Enhancement of Psychosocial Competence and Well-Being of Chinese High School Students under the COVID-19 Pandemic: Tin Ka Ping P.A.T.H.S. Project in Mainland China

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Abstract

Mental health problem is a growing problem in mainland China and the situation has worsened under the COVID-19 pandemic. Besides focusing on tertiary and secondary prevention strategies, there is an urgent need to enhance the well-being of adolescents through primary prevention programs. During the pandemic, a positive youth development program entitled "Tin Ka Ping P.A.T.H.S. Program" was implemented in schools in mainland China. In 2022/23 academic year, students were invited to write a weekly diary on their experience about the program after completion of the program (N = 2,337). Qualitative evaluation showed that 98.2% of the students perceived the program was beneficial to their well-being in different domains. Specifically, students perceived the program enhanced their sense of community, school and academic adjustment, interpersonal relations (family relations and peer relations), and intrapersonal competence (including optimism, resilience, positive coping with stress, spirituality, life meaning and cherishing one's life). In conjunction with other quantitative and qualitative evaluation findings, the triangulated findings strongly suggest Tin Ka Ping P.A.T.H.S. Program is a promising program that enhances the psychosocial competence and quality of life of adolescents.

Keywords Tin Ka Ping P.A.T.H.S. Program · Positive Youth Development · Qualitative Evaluation · Diaries · Adolescent Well-Being

Introduction

Mental health problem is a rising problem in mainland China. According to UNICEF (2021), there were many challenges faced by children in China. These included intense pressure and competition in school, high expectations from

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parents, and rapidly changing socioeconomic conditions. The report also mentions that according to a recent national mental health study, nearly 25% of adolescents reported feeling mild or severe depression, and at least 30 million children and adolescents under the age of 17 in China faced emotional or behavioural problems. Similarly, Wang et al. (2020) reported that the prevalence of non-suicidal self-injury in adolescents and children was about 19.5% globally, compared to 27.4% in China. They reasoned that China's intensified social competition pressure and high academic requirements are the triggers for increased negative emotions and self-injurious behaviors. Besides mental health issues, addictive behavior is also a growing concern in mainland China. Wei et al. (2022) showed that among ethnic minority adolescents, the prevalence of gaming disorder/game addiction was as high as 23.83%. Gaming disorder/game addiction was a risk factor for anxiety and insomnia, and adolescents with gaming disorder/game addiction were more likely to suffer from anxiety and insomnia. Similarly, Gao et al. (2022) found that the prevalence rate of Internet addiction rate among vocational high school students was 13.4% and there was a positive correlation between internet addiction symptoms and obsessive–compulsive disorder symptoms, insomnia, stress, and depression, with psychological states (stress, anxiety, depression) served as a mediator. In short, there is growing evidence suggesting that psychological morbidity is a growing adolescent developmental problem that constitutes a well-being issue in mainland China (Cao et al., 2020; Chen et al., 2013, 2022; Cheung et al., 2020; Chi et al., 2020).

Adolescent mental health problems have been further intensified by the COVID-19 pandemic. Shek (2021) highlighted twelve reflections, including the rise of mental health problems and the need to promote well-being under the pandemic (e.g., Chen & Lucock, 2022). There are studies showing that mental health problems in adolescents in mainland China were huge. To assess the symptoms of depression and anxiety and associated risk factors in Chinese secondary school students after the pandemic, Zhang et al. (2021) conducted an online survey based on 22,380 junior high school students (12–17 years old) from 7 junior high schools in Jiangsu Province. Results showed that 26.9% of participants reported anxiety symptoms, 25.6% reported depressive symptoms, and 20.6% reported both anxiety and depressive symptoms. Anxiety and depression symptoms were reported in females higher than males, and higher in urban areas than in rural areas. Chen et al. (2022) systematically analyzed and estimated the prevalence of depressive symptoms in children and adolescents in China during the COVID-19 epidemic, and examined the reasons for the inconsistency in prevalence in previous studies. Studies published in PubMed, Embase, Cochrane Central, China Scientific Journals Database (VIP), China National Knowledge Infrastructure (CNKI), and Wanfang were searched from December 2019 to May 2021 were identified. They eventually included 13 reports involving 41,729 participants. The findings echoed those reported by UNICEF (2021)—adolescents felt more isolated and anxious, and were more worried about their academic and career prospects during the pandemic. Besides, compared to adults, young people tend to have more hesitation to seek psychological support. Shek et al. (2023) also pointed out the importance of enhancing individual and family resilience of the public during and after the pandemic. Recently, Shek (2024) pointed out that adolescent

mental health problems do not disappear over night and there is a need to promote adolescent well-being in the post-pandemic period.

Faced with adolescent mental health problems during and after the pandemic, there are three strategies from the public health perspective. First, we should treat those with mental health problems (i.e., tertiary prevention). Second, we should identify students who have mental health problems as early as possible (i.e., secondary prevention). One challenge confronting these two strategies is that trained counselors and Mental Health teachers are inadequate in mainland China. Finally, we should try to prevent the occurrence of mental health problems by minimizing risk factors and maximizing protective factors. One protective factor is to enhance the psychosocial competencies of through validated youth enhancement programs such as positive youth development (PYD) programs. Unfortunately, there are very few validated youth mental health prevention programs in China (Shek et al., 2022b). One notable exception is the Project P.A.T.H.S. in different parts of China.

