



# Evaluating the Impact of a Positive Youth Development Program Using Student Diaries: Tin Ka Ping P.A.T.H.S. Project in Mainland China

Lindan Tan<sup>1</sup> · Daniel T. L. Shek<sup>1</sup> · Xiang Li<sup>1</sup>

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## Abstract

The rising prevalence of mental health issues among students in mainland China calls for urgent responses, including the implementation of Positive Youth Development (PYD) programs. In this paper, we focus on the effectiveness of the “Tin Ka Ping P.A.T.H.S. Project” via student diaries. In the 2016/17 (N = 1,832) and 2017/18 (N = 1,229) academic years, junior and senior high school students wrote reflections upon completing the program. Findings revealed that 96.90% of students acknowledged the program’s positive impact on their overall well-being across twelve domains. These include self-report improvements in intrapersonal competencies (encompassing cognitive, emotional, moral competencies, resilience, self-identity, and spirituality), interpersonal relationships, school adjustment, family functioning, and social responsibility. This research suggests that the “Tin Ka Ping P.A.T.H.S. Project” substantially improves the quality of life and enhances psychosocial competence for adolescents. Theoretical and practical issues involved in the implementation of PYD programs in China are discussed.

**Keywords** Positive Youth Development · Tin Ka Ping P.A.T.H.S. Project · Mental Health · Diaries · Reflective Writing

## Introduction

### Student Mental Health Concerns in Mainland China

Based on World Health Organization (WHO) statistics indicate that 14% of adolescents experience a mental disorder (WHO, 2024). Unfortunately, the mental health needs and rights of adolescents have historically been marginalized, particularly in

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✉ Daniel T. L. Shek  
daniel.shek@polyu.edu.hk

<sup>1</sup> Department of Applied Social Sciences, The Hong Kong Polytechnic University, Hong Kong, China

low- and middle-income countries, where nearly 90% of this demographic resides (WHO, n.d.). In mainland China, studies have consistently indicated the prevalence of psychological issues in students. An investigation targeting middle and high school students in 11 cities across China (N = 14,590) revealed that 32.0% of the participants exhibited symptoms of anxiety, while 4.4% displayed symptoms of depression (Luo et al., 2020). A three-wave longitudinal survey conducted among seventh-grade students showed a significant increase in anxiety, depression, academic stress, emotional distress, obsessive–compulsive tendencies, and interpersonal sensitivity among adolescents surveyed between 2016 and 2020 (Wu et al., 2022). A recent study found that approximately one in five adolescents could be classified as experiencing mild Internet addiction, with seniors exhibiting a higher frequency of addiction symptoms compared to juniors (Shek et al., 2023a). Given that adolescents' mental health has progressively become a major concern (Chang et al., 2023; Zhang et al., 2021), there is an increasing need for establishing effective prevention and intervention strategies tailored to adolescent's mental health (Shek, 2006a, 2006b). Among several effective prevention and intervention programs, Positive Youth Development (PYD) programs received significant attention in mainland China due to their effectiveness and long-term impact on the holistic positive development of youth (Qu et al., 2024).

### **PYD as a Prevention Needs Further Validation**

Traditionally, mainstream preventions addressing student health have focused on identifying and minimizing risk factors to mitigate negative outcomes, adopting a deficit-oriented approach (Benson et al., 2004). In contrast, PYD programs highlight the developmental plasticity, potential and capabilities of youth (Benson, 1997; Catalano et al., 2004; Damon, 2016; Lerner et al., 2005; Shek et al., 2019a). PYD programs emphasize nurturing their strengths to navigate developmental challenges adaptively (Curran & Wexler, 2017; Shek & Sun, 2012).

Multiple meta-analyses and evaluation studies have demonstrated the beneficial impacts of PYD programs on students' psychological well-being. Firstly, PYD programs have been shown to improve different competencies (Catalano et al., 2019; Taylor et al., 2017). Secondly, PYD programs are associated with improved psychological well-being, such as family harmony, positive peer relationships, citizenship, achievement motivation, meaning in life, life satisfaction, and overall prosperity (Catalano et al., 2019; Shek & Zhu, 2020; Taylor et al., 2017; Zhu & Shek, 2020). Thirdly, research shows that PYD attributes serve as protective factors against risk factors such as anxiety, depression, Internet addiction, suicidal tendencies, and aggressive behaviours (Gariépy et al., 2016; Jiang et al., 2024; Zhou et al., 2020).

However, there are mixed findings regarding the effects of PYD programs (Catalano et al., 2019; Zareei Mahmoodabadi et al., 2023), suggesting that there is a need to conduct more studies to address the impact of PYD programs (i.e., the effectiveness as preventions tools as well as the impact as intervention). According to the systematic review of the United States Agency for International Development (USAID) conducted by Alvarado et al. (2017) to examine applications of PYD

programs in low- and middle-income countries, current PYD programs face critical challenges, including the “lack of robust and consistent measurement of PYD outcomes” and “few instances of longitudinal studies or evaluations of PYD programs” (Alvarado et al., 2017, p. 40), further highlighting “there is a tremendous need to invest in advancing the field, piloting new strategies, and rigorously evaluating and documenting programs that are being implemented” (Alvarado et al., 2017, pp. 5–6). In short, contemporary PYD programs deserve comprehensive and rigorous evaluation, particularly given the limited amount of validated PYD programs in China (Shek et al., 2023b).

### **The “Tin Ka Ping P.A.T.H.S. Project” in Mainland China**

The significance of PYD initiatives has been acknowledged by the global community, including agencies such as USAID. Over \$440 million has been invested by USAID in PYD research and initiatives worldwide (USAID, 2013). Additionally, they have developed “[YouthPower.org](#),” an online learning platform with over 1,000 resources aimed at promoting the PYD approach’s global adoption. These initiatives have facilitated the formation and expansion of PYD programs globally, empowering youth across diverse nations. Unfortunately, despite the prevalence of many PYD programs in the West, there is a scarcity of evidence-based PYD initiatives in China (Shek & Yu, 2011).

In mainland China, the exception is the “Tin Ka Ping P.A.T.H.S. Project” which was transplanted from Hong Kong. This project has been acknowledged as an effective PYD program by YouthPower Learning (Alvarado et al., 2017). In 2005, the “Project P.A.T.H.S. (Positive Adolescent Training through Holistic Social Programs)” was launched in Hong Kong, financed by “The Hong Kong Jockey Club Charities Trust” with a grant of HK\$750 million. It produced substantial research outcomes through various assessment methods (Shek, 2013; Shek & Dou, 2024; Shek & Sun, 2012; Shek et al., 2014). Collectively, these studies validated the program’s effectiveness in enhancing the psychosocial competence and holistic well-being of participants, benefiting both implementers and students.

The success of “Project P.A.T.H.S.” in Hong Kong led to its expansion into mainland China in 2011, forming the “Tin Ka Ping P.A.T.H.S. Project.” This initiative, supported by the “Tin Ka Ping Foundation”, began as a pilot program in four schools located in Shanghai, Changzhou, Suzhou, and Yangzhou. Following the pilot’s success, it was fully integrated into the educational framework of schools in diverse regions of mainland China starting in the 2015/16 academic year. To comprehensively assess the program’s implementation effectiveness, a range of evaluation methodologies were utilized. Quantitative assessment data were primarily gathered through quasi-experimental studies, which suggested that students in the experimental cohort reported greater improvements in PYD attributes, for example, life satisfaction, less depression, and reduction of delinquency, from pre-test to post-test compared to their control group counterparts (Shek et al., 2014; Zhu & Shek, 2020). Besides, qualitative evaluation methods, particularly student diaries were used (Shek, 2024; Shek & Dou, 2024).

