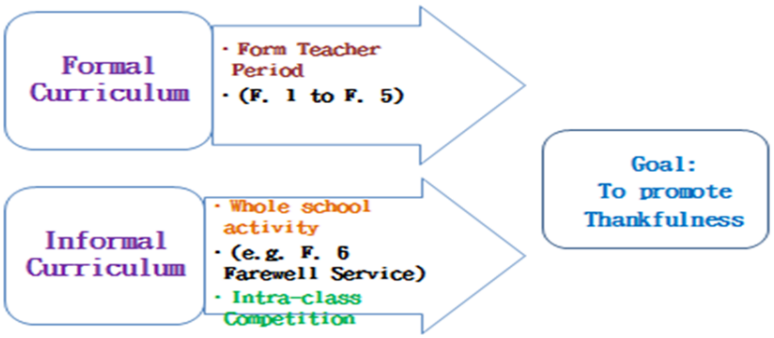
Appendix I: Infusing the PERMA model and Character Strengths into a positive education program

Infusing the PERMA model and Character Strengths into formal and informal curriculum



I. Formal Curriculum

a. Form Teacher Period (Life Education)

Form	Content	Duration
F. 1	Gratitude file: a new born Lamwooer	1 hour 10 minutes
F. 2	Gratitude file: family	1 hour 10 minutes
F. 3	Gratitude file: friends and peers	1 hour 10 minutes
F. 4	Gratitude file: society and country	1 hour 10 minutes
F. 5	Gratitude file: careers	1 hour 10 minutes

b. Values education infused into formal curriculum and the implementation schedule

Subject	2016 Sept	Oct	Nov	Dec	2017 Jan	Feb	March	April	May
Chi Lang (J)		✓	✓						
Chi Lang (S)								✓	
Eng Lang (J)		✓	✓						
Eng Lang (S)	✓				✓				
Liberal S (J)									
Liberal S (S)			✓						
Chi Hist						✓	✓		
Chi Lit									
Biology	✓					✓			
Chemistry									
Commerce									
Comp & ICT		✓					✓		
D & T									
Economics									
History							✓		
Home E.	✓	✓	✓	✓	✓	✓	✓	✓	✓
Integrated S.			✓						
Physical E.	✓	✓	✓	✓	✓	✓	✓	✓	✓
PTH		✓							
Religious S.			✓						
Visual Arts									

Ⅱ. Informal curriculum

Date	Activity	Strategy
Nov 2016 - Jan 2017	Thanksgiving and Cookie Selling Competition	Communication & experiential learning
Nov 2016	Public lecture on positive education and gratitude	Peer sharing and video appreciation
Feb 2017	Farewell Service for graduates	Video show and performance
March 2017	30-day morning sharing on gratitude	Experiential learning and reflection
March & April 2017	Inter-class Display Board Competition	Collaboration and communication
May 2017	Writing gratitude journal	Reflection and sharing

Appendix II Interview guides:

1. Do you remember the elements of the PERMA model? Can you explain …
2. Which aspect(s) of the PERMA model help you most? Explain with examples.
3. Do you remember which scenario / impression on Flourishing Life program in lesson or in school activity? Share with us.
4. Have you used what you have learnt from positive education in your daily experience?
5. Have you used what you have learnt from Form Teacher Periods or School assemblies in your daily experience?
6. If you feel stressful or have despair in life, do you think positive education enable you to be positive.
7. Do you think the positive education program can help you understand yourself, your character strengths and ways to face adversity?
8. Do you think the positive education program is effective to all students? Why ?
9. What are your opinions towards the positive education program that we implemented in the last school year?
10. Do you have any suggestions for improvement?

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