The Project P.A.T.H.S. (Positive Adolescent Training through Holistic Social Programme) is a youth enhancement program initiated and financially supported by the Hong Kong Jockey Cub Charities Trust with an earmarked grant of HK$750 million. It was launched from 2005 and we are still managing the website. With the involvement of five universities in Hong Kong, the Research Team developed the Grade 7 to Grade 9 curriculum materials and manuals (initially 120 units with revamped units and specially designed units later on), trained potential program implementers, supported the implementation process and evaluated the developed program (Shek & Wu, 2016). Evaluation studies utilizing different evaluation strategies clearly support the effectiveness of the program that can enhance the psychosocial competence and well-being of the participants. Besides, the program also enhanced the personal and professional competencies of the program implementers, particularly the teachers.

In view of the overwhelming success of the Project P.A.T.H.S. in Hong Kong, the program was transplanted to mainland China in 2011 with the financial support of Tin Ka Ping Foundation, with a pilot project in East China involving four schools in Shanghai, Changzhou, Suzhou and Yangzhou. As the results were very positive, we spent 2014/15 academic year to train teachers and fully implemented the program from 2015/16 to 2017/18 academic years. Again, evaluation studies using different evaluation strategies showed that the program was able to enhance the psychosocial competence and well-being of the students (Shek et al., 2022a). From 2019/20 academic year onward, the Foundation create a new initiative entitled "Build the Tin Garden Together" utilizing school-based Tin Ka Ping P.A.T.H.S. curriculum materials. To understand the impact of the school-based P.A.T.H.S. Program, we have continued to collect evaluation data and conducted evaluation studies. To address the needs of young people in the rural area, we also developed and implemented the rural version of the Project P.A.T.H.S. with very positive evaluation findings (Zhou et al., 2022). We are currently implementing the program in an additional 13 schools in mainland China and developing the Malaysian, Korea and Spanish versions of the curriculum materials.

During the pandemic years, with school resumption in 2022–23 school year, the schools continued to implement the Tin Ka Ping P.A.T.H.S. Program. Besides

collecting quantitative evaluation data using student feedback questionnaire, we also collected student diaries after completion of the program. Actually, we have used this evaluation strategy in the past two decades in different sites (Shek & Wu, 2016; Shek et al., 2022a).

As mentioned above, evaluation using multiple strategies has been utilized, including both quantitative and qualitative methods. In the Project P.A.T.H.S., we conducted a longitudinal quantitative evaluation study with eight waves of data collected. Besides, we collected subjective outcome evaluation using validated tools. Although quantitative evaluation findings can give static pictures on program outcomes, it cannot examine the subjective experiences of the participants (Patton, 1987, 1990, 1997, 2002). Hence, we used qualitative evaluation strategies via focus groups, individual interviews, and repertory grids. In particular, we used the diary technique to collect views from students (Shek & Wu, 2016).

Researchers have used diaries as a qualitative research tool (Gillmore et al., 2001; Leigh, 1993, 2000; Morrison et al., 1999; Peterson et al., 2002; Stone et al., 1991). Olorunfemi (2023) argued that diaries as a research method could benefit both researchers and participants and it is a user-friendly way to reflect. They reasoned that "using diary studies not only addresses the need for more dynamic methodological designs in qualitative research, but is advantageous for providing a process view of how the individual engages with the constructs studied" (p. 1). Patterson (2005) also proposed using diary as an alternative method in marketing research and argued that qualitative diary research is "a useful way of capturing genuine thick description" (p.142). Unterhitzenberger and Lawrence (2002) similarly proposed to use diary method in studies on projects because of its flexibility and ability to understand the dynamic nature of the participants' experiences. In the context of evaluation, diaries have been used to evaluate the participants' experiences and changes arising from the program (Cohen et al., 2006; Tomitsch et al., 2010). McCombie et al. (2024) argued that qualitative diary methods "provide rich data about experiences and phenomena" and they can provide valuable insight on "behavior, cognitions, and change over time" (p. 3) that cannot be achieved by other quantitative and qualitative methods. The Commonwealth Scholarship Commission in the United Kingdom (2022) also used diary method to measure the outcomes and impact of international scholarships. Researchers have also used diaries in the context of education (Bartholomew et al., 2004; Gorman, 1998; Hobson, 1996).

In high schools in mainland China and the Hong Kong Special Administrative Region, students are usually asked to write weekly dairies on their life experiences. Hence, we have taken advantage of this practice to collect evaluation data in the form of student diaries in the P.A.T.H.S. program and Tin Ka Ping P.A.T.H.S. program in mainland China (Shek, 2010; Shek et al., 2019). Based on this strategy, we continued to invite high school students after completion of Tin Ka Ping P.A.T.H.S. program under the COVID-19 pandemic in 2022–23 academic year.