## The Role of Diary as Reflective Writing on the PYD Program

Reflective writing is integral to the evaluation of PYD programs. Several studies have employed diaries as a qualitative strategy to assess the effectiveness of these initiatives, focusing on how adolescents perceive and understand their experiences and gains from the program (Shek, 2010; Shek & Sun, 2012; Shek et al., 2019b; Zhu & Shek, 2020). This student-centred approach facilitates confidentiality and privacy, encouraging participants to express themselves honestly and openly without concern for external judgment or influence on their experiences during the program (Shek et al., 2019b; Travers, 2011). In clinical and educational contexts, reflective writing in diaries is a broad-based tool for assessing the efficacy of interventions due to its spontaneous nature. For example, Schmitz and Wiese (2006) employed diary analysis to assess the efficacy of a training program for self-regulated learning among college students. The implementation effectiveness and moderators of the care intervention for older adults were examined by Hasson et al. (2012) using diary data.

Additionally, it is critical to acknowledge that reflective writing serves not only as a tool for evaluation but also as a useful process of self-learning and self-reflection for participants in PYD programs. Reflective writing enhances students' motivation and autonomy (Amirkhanova et al., 2016; Walker, 2006). For instance, Vinjamuri et al. (2017) showed that diary assignments increased social work students' motivation to participate in research-based practice. According to a meta-analysis, reflective writing has a positive effect on academic achievement (Bangert-Drowns et al., 2016). Besides, reflective writing fosters cognitive competence and facilitates critical thinking (Amirkhanova et al., 2016; Pavlovich et al., 2009). Moreover, by analysing personal experience and feelings, reflective writing acts as a scaffolding mechanism for developing self-regulated, which in turn leads to the enhancement of self-knowledge and self-awareness (Brearley, 2000; Nückles et al., 2020). Therefore, this convergence between reflective writing results and PYD objectives highlights its potential to enhance program effectiveness. By providing an in-depth examination of personal experiences, reflective writing can illuminate the "black box" of the change process, enabling the analysis of both prevention and intervention outcomes (Shek & Sun, 2012; Shek et al., 2019b; Travers et al., 2015).

## The Present Study

In academic environments across mainland China, diary writing is prevalent among students to record their study and live experiences (Shek, 2024). The objective of this study is to evaluate the perceived effectiveness of the "Tin Ka Ping P.A.T.H.S. Project," a PYD initiative, by analyzing student diaries collected from high school students who completed the program during the 2016/17 and 2017/18 academic years. It evaluates the program's specific impact on the improvement of adolescents' psychosocial competence and its performance in different areas. It further informs the integration of evidence-based PYD programs into student mental health policy development. Specifically, this study aims to 1) assess students' overall perception of

participation in the “Tin Ka Ping P.A.T.H.S Project” (i.e., whether their subjective experiences are positive or negative); and 2) explore the specific PYD domains in which students perceived benefit from participating in the “Tin Ka Ping P.A.T.H.S Project”. In short, this study not only provides empirical support for the perceived effectiveness of the “Tin Ka Ping P.A.T.H.S. Project” but also offers policy suggestions for policymakers and educational practitioners to promote positive growth and thriving for adolescents in mainland China.

## Method

This study used a mixed method approach to assess student’s overall attitude toward participating in the “Tin Ka Ping P.A.T.H.S. Project” and explore students’ perceived benefits within the domains of adolescent positive development by participating in the “Tin Ka Ping P.A.T.H.S. Project”. Middle- and high-school students were involved in the program throughout the 2016/17 and 2017/18 school years. Data was collected through student diaries covering two academic years of self-reflective writing by students. The analytical method combines qualitative (i.e., thematic content analysis via diaries) and quantitative analysis (i.e., emotional polarity scales within diaries and categorization of responses in terms of percentages) to provide comprehensive research results.

## Participants and Procedures

This study was reviewed by the Institutional Review Board at a public university in Hong Kong and ethical approval was obtained before launching the study.

During the academic years of 2016/17 and 2017/18 respectively, a collective number of 30 and 28 junior and senior high schools became participants in the school-based “Tin Ka Ping P.A.T.H.S. Project”, involving 625 and 734 classes, benefiting a total of 29,415 and 34,233 students. The majority of participants were Grade 7, Grade 8, and Grade 10 students, with a limited number of students from Grade 9 and Grade 12 students due to the heightened academic pressure associated with preparing for high school or college entrance exams. From this cohort, a subset of 16 and 9 schools was randomly selected to participate in a qualitative evaluation study in the academic year of 2016/17 and 2017/18 respectively. The simple random sampling was conducted using a random number generator to ensure that each school had an equal probability of being chosen, which minimized selection bias and aimed to enhance the representativeness of the sample.

These selected schools implemented the program across Grades 7–12 in varying manners. Subsequently, 3,085 diaries were collected during the period of 2016/17 ( $N=1,832$ ) and 2017/18 ( $N=1,229$ ) academic years. Diaries were collected at the end of each academic year after the implementation of the program over the course of the year. This data collection time point allowed researchers to assess the program’s overall effectiveness and to evaluate the persistence of its preventive impact. Furthermore, students have enough time at the end of the academic year to

coherently and reflectively document their overall experience and the potential benefits or gains they derived from participating in the program.

Based on the exclusion criteria, a total of 24 diaries were identified as invalid and excluded from the analysis. Diaries were regarded as invalid if unrecognizable handwriting ( $n=4$ ) or a high percentage of irrelevant content, such as unrelated personal stories, doodles, or non-substantive text ( $n=20$ ). To minimize bias, two researchers independently assessed each diary marked as invalid. When disagreements arose, they were discussed and, if no consensus could be achieved, a third researcher was consulted. This procedure ensured a rigorous and transparent exclusion protocol, which aligns with common practices in diary-based studies to guarantee data quality (Alaszewski, 2006; Bolger et al., 2003). As a result, 3,061 valid diaries were included in the final analysis.

To ensure consistency in the data collection process, school coordinators provided students with standardized guidelines, emphasising diary should contain a minimum of 200 words to express their experiences, thoughts, emotions, and reflections on their participation in the program. Prior to joining the study, all participating students were required to provide informed consent. Clear instructions were given to the students on the voluntary nature of their participation, with guarantees of confidentiality and anonymity of their inputs. Students were informed that the collected data would be used exclusively for research and educational objectives. Due to the sensitive nature of the diary, several measures were adopted to protect participant's privacy. Following rigorous collection protocols, all diaries were carefully handled and stored at the research team's office at the university. During data entries, researchers anonymized the content by removing any specific names, especially when presenting them as examples in the study.

## Theoretical Framework and Data Analyses

The present research employed a hybrid evaluation strategy (Patton, 2003; Shek, 2013, 2024; Shek et al., 2019b) that integrates both qualitative and quantitative evaluation, grounded in an evidence-based methodology to offer a more comprehensive means of program evaluation. As Holloway and Biley (2011) suggested “qualitative inquiry is still the most humanistic and person-centered way of discovering and uncovering thoughts and actions of human beings” (p. 974). The qualitative analysis involves an examination of the textual content of the diaries, employing the textual analysis technique (Carley, 1994; Fürsich, 2009; Grimmer & Stewart, 2013).

In addition, the utilization of quantitative methods facilitates robust program evaluations through the incorporation of extensive sample sizes and the application of intricate statistical analyses (Shadish et al., 1991). To enhance the generalizability of the findings, quantitative methods will be employed to assess the qualitative data by quantifying the ratio of positive cases to all cases. This established method, widely employed by researchers (Shek, 2010; Shek & Sun, 2012; Shek et al., 2019b) in the analysis of diary data, serves to enrich the interpretive scope of the evaluation.