Method

Participants and Procedures

In 2022/23 academic year, a total of 39 schools joined the "Building the Tin Garden Together" project and implemented school-based Tin Ka Ping P.A.T.H.S. program, involving 557 classes and 26,169 students. Among them, we randomly selected six schools to join this qualitative evaluation study. In these randomly selected schools, one implemented the program at Grades 7, 8, and 10, one implemented the program at all junior secondary grades (i.e., Grades 7–9), one implemented the program at Grades 7 and 8 only, two implemented the program at all senior secondary grades (i.e., Grades 10–12), while the remaining one implemented the program at Grades 10 and 11 only. Finally, we received a total of 2,337 usable diaries. As we randomly sampled the schools and the sample size was large, we argued that there was acceptable generalizability of the findings.

For the sample size to be determined in qualitative research, there are different views in the scientific literature. Primarily, some researchers suggested some "magic numbers" for the sample size in survey (N = 384; Memon et al., 2020) and qualitative research (Sim et al., 2018). For examples, Bekele and Ago (2022) pointed out there are different factors influencing the sample size (e.g., practicalities and experience of researchers) and pointed out 20–60 is the common sample size used.; Dworkin (2012) proposed 25–30 cases are minimal sample size in qualitative research. On the other hand, there are views arguing that sample size in qualitative research depends on saturation (Hennink & Kaiser, 2022; Sim et al., 2018; Vasileiou et al., 2018), although there are different meanings of "saturation". Finally, there are studies arguing that there are many issues involved in determining sample size in an a priori manner in qualitative research (Fugard & Potts, 2015a & b, 2016; Fusch & Ness, 2015; Marshall et al., 2013; van Rijnsoever, 2017). In the present study, as previous studies showed that a large sample of diaries (N = 859; Shek et al., 2019) would be able to arrive at theoretical saturation, it is argued that the sample in this study (N = 2,337) can be considered to be adequate to reach saturation. The sample size is also much larger than the magic number of "384" in social science research.

In each randomly selected school, the school coordinator randomly invited students to join this evaluation study. Depending on the school situation, they could randomly invite students from different classes and/or different grades to write the diaries. Standardized instructions were given to the school coordinators. The invited students were instructed to write a diary of no less than 200 words that can describe their experiences, feelings and thoughts about their participation in the program. The students were clearly informed that their participation was entirely voluntary and there was no need to reveal their identity. They were also informed that the data would be used in an anonymous and confidential manner for education and research purposes. All selected students gave their consent to join the study.

Data Analyses

Regarding the coding strategies, inductive coding is commonly adopted to allow the codes to "emerge" from the data. However, there are also views arguing that qualitative researchers can code the materials in a deductive manner when a priori theoretical framework or research is available (Bingham & Witkowsky, 2022; Crabtree & Miller, 1999; Elo & Kyngas, 2008; Fife & Gossner, 2024). As pointed out by Bingham (2023), "deductive codes can also be developed from propositions … They are deductive in nature because they are often developed from existing theory and/or research" (p. 2). Similarly, Naeem et al. (2023) reasoned that "deductive thematic analysis, also referred to as 'theoretical thematic analysis,' involves the application of an existing theoretical or conceptual framework to structure and interpret the data" (p. 8). In this study, we used a hybrid approach with primary employment of deductive coding for several reasons. First, as argued by some qualitative researchers, both inductive and deductive coding strategies could and should be used (e.g., Miles & Huberman, 1994). Second, hybrid approach has been used in the existing literature (e.g., Fereday et al., 2006; Naeem & Ozuem, 2022; Xu & Zammit, 2020). Third, as we have developed a coding scheme based on the previous evaluation studies using diaries (e.g., Shek et al., 2019), we can use such conceptual frameworks to guide the coding process in an efficient manner. Fourth, through inductive coding, we further identified new categories of codes (e.g., positive evaluation of the teachers).

Consistent with the previous studies, the data were analyzed using general qualitative analyses techniques (Shek et al., 2019). First, we invited research colleagues to rate the overall tone of the diary on a 7-point scale ranging from "1" to "7" with the following definitions:

1 = strongly negative (all or almost all responses are negative)
2 = moderately negative (most of the responses are negative)
3 = slightly negative (both negative and positive responses are present, with negative responses more than positive responses)
4 = neutral (negative and positive responses are presented with similar intensity)
5 = slightly positive (both negative and positive responses are present, with positive responses more than negative responses)
6 = moderately positive (most of the responses are positive)
7 = strongly positive (all or almost all responses are positive).

To reduce biases involved in the data analyses, the author was not involved in the data analysis process. The data analyses were coordinated by a Research Assistant Professor and several research assistants. The ratings were checked by the Research Assistant Professor. Generally speaking, the consensus amongst the raters was very high, particularly on those cases rated as "very positive" (i.e., rating of "7"). Based on 20 randomly selected cases, the inter-rater reliability between the research staff and the author was 100%. Besides rating the positivity of each case, the research assistant also marked the perceived benefits of the program in different domains which are based on categories identified in previous studies (e.g., Shek et al., 2019).

The Research Assistant Professor also checked the categorization with consensus amongst the research colleagues.