The transcription of student diaries was conducted individually by three researchers proficient in Chinese. This process involved two phases. Firstly, a 7-point scale was utilized to evaluate the emotional polarity of the entries, discerning between positive and negative attitudes. Subsequently, based on previous practice (Shek, 2024), the diaries were systematically categorized into twelve thematic domains included in six groups. “Calibration exercises” were served to train three researchers to apply the same standard when rating and coding diaries. This strategy enhances reliability and validity and to standardize the rating and coding procedure. To fill in the possible gaps and resolve any misunderstandings or ambiguities, a rating/coding manual was created, guaranteeing a rigorous and impartial assessment procedure. For the part of rating diaries, researchers independently rate students’ emotional polarity in diaries. When researchers used thematic analysis to code the diaries, the same process was followed. Discrepancies were reviewed and resolved through discussion to reach a consensus on ambiguous cases. These steps minimize subjective biases and enhance the study’s methodological rigour.

In the first step, we utilized a 7-point scale to evaluate the level of positivity or negativity in students’ diaries. The 7-point Likert scale was employed because it provides a more nuanced measurement of emotional polarity compared to shorter scales (e.g., 5-point scales), hence enabling a more sensitive detection of subtle changes in participants’ emotional expressions (Dawes, 2008). The methodological approach employed in the present study was consistent with established academic studies on the assessment of adolescents’ well-being and emotion, where the 7-point Likert scale has been shown to enhance measurement precision (Shek, 2010, 2024; Shek & Sun, 2012; Shek & Zhu, 2020). Besides, the scale corresponds with well-established measures of psychological well-being that have been validated for Chinese language content (Shek, 2024; Shek & Zhu, 2020). This alignment ensures that the 7-Point Likert Scale accurately reflects emotional polarity in accordance with established frameworks.

Specifically, three experienced researchers rated each diary on the 7-point Likert scale. This scale ranged from 1 to 7, where 1 indicating “Strongly Negative” (predominantly negative content), 2 representing “Moderately Negative” (a prevalence of negative content), 3 meaning “Slightly Negative” (a mix of negative and positive content with a predominance of negativity), 4 indicated “Neutral” (a balance between positive and negative content), 5 signifying “Slightly Positive” (a mix of positive and negative content with a predominance of positivity), 6 reflected “Moderately Positive” (a preponderance of positive content), and 7 denoted “Strongly Positive” (predominantly positive content). Further, responses were classified into four categories, namely “positive”, “negative”, “neutral”, or “undecided”.

In the second step, the students’ diaries were coded and categorized into different domains. This narrative mapping was guided by qualitative analysis guidelines (Wolcott, 1994), alongside the “conceptual framework” and “a priori schema” identified in antecedent research (Shek, 2010, 2024; Shek et al., 2019b). Regarding the strategies employed for coding, a deductive approach rooted in a priori theoretical frameworks or seminal studies was adopted. Scholars (Bingham & Witkowsky, 2022; Crabtree & Miller, 1992) have underscored the efficacy of this deductive methodology. Naeem et al. (2023) expounded on the concept of “deductive thematic

analysis” also known as “theoretical thematic analysis”, emphasizing the application of established theoretical or conceptual frameworks to interpret and construct data.

Synthesising theoretical frameworks on PYD and previous research (Shek, 2024; Shek & Sun, 2012; Shek et al., 2019b), we proposed a framework that highlights the coaction between individuals and their environments within the “P.A.T.H.S. program” (Shek, 2010, 2024; Shek & Sun, 2012; Shek et al., 2019b). The thematic content concerning perceptions of the program’s benefits as reflected in the diaries were categorized into twelve domains across six broader groups, all within the theoretical framework in Table 1. Instances of diary cases where no dominant benefit was identified but multiple benefits were covered were designated as “Uncoded Cases.”

The 12-domain framework used in this study (Table 1) is based on well-established PYD theories and extensive research on adolescent development, including studies conducted in Hong Kong and mainland China (Shek, 2010, 2024; Shek & Sun, 2012), as well as the broader PYD literature (Catalano et al., 2004, 2019; Lerner et al., 2005). Each domain reflects key constructs in PYD, such as life purpose (Damon, 2008), pro-social values (Lerner et al., 2005), resilience (Masten, 2001), and identity development (Erikson, 1968), thus establishing a strong theoretical foundation. Specifically, the framework encompasses intrapersonal competence, interpersonal competence, school adjustment, family functioning, social responsibility, and other general benefits, reflecting the 5Cs of the PYD: “Competence”, “Confidence”, “Character”, “Connection”, and “Caring” (Lerner et al., 2005). After a thorough theoretical review, cultural adaptation, and integration of prior research (Lai et al., 2015; Shek, 2010, 2024; Shek & Sun, 2012), the 12 domains were organized into six groups to comprehensively address key areas of PYD, maintaining relevance and coherence with the cultural context of mainland China.

Group I: Intrapersonal Competence, encompassing Domains 5 (Cognitive competence), 6 (Moral competence), 7 (Resilience), 8 (Emotional competence), 9 (Self-identity), and 10 (Spirituality).

Group II: Interpersonal Competence, featuring Domain 4 (Peer relationships).

Group III: School Adjustment, including Domains 2 (Academic performance) and 11 (Appreciation of the teacher).

Group IV: Family Functioning, involving Domain 3 (Family relationship).

Group V: Social Responsibility, comprising Domain 1 (Benefits for community and the society).

Group VI: Other Domain, Domain 12, for other general benefits.

Shek et al. (2005) elucidate twelve fundamental principles and criteria for conducting a robust and high-quality qualitative evaluation study and mitigating bias. Adherence to these principles, this study based on a well-established qualitative framework, rigorously explained and justified the sample demographics, explicated the data collection methodologies employed and the procedure, and critically explained limitations in a reflective manner.

To further strengthen data analysis integrity and alleviate bias, the inclusion of peer-checking procedures employed, a Research Assistant Professor scrutinized the categorization of the twelve identified categories, ascertained through

**Table 1** Theoretical framework of perceived benefits of P.A.T.H.S. Program

Groups	Domains
Perceived Benefits of P.A.T.H.S. Program	I Intrapersonal Competence <ul style="list-style-type: none"> <li>5. Intrapersonal competence: Cognitive competence, problem solving, behavioral competence</li> <li>6. Intrapersonal competence: Moral competence, values cultivation</li> <li>7. Intrapersonal competence: Optimism, resilience, coping with stress</li> <li>8. Intrapersonal competence: Emotional competence</li> <li>9. Intrapersonal competence: Positive self-identity; self-confidence; positive self-image; self-efficacy</li> <li>10. Intrapersonal competence: Spirituality, life meaning, cherishing life</li> </ul>
II Interpersonal Competence	4. Interpersonal relationship: Improved peer relationship; improved social competence
III School Adjustment	2. Benefits for school adjustment; studying; academic performance
IV Family Functioning	11. Appreciation of the teacher
V Social Responsibility	3. Family relationship; parent-child relationship
VI Other Domain	1. Benefits for community and the society
	12. Other general benefits

(Source: Author's own)

the researchers' consensus, while also verifying the ratings of positivity attributed to each case. In addition, curtailed biases and ideological inclinations through the attainment of inter-rater and intra-rater consensus and reliability employed, thereby enhancing the robustness of the study's findings. Intra- and inter-rater reliability were assessed using a subset of 20 cases randomly selected from the raw diaries. Intra-rater reliability was determined by re-evaluating these cases by the researcher who initially rated them. For inter-rater reliability test, two other researchers, not part of the initial rating process, independently rated the same 20 randomly chosen diaries.

## Results

### Reliability of the Analyses

Intra-rater reliability reflects the stability of data recorded by a single rater across several trials, with a Kappa value exceeding 0.8 indicating excellent agreement (Portney, 2020). The results showed a Kappa value of 1.0, indicating excellent agreement in assessments by the same rater across different trials.

Inter-rater reliability concerns variation between two or more raters measuring the same subjects, and the intraclass correlation coefficient (ICC) was used for this calculation, with values identified as "moderate" for 0.50 to 0.75 and "good" above 0.75 (Portney, 2020). The ICC value of 0.85 in this study suggests a good level of agreement among different raters.

### Overall Results

This study evaluated the perceived effectiveness of the "Tin Ka Ping P.A.T.H.S. Project" on adolescent psychosocial competence by analyzing students' diaries. Results showed that 96.9% of participating students held a positive perception of the project, and the project had a significant positive impact on their positive development in multiple areas. Specifically, students' self-reflective narrative indicated perceived benefits improved from participating in the program, including improvement of intrapersonal competence, enhancement of interpersonal competence, facilitation of school adjustment, and growth of familial and societal domains. Detailed results for each specific area are presented separately.

### Rating the Tone of Positivity or Negativity in the Diary

Table 2 shows the ratings for the 3,061 diaries, a vast majority of the diaries were assessed as "positive" across both junior and senior secondary grades. During the academic year of 2016/17, among 1,832 students, 1,762 (96.18%) diaries were rated as "positive," while 38 (2.07%) and 32 (1.75%) diaries were evaluated as "neutral" and "negative" respectively. During the academic year of 2017/18, among 1,229 students, 1,204 (97.97%) diaries were classified as "positive," while 15 (1.22%) and 10

**Table 2** Classification of student diaries

Year	Grade	Total Number	Negative		Neutral		Positive		Undecided	
			n	%	n	%	n	%	n	%
2016/17	7	1,048	13	1.24	23	2.19	1,012	96.56	0	0.00
	8	533	0	0.00	3	0.56	530	99.44	0	0.00
	10	225	19	8.44	12	5.33	194	86.22	0	0.00
	11	13	0	0.00	0	0.00	13	100.00	0	0.00
	12	13	0	0.00	0	0.00	13	100.00	0	0.00
	Total	1,832	32	1.75	38	2.07	1,762	96.18	0	0.00
2017/18	7	555	2	0.36	2	0.36	551	99.28	0	0.00
	8	403	6	1.49	12	2.98	385	95.53	0	0.00
	9	64	0	0.00	0	0.00	64	100.00	0	0.00
	10	90	0	0.00	0	0.00	90	100.00	0	0.00
	11	117	2	1.71	1	0.85	114	97.44	0	0.00
	Total	1,229	10	0.81	15	1.22	1,204	97.97	0	0.00
2016/17&2017/18	7	1,603	15	0.94	25	1.56	1,563	97.50	0	0.00
	8	936	6	0.64	15	1.60	915	97.76	0	0.00
	9	64	0	0.00	0	0.00	64	100.00	0	0.00
	10	315	19	6.03	12	3.81	284	90.16	0	0.00
	11	130	2	1.54	1	0.77	127	97.69	0	0.00
	12	13	0	0.00	0	0.00	13	100.00	0	0.00
	Total	3,061	42	1.37	53	1.73	2,966	96.90	0	0.00

(0.81%) diaries were rated as “neutral” and “negative” respectively. In total, 2,966 (96.90%) diaries were rated as “positive,” while 53 (1.73%) and 42 (1.37%) diaries were classified as “neutral” and “negative” respectively.

As described in Table 3, during the 2016/17 and 2017/18 academic years, a total of 2,648 (86.51%) diaries were rated as “strongly positive” with rated as “7”. Specifically, ratings for diaries at Grade 7 ( $M=6.79$ ,  $SD=0.70$ ), Grade 8 ( $M=6.80$ ,  $SD=0.67$ ), Grade 9 ( $M=7.00$ ,  $SD=0.00$ ), Grade 10 ( $M=6.31$ ,  $SD=1.41$ ), Grade 11 ( $M=6.79$ ,  $SD=0.70$ ), Grade 12 ( $M=7.00$ ,  $SD=0.00$ ) were also quite positive.

Notably, among the selected schools, Grade 7 and Grade 8 students comprised 52.37% ( $N=1,603$ ) and 30.58% ( $N=936$ ) of the sample, respectively. In contrast, Grade 12 students represented only 0.42% ( $N=13$ ) of the total sample. This disparity might be attributed to the significant academic pressure faced by Grade 12 students as they prepare for the “Nationwide Unified Examination for Admissions to General Universities and Colleges”, known as the “Gaokao.” Consequently, very few Grade 12 students participated in the program, and even fewer were involved in the evaluation process. Given the predominance of Grade 7 and 8 students, the generalizability of the results may be substantially limited when applied to senior high school students. Additionally, the results indicated that Grade 10 students exhibited relatively lower positive perceptions ( $M=6.31$ ) compared to other grades (see Table 3). A explanation for this finding is the transitional phase from junior to

**Table 3** Rating of student diaries

Year	Grade	Total Number	Mean	Std. Deviation	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	%	n	%
2016/17	7	1,048	6.72	0.80	4	0.38	4	0.38	5	0.48	23	2.19	32	3.05	97	9.26	883	84.26		
	8	533	6.94	0.33	0	0.00	0	0.00	0	0.00	3	0.56	5	0.94	12	2.25	513	96.25		
	10	225	6.03	1.59	11	4.89	3	1.33	5	2.22	12	5.33	18	8.00	45	20.00	131	58.22		
	11	13	7.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	13	100.00		
	12	13	7.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	13	100.00		
	Total	1,832	6.70	0.88	15	0.82	7	0.38	10	0.55	38	2.07	55	3.00	154	8.41	1,553	84.77		
2017/18	7	555	6.92	0.40	0	0.00	1	0.18	1	0.18	2	0.36	4	0.72	19	3.42	528	95.14		
	8	403	6.62	0.91	2	0.50	4	0.99	0	0.00	12	2.98	13	3.23	60	14.89	312	77.42		
	9	64	7.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	64	100.00		
	10	90	7.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	90	100.00		
	11	117	6.77	0.74	0	0.00	1	0.85	1	0.85	1	0.85	2	1.71	11	9.40	101	86.32		
	Total	1,229	6.82	0.65	2	0.16	6	0.49	2	0.16	15	1.22	19	1.55	90	7.32	1,095	89.10		
2016/17&2017/18	7	1,603	6.79	0.70	4	0.25	5	0.31	6	0.37	25	1.56	36	2.25	116	7.24	1,411	88.02		
	8	936	6.80	0.67	2	0.21	4	0.43	0	0.00	15	1.60	18	1.92	72	7.69	825	88.14		
	9	64	7.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	64	100.00		
	10	315	6.31	1.41	11	3.49	3	0.95	5	1.59	12	3.81	18	5.71	45	14.29	221	70.16		
	11	130	6.79	0.70	0	0.00	1	0.77	1	0.77	1	0.77	2	1.54	11	8.46	114	87.69		
	12	13	7.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	13	100.00		
Total	3,061	6.75	0.80	17	0.56	13	0.42	12	0.39	53	1.73	74	2.42	244	7.97	2,648	86.51			

senior high school, during which students experience a dramatic increase in academic pressure compared to Grade 9 (the final year of junior high school). This finding suggests that the content of prevention and intervention programs may need to be carefully refined to better align with the developmental needs of students during this critical transitional period.

In addition, regarding the observed differences in perceived benefits across domains (see Table 4), while overall positivity in Domain 12 (“Other General Benefits”) remained high, with 73.3% of student’s diaries indicating “Strongly Positive” and 17.96% indicating “Moderately Positive” and 8.74% “Slightly Positive” with no neutral or negative responses, indicating that the majority of students were positive about the program. However, the percentage of “Strongly Positive” was low compared to other areas (e.g. 95.00% for “positive self-identity”, and 94.25% for moral competence). This may be due to the broad and non-specific nature of the general benefits, including vague or less salient outcomes, making it difficult for students to closely associate these benefits with the program. In addition, students may prioritize specific, tangible benefits that have a direct impact on their daily lives (e.g., increased self-confidence, improved peer relationships), while general benefits may feel less immediately relevant. Furthermore, measurement challenges, such as difficulty attributing improvements in general well-being to the program, may also lead to more moderate or mildly positive ratings than strongly positive ratings.