Shek et al. (2005) proposed several principles for conducting high quality qualitative evaluation. In this study, we upheld the following principles: adoption of a general qualitative orientation; clear description of the sample with justifications; clear description of the data collection process; ways to minimize biases and ideological preoccupation via consensus amongst the different raters and inter-rater reliability; consideration of alternative explanations; discussion of the limitations in a self-critical manner.

Results

Table 1 shows the ratings for the 2,337 diaries, with most of the cases rated as "7". Regarding the impact of the program (Table 2), results showed that the program was able to enhance the psychosocial competencies and well-being of the program participants in different domains. The translated narratives of the participants are presented below.

Enhancement of the Sense of Community

Some participants perceived that their sense of community and community identity increased after taking the subject. Some narratives are:

➤ "The first lesson was "Shine on Shanwei with One Heart", and it made me realize that Shanwei has such a beautiful place. I know that Shanwei has so many characteristics. The teacher also taught us to care about the motherland and love the motherland."

➤ "I have benefited a lot. I have learned what is a collective, what is unity and cooperation. Every activity, the team cannot succeed without one person. The interests of the collective are greater than the interests of the individual."

➤ "The program encouraged me to participate in and care for the community, and cultivated my sense of responsibility to contribute to the society, making me feel like a new life, like a groundhog that has not seen the light of day, breaking through the ground and seeing the vast and infinite world."

Enhancement of Study Interest, Academic Performance and School Adjustment

Some students shared that the program was able to enhance their study motivation, academic performance and school adjustment. Extracts of some diaries are as follows:

➤ "This is a section that adds spice to the boring learning. This is not only a way to relax in intense study, but also an expansion and innovation in addition to life and textbook learning."

Table 1 Distribution of ratings of student diaries on a 7-point rating scale

Categories	Total number	1 = Strongly Negative		2 = Moderately Negative		3 = Slightly Negative		4 = Neutral		5 = Slightly Positive		6 = Moderately Positive		7 = Strongly Positive	
		n	%	n	%	n	%	n	%	n	%	n	%	n	%
Benefits for community and the society	72	1	1.39	0	0.00	0	0.00	2	2.78	1	1.39	4	5.56	64	88.89
Benefits for school adjustment; studying; academic performance	55	0	0.00	1	1.82	0	0.00	1	1.82	1	1.82	6	10.91	46	83.64
Family relationship; parent–child relationship; family functioning	140	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	8	5.71	132	94.29
Interpersonal relationship: improved peer relationship; improved skills (social competence)	225	0	0.00	0	0.00	0	0.00	1	0.44	2	0.89	17	7.56	205	91.11
Intrapersonal competence: cognitive competence, problem solving, behavioral competence	139	0	0.00	0	0.00	0	0.00	0	0.00	1	0.72	15	10.79	123	88.49
Intrapersonal competence: moral competence, values cultivation	230	0	0.00	0	0.00	0	0.00	1	0.43	6	2.61	26	11.30	197	85.65
Intrapersonal competence: optimism, resilience, coping with stress	157	0	0.00	0	0.00	1	0.64	0	0.00	1	0.64	3	1.91	152	96.82
Intrapersonal competence: emotional competence	177	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	5	2.82	172	97.18
Intrapersonal competence: Positive self-identity; self-confidence; positive self-image; self-efficacy	161	0	0.00	0	0.00	1	0.62	0	0.00	2	1.24	9	5.59	149	92.55
Intrapersonal competence: Spirituality, life meaning, cherishing life	276	0	0.00	1	0.36	0	0.00	1	0.36	2	0.72	14	5.07	258	93.48
Appreciation of the teacher	273	1	0.37	1	0.37	4	1.47	3	1.10	1	0.37	25	9.16	238	87.18
Other positive comments	432	2	0.46	5	1.16	3	0.69	12	2.78	10	2.31	48	11.11	352	81.48
Total	2337	4	0.17	8	0.34	9	0.39	21	0.90	27	1.16	180	7.70	2088	89.35

Table 2 Classification based on positivity of the diaries (ratings 5–7 = positive; rating 4 = neutral; ratings 1–3 = negative)

Categories	Total number	Positive		Negative		Neutral		Unde-cided	
		n	%	n	%	n	%	n	%
Benefits for community and the society	72	69	95.83	1	1.39	2	2.78	0	0.00
Benefits for school adjustment; studying; academic performance	55	53	96.36	1	1.82	1	1.82	0	0.00
Family relationship; parent–child relationship; family functioning	140	140	100	0	0.00	0	0.00	0	0.00
Interpersonal relationship: improved peer relationship; improved skills (social competence)	225	224	99.56	0	0.00	1	0.44	0	0.00
Intrapersonal competence: cognitive competence, problem solving, behavioral competence	139	139	100	0	0.00	0	0.00	0	0.00
Intrapersonal competence: moral competence, values cultivation	230	229	99.57	0	0.00	1	0.43	0	0.00
Intrapersonal competence: optimism, resilience, coping with stress	157	156	99.36	1	0.64	0	0.00	0	0.00
Intrapersonal competence: emotional competence	177	177	100	0	0.00	0	0.00	0	0.00
Intrapersonal competence: Positive self-identity; self-confidence; positive self-image; self-efficacy	161	160	99.38	1	0.62	0	0.00	0	0.00
Intrapersonal competence: Spirituality, life meaning, cherishing life	276	274	99.28	1	0.36	1	0.36	0	0.00
Appreciation of the teacher	273	264	96.70	6	2.20	3	1.10	0	0.00
Other positive comments	432	410	94.91	10	2.31	12	2.78	0	0.00
Total	2337	2295	98.20	21	0.90	21	0.90	0	0.00

➤ "The P.A.T.H.S. class is the most interesting in my heart, it also makes us happy, cultivates our interests and hobbies, makes us more interested in reading, and has a greater sense of achievement."