### Specific Perceived Benefits of the Program

Results indicate a notable enhancement in the holistic development of the participants across twelve domains covered in six groups (refer to Table 4).

#### Enhanced Intrapersonal Competence

“Tin Ka Ping P.A.T.H.S. Project” enhanced students’ intrapersonal competence and nurtured their sense of “Being.” Specifically, it benefits student’s cognitive competence and problem-solving abilities, moral competence, coping strategies and resilience, emotional competence, self-identity, and spirituality.

Regarding enhanced cognitive competence, the integration of comprehensive group discussions and self-reflection activities within the “Tin Ka Ping P.A.T.H.S. Project” curriculum facilitated a shift in students’ thinking patterns, enabling them to engage in rational, analytical, and critical reasoning across various perspectives. The following narratives of participants’ diaries illustrate these developments.

- “The P.A.T.H.S. class has truly transformed my learning. It encourages us to think critically and creatively, providing ample time and opportunities for collaboration and helping me cultivate meaningful reflection.”
- “In the P.A.T.H.S. class, I uncovered a surprising aspect of my personality—I am a ‘detective-type’ thinker. I thrive on analysis, critique, and expressing my viewpoints, which makes me eager to tackle and resolve problems. Our thinking styles are not fixed, they can be nurtured and developed over time.”

**Table 4** Perceived program effectiveness based on student diary (2016/17 & 2017/18)

Perceived program effectiveness	N	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	%
1. Benefits for community and the society	82	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	7	8.54	75	91.46
2. Benefits for school adjustment; studying; academic performance	71	0	0.00	0	0.00	0	0.00	0	0.00	2	2.82	10	14.08	59	83.10
3. Family relationship; parent-child relationship	113	0	0.00	0	0.00	0	0.00	0	0.00	5	4.42	10	8.85	98	86.73
4. Interpersonal relationship; Improved peer relationship; improved social competence	599	0	0.00	0	0.00	0	0.00	0	0.00	11	1.84	43	7.18	545	90.98
5. Intrapersonal competence; Cognitive competence, problem solving, behavioral competence	244	0	0.00	0	0.00	0	0.00	0	0.00	6	2.46	15	6.15	223	91.39
6. Intrapersonal competence; Moral competence, values cultivation	226	0	0.00	0	0.00	0	0.00	0	0.00	3	1.33	10	4.42	213	94.25
7. Intrapersonal competence; Optimism, resilience, coping with stress	256	0	0.00	0	0.00	0	0.00	0	0.00	4	1.56	17	6.64	235	91.80
8. Intrapersonal competence; Emotional competence	156	0	0.00	0	0.00	0	0.00	0	0.00	5	3.21	9	5.77	142	91.03
9. Intrapersonal competence; Positive self-identity; self-confidence; positive self-image; self-efficacy	220	0	0.00	0	0.00	0	0.00	0	0.00	1	0.45	10	4.55	209	95.00
10. Intrapersonal competence; Spirituality, life meaning, cherishing life	255	0	0.00	0	0.00	0	0.00	0	0.00	4	1.57	22	8.63	229	89.80
11. Appreciation of the teacher	253	0	0.00	0	0.00	0	0.00	0	0.00	9	3.56	27	10.67	217	85.77
12. Other general benefits	206	0	0.00	0	0.00	0	0.00	0	0.00	18	8.74	37	17.96	151	73.30
Negative or Neutral Evaluations <sup>a</sup>	95	17	17.89	13	13.68	12	12.63	53	55.79	0	0.00	0	0.00	0	0.00
Uncoded Cases <sup>b</sup>	285	0	0.00	0	0.00	0	0.00	0	0.00	6	2.11	27	9.47	252	88.42
Total	3,061	17	0.56	13	0.42	12	0.39	53	1.73	74	2.42	244	7.97	2,648	86.51

Note. <sup>a</sup> Rating score  $\leq 4$  on a 7-point scale

<sup>b</sup> Cases involving multiple benefits

- “Through the P.A.T.H.S. course, we students—especially those navigating the tumultuous phase of adolescence—have learned the critical importance of rational analysis over impulsive reactions, which has sharpened my analytical abilities and enriched my perspectives.”

In the domain of moral competence, students reported an enhanced ability to distinguish between “right” and “wrong,” which contributed to their ethical decision-making processes. The following examples illustrate the specific ways in which students applied these moral competencies:

- “In P.A.T.H.S. Class, I learned that honesty is essential in our interactions with others. It forms the foundation of a person’s character ... However, being honest is not always easy. From today, I commit to embracing honesty as I grow. Equally important is the sense of responsibility we carry.”
- “Since joining P.A.T.H.S., I have gained a deeper appreciation for mutual respect. Politeness is not just a social nicety, it reflects our personal and cultural values. It even demonstrates the quality of our moral upbringing and contributes to the dignity of our nation.”
- “P.A.T.H.S. has also taught me the significance of distinguishing right from wrong. It’s vital to recognize that ‘do not avoid doing a good deed even if it seems trivial, and do not commit an evil act even if it seems small’. Embracing truth, goodness, and beauty is crucial. Conversely, we must reject falsehoods and ugliness.”

In relation to resilience, participants reported a marked increase in their coping skills and overall optimism when confronted with adversity, the following reflections illustrate the transformative impact of the program on resilience:

- “P.A.T.H.S. Class has enhanced my ability to face adversity. In the past, I would often find myself subconsciously escaping and dodging challenges when I encountered difficult situations. Now, I approach obstacles calmly. I’ve learned to face difficulties head-on, and I can even handle them with a sense of ease!”
- “Everyone’s path to growth is inevitably filled with hardships and setbacks. The principles I’ve learned in P.A.T.H.S. serve as a guiding mirror, reminding me to bravely overcome every challenge. I’ve realized that I shouldn’t fear difficulties. Instead, I must embrace them with courage and confidence, with a resilient spirit.”
- “Only on a muddy path can we leave behind our footprints ... No matter how dark the corners of life may seem, there will always be a ray of light to guide us. As my teacher told us once you’ve chosen your path, you must endure the storms and embrace the journey!”
- “I used to linger in confusion, hesitating at a standstill until I discovered the illuminating path of P.A.T.H.S. I’ve come to understand that life’s setbacks are trivial. With hard work, dedication, and a spirit of exploration, every setback can transform into a beautiful new beginning.”

With respect to enhanced emotional competence, the program significantly enhanced participants' competence in understanding and managing their emotions, as evidenced in the following diaries:

- “In the past, I struggled to control my emotions. Whenever I felt unhappy, I would often lash out, wanting everyone to see my anger, without considering how my actions affected those around me. However, after taking P.A.T.H.S. Class ... I learned to manage my temper, no longer using others as my emotional punching bag. I now strive to be more considerate of other people's feelings.”
- “P.A.T.H.S. Class has equipped me with valuable knowledge of emotional regulation. I learned about the four primary emotions: joy, anger, sadness, and fear. I learned how to control my emotions, and flexibly choose specific methods to regulate emotion. I realized that positive emotions can boost our energy, which helps us think clearly and solve problems effectively. Conversely, negative emotions can hinder our performance and cloud our judgment.”
- “One of the most significant lessons I've gained from P.A.T.H.S. is the importance of expressing negative emotions in a healthy way. We all face emotional challenges at some point, whether it's anger, anxiety, or sadness. It's crucial to have strategies for emotional regulation.”