➤ "The P.A.T.H.S. course alleviates the academic pressure, but also allows the students to learn different truths, broaden the students' horizons, and promote the relationship between the students, and work together to win together."

Enhancement in Family Relationships

Some students shared that the program was able to enhance and improve their family relationships, particularly with the parents. Some diary content is as follows:

➤ "The most profound part of this year's P.A.T.H.S. class is the lesson about "family", because of personal reasons, my mother has been with me the longest time in my family, so I have a deep understanding of my mother, but my father works outside the home all the year round, and almost only comes home on long vacations, which makes me unfamiliar with this. But after that class, I felt a lot of guilt in my heart for rarely greeting my father, which effectively adjusted my relationship with him."

➤ "I learned a lot through this P.A.T.H.S. class. The first is how to get along with your family. In this lesson, I learned the key to parent-child communication: mutual care, empathy, fairness, and gratitude. It's not easy for children, but it's even more difficult for parents."

➤ "I have learned to be grateful, as the saying goes: the grace of a drop of water should be reciprocated by a spring. We should not only thank all the people who have helped us, but also our parents. Because of our parents, we came to this world, our parents raised us as adults, we should thank our parents for their nurturing grace. Parents will help us do something that we can't accomplish, whenever we make mistakes, parents will also teach us patiently."

Enhancement in Social Relationships

Some students also wrote that the program enhanced their social relationships. Some sharing included:

➤ "I didn't have a lot of friends in junior high school, I didn't know how to communicate with them in junior high school, they didn't look for me, and I wouldn't go to them. Since I took the P.A.T.H.S. class, I seem to have found myself. I have the courage to make friends, and I will resist when I am not good. If I didn't have this course, I might have been living the same life as before."

➤ "Originally, I was very introverted, shy, and reluctant to participate in other people's communication. But since I started to get in touch with the P.A.T.H.S. classes, my whole person is completely different. The P.A.T.H.S. class has also strengthened my self-confidence, and I am not nervous at all about speaking in class or communicating with the teacher."

➤ "I could also know the true friendship of my classmates. In general, P.A.T.H.S. classes allow us to promote the relationship between teachers and students, help students solve puzzles, can make students get better situations with each other, and let us understand interpersonal relationships better."

Enhancement of Cognitive Competence and Behavioral Competence

Students also expressed that the program enhanced their cognitive competence (e.g., problem solving and thinking skills) and behavioral competence (e.g., assertiveness and say no" to engagement in problem behaviour). Some examples are:

➤ "The part of the course that I have benefited the most from this semester has been the ability to act. First of all, it is necessary to have a clear understanding and rigorous planning for the future, analyze, and then take action from different aspects, and improve the ability and efficiency of action."

➤ "For me, taking the P.A.T.H.S. class has had a big impact on me. When I am faced with an unintelligible problem or confused about an unknown knowledge, I will think of the method taught to me by the teacher in the P.A.T.H.S. class, and I will face and solve it by myself, so that I have the ability to face the problem and solve it by myself. It was the P.A.T.H.S. class that strengthened my ability to make informed decisions and enhanced my understanding of myself."

➤ "In this course, I have gained a lot, such as making me look at problems more comprehensively, no longer judging a person based on my first impression, learning to observe a person more carefully, looking at the world with kindness, and enhancing my social responsibility."

➤ "In one debate, although I didn't speak much, I felt a lot about the different views and facts held by both sides, and the evidence to refute and agree with the opponent and the other party, many of which were points and facts, and the facts caused me to think deeply. The P.A.T.H.S. class also made me aware of things I didn't realize before, and it also helped me to face the future more positively."

Enhancement of Moral Competence

Students pointed out that the program enhanced their ability to differentiate "right" from "wrong". Some sharing includes:

➤ "I learned that material things are not necessities, and I learned that my career outlook and my own conditions determine my personal value, and then determine my salary. I understood the correct outlook on love and life, and gained a new understanding of my person, and also had a certain blueprint for my future life planning."

➤ "After studying this year's P.A.T.H.S. class, I have gained a lot and thoughts, which opened up another path in my life. In "Money and Value", I learned that there are pros and cons to money. Money is not everything. The key is the way

you use it, the way. In "My Professional Values", I learned that we should seize the moment, and what we get is directly proportional to our own value."

➤ "In this year's P.A.T.H.S. class, I learned to help me develop my talents, and let me know what to do and what not to do. What's bad and what's good. Absolutely do not do anything that violates the law. Sharpen your will, refuse bad temptations, and constantly enhance your self-control."