Concerning self-identity, a substantial portion of students reported improvements in their self-awareness and self-confidence. Some narratives as below:

- “In the past, I was introverted and shy, often retreating into my shell. However, the journey of P.A.T.H.S. Class has transformed me from a shy introvert into a lively and outgoing individual, and I couldn't be happier with this change.”
- “Hello to the deepest self within myself! You have evolved from being cowardly and timid into someone strong, brave, and full of life. Since starting P.A.T.H.S. Class, you've sown the seeds of personal growth.”
- “Previously, I always shrank in my own world with inferiority, unwilling to open my heart to others, so I didn't have many friends. Even when I entered junior high, I struggled to make changes. It wasn't until I took this course that I found courage and confidence. Gradually, I became more cheerful. P.A.T.H.S. has been like a warm bowl of chicken soup for my soul.”
- “This course has encouraged me to confront my true self, prompting deep reflection and self-belief. If given the opportunity in the future, I would love to take this course again to further solidify my strengths, improve my weaknesses, and continue my journey toward becoming an outstanding person!”

In light of spirituality, the “Tin Ka Ping P.A.T.H.S. Project” emphasizes the search for life's meaning and cherish life. The following diary excerpts demonstrate the transformation in participants:

- “The P.A.T.H.S. is a soul journey. Just like a blind man finds his cane, a bird finds the direction of its growth. My soul and thoughts are growing uncontrollably, and we are approaching the life truth. We gradually walk to the top of the

mountain with excitement, and see the extremely broad scene outside the narrow mind!”

- “What I remember most about the P.A.T.H.S. class is ‘thinking about life’. Life is lived only once; its weight can feel heavier than Mount Tai or lighter than a feather ... By dedicating ourselves to the service of others, we earn respect and admiration. Life is precious not merely because it is singular, but because it can be shared and used to uplift others, let’s make our lives more precious!”
- “I vividly remember a session centered on cherishing life. ‘If you had only three days left to live, what would you choose to do?’ Some suggested seizing the moment to embrace adventure, while others opted to spend precious time with family. From the varied answers, our teacher concluded with a powerful reminder: Cherish life. Besides, the challenges we face can make our lives richer and more meaningful.”

### **Perceived Benefits of Interpersonal Competence**

Students reported growing interpersonal competence and gradually forming meaningful friendships, exemplified in the following narratives:

- “I am very much grateful for P.A.T.H.S. Class. It has given me the deepest friendship, and helped me navigate an unfamiliar environment with ease! It has taught me how to communicate more effectively with my classmates and get along better. I’ve come to appreciate the purity of our friendships and witnessed the power of unity when faced with challenges.”
- “Just like the plump fruits picked by fruit farmers in autumn. Before joining P.A.T.H.S. Class, I was not a person who communicated well with classmates, and it was easy to have conflicts with others. I felt very distressed and self-blame for this. However, after just one session, I learned interpersonal skills and since then, I have undergone ‘earth-shaking changes’, which made me more relaxed when communicating with classmates.”
- “I learned some skills to interact with others. Whether it’s family or friends, we must learn to think from others’ perspectives. If we hurt others, we should apologize to them sincerely and make compensation. Only in this way can we handle the relationship with our family and friends well, and have fewer quarrels and more love and warmth around us.”

### **Enhanced School Adjustment**

Findings indicate that the program positively influences adolescents’ school adjustment, better academic performance and a greater sense of appreciation for teachers.

With reference to academic performance, the majority of students shared that the program significantly enhanced their study motivation, as the diaries below suggest:

- “Attending P.A.T.H.S. Class allows us to gain a lot of knowledge while having fun. Unlike traditional classes that can feel stressful, it allows us to relax and enjoy the learning process through games, making it far from boring. So,

I've developed a love for learning that I never had before. I like it very much, it makes me fall in love with learning!"

- "In P.A.T.H.S. Class, we study hard together. I think the best benefit I get is that it has cultivated my diligence in studying. We like P.A.T.H.S. Class and hope that there will be there in high school and college in the future."
- "Traditional learning was mostly limited to textbook subjects like Chinese, mathematics, and English, which made learning feel dull and unexciting. There were no courses like the ones, the interesting P.A.T.H.S. Class, we have now that can help us grow mentally, which allowed us to be inspired by the experience instead of blindly and boringly preaching. This made me look forward to and interested in learning again. Now, I look forward to it each week, eager to discover new knowledge and explore the world around me."

Regarding enhanced appreciation of the teacher, most students emphasized that their relationships with instructors improved markedly as a result of the program and were satisfied with their instructors' performance, expressing appreciation for their teachers in diaries.

- "My teacher has crafted the course content thoughtfully and organized the activities well. Her good teaching skills create a wonderful atmosphere where every student even introverted classmates feels encouraged to participate. Whenever we need help, she is always there and patiently enlightens us and treats us with great care."
- "Here, students and teachers talked about life, ideals, and the future as friends. My teacher guided us on how to be a good person. My teacher had a good grasp of the course and was very professional. We like a big family, her gentle and engaging teaching methods, including fun games and short videos, enhance our learning experience. Once again, I can say that I really enjoy P.A.T.H.S. Class!"
- "Our instructor brings so much joy and unexpected surprises, this is one of the main reasons I love this class! The teacher not only 'decorated' the classroom colorfully, but also walked into our hearts in different ways, and taught us the right methods to guide our path so that our grow path is no longer confused."

### Enhanced Family Functioning

The program enhanced students' communication skills with family members and equipped them to address familial issues more effectively, demonstrated in the following examples:

- "Before attending P.A.T.H.S. Class, I was very rebellious and always thought that it was my parents' duty to take care of me. Later, I realized that they took care of me because they loved me, and this love transcended the bond of blood. So from now on, I will do my best to study hard to repay my parents' selfless love."
- "In the past, my relationship with my parents was strained. We quarrelled daily, which left me feeling alone. P.A.T.H.S. Class encouraged me to have an honest

conversation with my parents. I discovered that my parents were much easier to talk to than I had thought. Since then, our relationship has grown stronger.”

- “After attending P.A.T.H.S., I understood that my parents just were not good at expressing themselves, but they loved me in their hearts. So, I wrote a very long letter to my father, telling him all the words I had kept in my heart for 13 years. I cried, I was very grateful that P.A.T.H.S. gave me the opportunity to tell my father how sad I was and how much I loved him.”
- “Earlier, I often lost control of my temper and made conflicts with my parents fiercely, lacking communication. But after a P.A.T.H.S. class, I know how to communicate with my parents better and solve problems together. I learned how to control myself and how to open my heart to my parents, which made our relationship closer.”

### **Enhanced Social Responsibility**

Students identified benefits resulting from the program including an increased understanding of social norms and a greater readiness to assume social responsibility. For instance, participants expressed in their writings:

- “From the P.A.T.H.S. class, I learned about the relationship between the collective like our class, and the individual. The collective is made up of individuals, and we must always consider the greater good of the collective. We should strive to support our collective and avoid harming it, even when personal interest conflicts arise.”
- “One of the key lessons I learned is the importance of loving our motherland. A country provides the foundation for our homes, and there is me only when there is a home. Without a strong nation, we cannot truly thrive. We should study hard today so that we can contribute to our country in the future and become the pillars of our society and our country. By becoming responsible citizens, we can help make our homeland beautiful and proud of us.”
- “There is a connection between human beings. We are all the same kind of creatures, so we all have responsibilities. If there are too many indifferent people, society will no longer be so beautiful. So everyone should help each other more, care more about others, don’t be a selfish person, and learn to selflessly contribute to society.”

### **Other General Benefits**

Beyond specific enhancements, participants identified several benefits of the “Tin Ka Ping P.A.T.H.S. Project” that significantly contributed to their psychosocial development, including reduced academic stress, soul-cleansing, and the alleviation of confusion and loneliness. Students employed vivid metaphors to describe it as a “lifesaver,” “spiritual healer,” “chicken soup” and “fragrant bitter tea.”

- “Until one day, you opened my closed heart and inspired me how to face life. To me, you are not just a course, but a guide in my life, leading me out of the

darkness, like a drowning person who always has to hold on to the last straw. Thank you for being my salvation, for transforming into a small boat that helps me navigate the vast ocean of challenges. You've ferried me to the shore, where I no longer feel confused and lonely."

- "Slowly, I realized that P.A.T.H.S. Class has been gently healing my psychological wounds, like a soothing balm, easing my troubles after each intense week of study. I often carry the weight of pressure, confusion, and grievances, which can feel overwhelming. Even if I lighten my backpack, I still feel drained. However, once I step into P.A.T.H.S. Class, and the music that touches my soul fills the air, all those negative feelings start to surface. They await a cleansing rain or warming sunshine to help heal every wound and scar, slowly restoring me."
- "Every time in P.A.T.H.S. Class, it feels like savouring a warm bowl of chicken soup on a chilly winter day or sipping iced chamomile tea on a hot summer afternoon. These moments help me grow."
- "I wrote a poem specifically for P.A.T.H.S. Class:

*With you, I'll find happiness on this path we share.*

*Our hearts are cleansed, and we're filled with joy.*

*When the class bell rings, we know it's time again,*

*To light our way and help us grow strong.*

*As the semester ends, I wonder if we'll meet once more,*

*Let P.A.T.H.S. Class inspire our hearts again.*

*P.A.T.H.S. Class, come back! We need you! We need you!*

I sincerely hope that it will become better and better, more and more popular, sharing the power of 'co-creation in P.A.T.H.S.' with the world. Come on!"

## Discussion and Policy Implications

A cornerstone of the success observed in "Project P.A.T.H.S." in Hong Kong lies in its rigorous evaluation practices, characterized by the utilization of diverse assessment strategies (Shek, 2013; Shek & Dou, 2024). This research examined the perceived effectiveness of the "Tin Ka Ping P.A.T.H.S. Project" by analyzing student diaries. The findings of this research underscore the students' resounding positive perceptions of the program's value and benefits for their personal growth.

A substantial majority of cases (96.90%) received positive ratings (scoring 5, 6, or 7), with 86.51% of cases receiving a top rating of "7" (indicating positive feedback without any negative commentary). This overwhelmingly affirmative portrayal speaks volumes that participants perceive the program as instrumental in enhancing their capacities and well-being. The outcomes of this present study align closely with previous research findings, including studies centred on student diaries (Shek, 2024; Shek et al., 2019b), but also quasi-experimental studies (Shek et al., 2014; Zhu & Shek, 2020) as well as subjective evaluations (Shek et al., 2017, 2018; Zhu & Shek, 2021). Drawing upon the 12-domain theoretical framework delineated by prior research on the benefits of the "P.A.T.H.S. program" (Shek, 2024; Shek & Sun, 2012; Shek et al., 2019b), our study found that students perceived the program

as strengthening their community connection and social responsibility, fostering intrapersonal and interpersonal competencies, and nurturing familial bonds, among other aspects.

The present findings resonate with research highlighting the effectiveness of PYD and Social-Emotional Learning (SEL) initiatives. Firstly, Social competence is a primary area in PYD initiatives (Shek & Zhu, 2020), positive relationships with parents, teachers, and peers play important roles in cultivating PYD (Bakadorova & Raufelder, 2018; Kaniušonytė & Žukauskienė, 2017; Lee & Lok, 2013; Martin & Collie, 2019; Mohamed et al., 2017). Trust and communication with these individuals serve as protective factors against risky behaviours, as evidenced among Malaysian teenagers (Mohamed et al., 2017). Furthermore, regarding the cultivation of intrapersonal competence, Erikson (1968) highlights the significance of developing self-identity during adolescence. Recent studies underscore the role of PYD programs in fostering self-identity formation among Chinese adolescents (Zhu & Shek, 2020) and enhancing resilience in New Zealand youth (Sanders et al., 2015). In addition, the incorporation of the SEL method equips students with emotional competence, supported by meta-analytical evidence (Taylor et al., 2017). These skills help students navigate emotional challenges and mitigate future issues such as depression and substance abuse (Zhou et al., 2020). Moreover, PYD interventions have been associated with improved academic performance (Beck & Wium, 2019; Kozina et al., 2018), and tailoring PYD programs to particular contexts is crucial for maximizing their effectiveness across various educational environments.

The present study provides evidence of the successful cultural adaptation of the Hong Kong-based “P.A.T.H.S. Project” to the “Tin Ka Ping P.A.T.H.S. Project” in mainland China, ensuring its relevance and conformity with local values. Key adaptations encompassed revisions to the curriculum materials, delivery methods, and teacher training. First, the curriculum was adapted to incorporate core themes of mainland Chinese culture, such as collectivism and patriotism. For example, “Serving the Motherland” was empathized in the unit of social responsibility. Second, the delivery method was adjusted to align with local educational practices, such as extending the course time to 40 min. The course combines classroom activities with experiential learning, utilizing interactive methods such as group discussions and role-playing to engage students while maintaining cultural and pedagogical relevance. Third, extensive training was provided to teachers and implementers to help them implement the program proficiently and culturally sensitively. The effects of these modifications were apparent in student diaries. For example, one student said, “Through the P.A.T.H.S. class, I have learned about the importance of making a contribution to our society and love our motherland”. These adaptations and outcomes highlight the program’s success in meeting the unique needs of mainland Chinese youth, affirming its relevance in the local cultural context.

Furthermore, while experimental studies are the robust method for evaluating intervention programs (Shek, 2013), this study, limited by financial and human resources, employed subjective outcome evaluations through reflective diary analyses, which present advantages over quantitative methods. Diary writing allows participants to express their subjective experiences, producing qualitative data that reflects the intricacies of their participation in the “Tin Ka Ping P.A.T.H.S. Project”.

It is an economical and privacy-enhanced alternative to methods such as interviews (Travers, 2011). Acknowledging the validity concerns of using student diaries, the study strictly followed principles of reliability and validity in qualitative research (Shek et al., 2005), emphasizing internal and external validity (LeCompte & Goetz, 1982). The anonymity of the diary encouraged honest expression, particularly beneficial for internal validity since performance in the program did not influence students' academic assessments, which hence reduces bias incentives. Besides, random participant selection enhanced external validity for broader generalization.

However, limitations of this study should be noted (Shek, 2024; Shek & Sun, 2012; Shek et al., 2019b), including the uni-directional nature of diary writing may limit interaction and potentially impede a thorough examination of viewpoints. Additionally, self-reporting and retrospection biases may affect the accuracy of data (Hufford & Shiffman, 2003; Wheeler & Reis, 1991). For example, the self-reflective narrative may be somewhat exaggerated due to social desirability, retrospective writing might lead to retrospective idealization, leading to selective or inconsistent memory that may distort perceptions of participation in PYD programs. Finally, limited longitudinal data, specifically the two-year evaluation period, may prevent a comprehensive assessment of the preventive impact of the program. In order to better understand the long-term effects of the "Tin Ka Ping P.A.T.H.S. Project", future evaluations should consider conducting longitudinal studies spanning several years. In addition, a mixed-method approach that includes both intervention and non-intervention groups would provide a more thorough understanding of the program's long-lasting effectiveness. However, as evaluation findings based on diaries across diverse cohorts and participants are consistently positive (Shek, 2024; Shek & Sun, 2012; Shek et al., 2019b), this provides support for the replicability of the findings across samples and time.