➤ "Since I came into contact with this course, I have enjoyed discussing my values and outlook on life with everyone, and I can feel the harmonious atmosphere and value blending between everyone. I also learned the correct concept of others, so as to correct my own life values, correct my own view of myself, respect others and love myself, which is my biggest gain."

Enhancement of Emotional Competence

Some participants wrote that the program was able to enahnce their emotional competence, such as understanding and amangement of their emotions.

➤ "I think this new P.A.T.H.S. class is very good. It allows me to become my own psychological protection doctor, and I also feel the warmth from the teacher. Every day can make me feel better. Sometimes when I am a little troubled, it reminds me of the content of the P.A.T.H.S. class to adjust my emotions."

➤ "This year's P.A.T.H.S. class has brought us a lot of gains, and the class atmosphere is also very good. The "Dictionary of Emotions" class has brought me gains. I could only silently digest my emotions before, but now I know how to talk to others, and I have learned how to regulate and control emotions."

➤ "Through this lesson, I learned the basic concepts of emotions and how to control them: change cognitive evaluation; divert attention; reasonable catharsis; relaxation training. Everyone has emotions but we have to control our emotions, otherwise they will control you. Only by managing your emotions can you manage your life well."

➤ "In the last class, I learned that everyone's emotions in adolescence are complex and diverse. The P.A.T.H.S. class taught me to take the emotions of adolescence seriously and not to disturb myself by the eyes of others, so I also sorted out the methods of adjusting emotions taught by the P.A.T.H.S.: diverting attention, relaxing training, reasonable catharsis, and asking others for help."

Enhancement of Self-identity, Self-confidence and Self-efficacy

The participants shared that the program could enhance their self-identity, self-confidence and self-efficacy. Some stories are as follows:

➤ "I learned to face the unhappiness of life, how to accept myself, how to know myself. One of the things that impressed me the most was when the teacher told us that we have many things and people who love us, and that we love. Tell us the value of life and believe in yourself!"

➤ "Self-confidence – one of the most important traits since I stepped onto campus last year. In this class, I learned a lot of good qualities, and the most impressive thing for me was self-confidence. Self-confidence fills us with passion. With self, we can start a great and glorious cause with firm confidence and hope."

➤ "In this semester's P.A.T.H.S. class, what impressed me the most was learning to be confident. We should first find what we are good at, develop our potential, and shine in what we are good at. Self-confidence also fills us with passion, and with self-confidence, we can start a great and glorious career with firm confidence and hope. Self-confidence is very important, and we need to learn to make ourselves more confident."

➤ "In this year's P.A.T.H.S. class, the biggest feeling for me is to know myself. It has a lot of help, whether it is at home, or interpersonal relationships, or maybe my own emotional management, let me deeply experience, the meaning of the P.A.T.H.S. class to me, this carefree, only happy and happy class. It teaches us useful knowledge, know how to face in life."

Enhancement of Optimism and Coping Ability

Students shared that their coping skills and optimism increased after taking the P.A.T.H.S. program.

➤ "Through learning the P.A.T.H.S. classes, I have perfected my life goals and continued to explore and develop. The other side is full of hope for a day, using limited time, constantly learning to enrich oneself, from where to fall, from where to get up. The road we have walked now is the accumulation of our ancestors. Constantly set goals, so as to achieve them step by step, and only by accumulating over time can we break through ourselves."

➤ "Learn to try, anything is possible. Everyone will go through tribulations. Don't be frustrated because of a small twist and turn. You have always been unique, be good at exploring your potential. Don't be afraid to endure hardships. There is sweetness in bitterness! You have to endure the pain of breaking out of the cocoon into a butterfly in order to afford the beauty of flapping your wings and flying high!"

➤ "I think the P.A.T.H.S. program can help people get out of trouble. When we are at a low point, don't give up easily. Think about the eventful years we have spent, don't give up in a moment of depression. Don't give up. Don't let go, go and struggle, persistence is victory. I have persevered because of my faith."

➤ "Make peace with your past. In the past, I couldn't recognize myself properly because of certain pressures. Because of excessive sadness, I was pessimistic about the world. And because of my family, I couldn't understand the meaning of coming into this world. But in the P.A.T.H.S. class, I reconciled with my past self. I understood that my strengths are not useless in the mouths of my parents, and I have learned that as long as I work hard, whether I succeed or fail, I will definitely be able to harvest some of the ideas I want."

Enhancement of Spirituality and Life Meaning

Some students wrote that the program enhanced their spiritual well-being, particularly their meaning of life.

> ➢ "After taking a semester of P.A.T.H.S. classes, I realized a lot of truths. Before that, I was a person with no ambitions, wandering around like a puppet until I happened to see the P.A.T.H.S. class on the schedule. So, I started looking forward to this course. I thought that this class was as boring as other classes, but it was this ideal that made me see another world. It was this class that gave me a new body and made me have a soul I went from a down-and-out person to a cheerful and lively little boy."
> ➢ "Last time when we had the P.A.T.H.S. class, the teacher asked us about our dreams. When the teacher asked me about it, I thought about it and realized that I felt as if I had been lost in the vast ocean. Thinking about it, I thought about it, I want to make a game special effects production! The P.A.T.H.S. class inspired me to think about my life, and if it weren't for this lesson, I might still be a learning tool now."
> ➢ "The P.A.T.H.S. class made me feel that money is important, but what is more valuable than money is life. Life is only once, and money can be earned again. Once life is gone, what is the use of money? It is money that makes you satisfy vanity. I think that friendship and family affection are precious. Money is precious, and my own life is even more precious."
> ➢ "We learned a lot in the P.A.T.H.S. class, and in the course, we realized the direction and goal of our life, and I experienced many different feelings in the process. The P.A.T.H.S. class developed my perspective on my life goals in an attractive way, gave me a new experience here, and learned the importance of planning the future direction and clarifying the path of life, all of which will greatly help me to find a job and create a future in the future."

Enhancement in Other Psychosocial Domains

Some students also mentioned some general benefits of the program such as having personal transformation, look at life from the bright side, and helping them to find a correct life path.

> ➢ "In the P.A.T.H.S. class, I learned to have compassion and love for others, and I also learned to distinguish between right and wrong. One of the lessons I remember most vividly was to tell me that life is useful, and not to think that life is bad. Don't care too much about other people's opinions, just be yourself. In the past, I often felt that living was a pain, and when others said that I was not good here, I was not good anywhere, and I thought that I was not worthy of living in the world, but now it is different! I started taking P.A.T.H.S. classes

in junior high school, and I began to think that life is a beauty, and I no longer think about suicide."

➢ "The P.A.T.H.S. class has helped me a lot, making me change from silent and introverted to lively and cheerful, from timid and inferior to confident and sunny, from being confused about the future to finding my goal and moving forward firmly. Of course, all this is inseparable from the hard work and patient help of the teachers, as well as the active atmosphere and active participation of the students in the classroom. Thank you for having you. If I can meet the P.A.T.H.S. program in future, I will definitely join to it without hesitation. Participation in this class is highly recommended."

➢ "I was in the middle of an ocean, and I was allowed to drift with me, without direction or purpose. It wasn't until this course was added to my high school that my life of being a gangster came to an end, and my high school life had a purpose and direction, which was like a beacon in the dark night, guiding my home. This course has benefited me a lot in my high school life, and I will definitely try my best to give my heart and soul to achieve my goals."

➢ "After I took the P.A.T.H.S. class, I learned that there are many paths in life, and I can consider the path that suits me best in more ways. It makes me have a clearer vision of the future and know how to make the right choice. I think the P.A.T.H.S. class is really useful for me, I can learn some things that are not in the textbook but are really useful in real life. It can strengthen my ability to face adversity, and there are all kinds of fun activities that I like, if I can, I want to take more P.A.T.H.S. classes!"

Appreciation of Teachers

Many students showed their appreciation of the teachers in their diaries, which may be a catalyst for the positive transformation in the students

➢ "The joy of P.A.T.H.S. classes is not limited to the content of the class. The teacher often interacts with the students, and the lively learning atmosphere makes me relax in the intense study and enrich my learning. I vaguely remember that in a P.A.T.H.S. class, the teacher led us to pick up leaves, which made me know that leaves are unique, and so are people."

➢ "In the P.A.T.H.S. classes, the teachers can always make the students raise their little hands in high interest and answer one question after another with their heads held high. When encountering difficult problems, students will be allowed to work together in groups. The small games interspersed in the course can also liven up the atmosphere among the students, such as the top pen game, I play you guess, and the paper airplane that releases emotions."

➢ "Taking the P.A.T.H.S. class will make me feel more relaxed than ever. The teacher uses her humorous language and enthusiastic explanations to transform the classroom from a heavy atmosphere to an active and cheerful paradise. Every

time I take the P.A.T.H.S. class, I forget my troubles and actively interact with my teachers and classmates, and my smile is even brighter, for which I would like to thank the co-creation teachers for their hard work."

Discussion

Utilizing diaries written by the students, we describe the impact of Tin Ka Ping P.A.T.H.S. Program on the enhancement of psychosocial competencies and quality of life in different psychosocial domains of the program participants under COVID-19 in this study. There are several strengths of this study. First, a qualitative methodology via the diary method was used. This evaluation method can highlight the subjective experience of the program participants, which cannot be adequately reflected by the quantitative survey findings. Second, based on the qualitative data, we also quantified the findings, hence transforming the study to be a mixed-method study. The percentage findings can give a snapshot of the subjective experiences of the students. Third, a large number of student diaries were collected that can enhance the generalizability of the findings. Fourth, as the cases were collected during the pandemic (2022/23 academic year), this study is very valuable on understanding the value of positive youth development programs in enhancing the well-being of the program participants during the COVID-19 pandemic.

Consistent with the previous studies (Shek et al., 2019), the present study showed that majority of the students highlighted the value and benefits of the program to their development. As shown in Table 1, amongst all 2,337 cases, 2,295 (98.2%) were rated as positive (5, 6 or 7), and around 90% of the cases were rated as "7" (i.e., positive comments with no negative comment). Such an overwhelmingly positive picture speaks for itself – the program is able to enhance the competencies and well-being of the program participants based on the testimonies of the program participants.

Second, based on the categories on the impacts of Project P.A.T.H.S. derived from previous studies (e.g., Shek et al., 2019), we identified 12 categories of impact and narratives supporting these themes are also presented in Table 2. First, students shared that the program enhanced their sense of community. This is important because there are studies showing that young people are egocentric and apathic. Second, in line with previous findings (e.g., Durlak et al., 2011; Roth et al., 1998; Sarason & Sarason, 1981; Sawyer et al., 1997; Taylor et al., 2017; Weissberg et al., 2015; Weissberg & O'Brien, 2004; Zin et al., 2004), the participants felt that the program enhanced their academic motivation, performance and adjustment. This finding is important because some teachers and parents may have the misconception that PYD programs are wasting time. Third, the findings showed that some participants' family relationship was enhanced after taking this program. This is in fact good news for parents with adolescent children. It also suggests that PYD enhancement is a catalyst for family enrichment. Fourth, the findings suggest that PYD programs enhance interpersonal relationships in adolescence. This is an important observation because adolescent maladjustment is intimately related to interpersonal relationship problems. Fifth, the participants shared that the program enhanced their resilience,

emotional competence, optimism and positive identity. These enhanced competencies can be regarded as important developmental assets protecting the healthy development of adolescents. Sixth, students shared that the program enhanced their moral competence. This is encouraging because developing an accurate moral compass is an important developmental task for adolescents which is difficult in a post-modern world. Finally, the students showed gratitude for the teaching of the teachers, which is also an important developmental asset for adolescent thriving.

The present findings basically concur with previous quantitative and qualitative findings related to subjective outcome evaluation (Shek & Wu, 2016). The findings are also in line with the recent qualitative studies (Shek et al., 2022a) and quantitative findings (Zhu & Shek, 2020). Together with other findings, the present findings underscore the value of Tin Ka Ping P.A.T.H.S. program in enhancing the psychosocial competences and well-being of the students. The present findings are also in line with the findings supporting the value of PYD and social-emotional learning programs (e.g., Belfield et al., 2015; Benson et al., 1998; Catalano et al., 2012; Durlak, 2014; Durlak et al., 2011, 2015; Hoffman, 2009; Taylor et al., 2017).

Methodologically, the present study highlights the usefulness of dairies as a valuable evaluation tool. Shek (2009) pointed out that there are several advantages of collecting evaluation data via diaries. First, through diaries, students are invited to reflect on their learning experience, thus consolidating their learning experience. Goldenhar and Kues (2006) stated that "journaling may be an educational intervention itself, because it provides students the opportunities to take time to reflect on their educational experiences" (p.531). Second, weekly diary can be regarded as a research method sensitive to contextual variations. When students write diaries, they take different contexts (e.g., school, family and community) into account, hence becomes more reflective of what happens in the real world. Third, diaries are useful tools that can empower the students because they can be passionate and moving. In fact, some of the narratives shown in this study can touch the hearts of the readers. Finally, in terms of resources, collecting student diaries is not costly and it can be easily done. In particular, if we collect dairies from students routinely, asking students to reflect on their experience is not something intrusive.

Nevertheless, there are several weaknesses of using weekly diaries as an evaluation tool (Shek, 2009; Shek et al., 2019). First, there may be the problem of invasion of privacy. However, this can be minimized by keep the diaries anonymous. Second, students may have problems in expressing their feelings and this is a problem particularly serious for Chinese adolescents. Third, as a qualitative research method, diary has the limitations of qualitative research. For example, Day and Thatcher (2009) highlighted the benefits as well as problems of collecting qualitative data via diaries.

While the positive findings can be interpreted as evidence supporting Tin Ka P.A.T.H.S. program, there are several alternative explanations. First, one may argue that the findings may not be representative. However, as the schools and participants were randomly selected, this alternative explanation can be partially dismissed. Second, it is possible that the students might try to write something in favor of the teachers (i.e., demand characteristics). However, as the dairies are anonymous, this explanation is not plausible. Third, the positive findings might

be due to the threat of the teachers. However, as we issued standard instructions and there were indeed some negative cases, this alternative explanation is also not plausible. In fact, the students were encouraged to write down their honest experiences.

In summary, based on a large number of diaries collected during the pandemic period, the present study showed that a vast majority of the diaries are positive and there is evidence suggesting that Tin Ka Ping Program as a PYD program can enhance the psychosocial competence and quality of life of the students who have participated in the program. The present findings are consistent with the previous studies adopting the same evaluation strategy (Shek, 2010; Shek et al., 2019) and other research methods (e.g., Zhu & Shek, 2020). Obviously, the available evidence forms a coherent picture – Tin Ka Ping P.A.T.H.S. program can enhance the psychosocial competence and quality of life of adolescents which is a promising program that can be used to tackle the adolescent mental health crisis in mainland China.

Data Availability Data are available upon request to the corresponding author.

Declarations

Competing Interest As the author is the Editor-in-Chief of ARQOL, he has invited an Associate Editor to be an Action Editor, who will invite qualified reviewers and make the final editorial decision.

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