Despite the research limitations, this study holds significant policy implications by examining the effectiveness of the "Tin Ka Ping P.A.T.H.S. Project", facilitating the incorporation of evidence-based PYD programs into mental health policy frameworks in mainland China. This corresponds with the long-standing emphasis on PYD as the "driving force behind the U.S. Department of Health and Human Services' youth related programs for over two decades", as highlighted in a 1996 government document (U.S. Department of Health and Human Services, 1996, p. 3). While PYD program has garnered theoretical support as a promising approach to fostering mental well-being in youth, and the potential tool nature in mental health policies (Benson, 1997; Benson et al., 2004; Catalano et al., 2004; Hahn et al., 2002; Lerner et al., 2005; Shek et al., 2019a, 2019b; Sherrod, 1997), their integration into public policy planning require further empirical investigation and validation of their effectiveness in addressing mental health challenges (Shek & Siu, 2019). By evaluating the perceived effectiveness of the "Tin Ka Ping P.A.T.H.S. Project", this study not only raises priority about youth mental health concerns in mainland China among key stakeholders but also underscores the significance of grounding health and social policy decisions in robust evidence to enhance the broader initiatives.

However, integrating PYD programs into mental health policies requires addressing scaling strategies, regional disparities, and potential barriers (Shek & Dou, 2024). Implementers should prioritize teacher training to guarantee program implementation

and secure sustainable funding through government grants or public–private partnerships. To bridge urban–rural disparities, tailored learning units and pilot programs in rural areas can inform context-specific adaptations. In addition, alleviating curriculum overload involves integrating PYD programs into existing curricula (e.g., moral education), and addressing cultural resistance through stakeholder engagement and awareness promotion to harmonize PYD principles with educational and social goals. In a recent review of mental health education programs in China, “P.A.T.H.S.” was identified as a program with “promise” (Qu et al., 2024).

In conclusion, future research should focus on enhancing the effectiveness of the “Tin Ka Ping P.A.T.H.S. Project” in mainland China by addressing several areas. These areas include considering developmental differences (e.g., variations in different age groups), geographic distinctions (e.g., urban versus rural contexts), subcultural adaptations (e.g., differences in curriculum content and pedagogical approaches between mainland China and Hong Kong), and other contextual factors. Additionally, future evaluations should implement longitudinal studies to better understand the long-term effects of the program.

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

## Declarations

**Competing Interests** The authors declare no conflict of interest. As the corresponding author is the Editor-in-Chief of ARQOL, he will not be involved in the review and editorial decisions. The Special Issue Editor will be responsible for all editorial decisions.

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## References

- Alaszewski, A. (2006). *Using diaries for social research*. SAGE Publications. <https://doi.org/10.4135/9780857020215>
- Alvarado, G., Skinner, M., Plaut, D., Moss, C., Kapungu, C., & Reavley, N. (2017). *A systematic review of positive youth development programs in low-and middle-income countries*. Youth-Power Learning, Making Cents International.
- Amirkhanova, K. M., Ageeva, A. V., & Fakhretdinov, R. M. (2016). Enhancing students' learning motivation through reflective journal writing. In R. Valeeva (Ed.), *Teacher education - IFTE 2016, vol 12. European proceedings of social and behavioural sciences* (pp. 14–18). Future Academy. <https://doi.org/10.15405/epsbs.2016.07.3>
- Bakadorova, O., & Raufelder, D. (2018). The essential role of the teacher-student relationship in students' need satisfaction during adolescence. *Journal of Applied Developmental Psychology, 58*, 57–65. <https://doi.org/10.1016/j.appdev.2018.08.004>
- Bangert-Drowns, R. L., Hurley, M. M., & Wilkinson, B. (2016). The effects of school-based writing-to-learn interventions on academic achievement: A meta-analysis. *Review of Educational Research, 74*(1), 29–58. <https://doi.org/10.3102/00346543074001029>
- Beck, M., & Wiium, N. (2019). Promoting academic achievement within a positive youth development framework. *Norsk Epidemiologi, 28*(1–2), 79–87. <https://doi.org/10.5324/nje.v28i1-2.3054>
- Benson, P. L. (1997). *All kids are our kids: What communities must do to raise caring and responsible children and adolescents*. Jossey-Bass.
- Benson, P. L., Mannes, M., Pittman, K., & Ferber, T. (2004). Youth development, developmental assets, and public policy. In R. M. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology* (pp. 781–814). John Wiley & Sons. <https://doi.org/10.1002/9780471726746.ch25>
- Bingham, A. J., & Witkowsky, P. (2022). Deductive and inductive approaches to qualitative data analysis. In C. Vanover, P. Mihas, & J. Saldaña (Eds.), *Analyzing and interpreting qualitative data: After the interview* (pp. 133–146). SAGE Publications.
- Bolger, N., Davis, A., & Rafaeli, E. (2003). Diary methods: Capturing life as it is lived. *Annual Review of Psychology, 54*, 579–616. <https://doi.org/10.1146/annurev.psych.54.101601.145030>
- Brearley, L. (2000). Exploring the creative voice in an academic context. *The Qualitative Report, 5*(3), 1–23. <https://doi.org/10.46743/2160-3715/2000.1945>
- Carley, K. (1994). Extracting culture through textual analysis. *Poetics, 22*(4), 291–312. [https://doi.org/10.1016/0304-422X\(94\)90011-6](https://doi.org/10.1016/0304-422X(94)90011-6)
- Catalano, R. F., Berglund, M. L., Ryan, J. A. M., Lonczak, H. S., & Hawkins, J. D. (2004). Positive youth development in the United States: Research findings on evaluations of positive youth development programs. *The ANNALS of the American Academy of Political and Social Science, 591*(1), 98–124. <https://doi.org/10.1177/0002716203260102>
- Catalano, R. F., Skinner, M. L., Alvarado, G., Kapungu, C., Reavley, N., Patton, G. C., Jessee, C., Plaut, D., Moss, C., Bennett, K., Sawyer, S. M., Sebany, M., Sexton, M., Olenik, C., & Petroni, S. (2019). Positive youth development programs in low- and middle-income countries: A conceptual framework and systematic review of efficacy. *Journal of Adolescent Health, 65*(1), 15–31. <https://doi.org/10.1016/j.jadohealth.2019.01.024>
- Chang, Q., Shi, Y., Yao, S., Ban, X., & Cai, Z. (2023). Prevalence of suicidal ideation, suicide plans, and suicide attempts among children and adolescents under 18 years of age in Mainland China: A systematic review and meta-analysis. *Trauma, Violence, & Abuse, 25*(3), 2090–2102. <https://doi.org/10.1177/15248380231205828>
- Crabtree, B. F., & Miller, W. F. (1992). A template approach to text analysis: Developing and using codebooks. In B. F. Crabtree & W. L. Miller (Eds.), *Doing qualitative research* (pp. 93–109). SAGE.
- Curran, T., & Wexler, L. (2017). School-based positive youth development: A systematic review of the literature. *Journal of School Health, 87*(1), 71–80. <https://doi.org/10.1111/josh.12467>
- Damon, W. (2008). *The path to purpose: Helping our children find their calling in life*. Free Press.
- Damon, W. (2016). What is positive youth development? *The ANNALS of the American Academy of Political and Social Science, 591*(1), 13–24. <https://doi.org/10.1177/0002716203260092>
- Dawes, J. (2008). Do data characteristics change according to the number of scale points used? An experiment using 5-point, 7-point and 10-point scales. *International Journal of Market Research, 50*(1), 61–104. <https://doi.org/10.1177/147078530805000106>
- Erikson, E. H. (1968). *Identity: Youth and crisis*. W. W. Norton & Company.

- Fürsich, E. (2009). In defense of textual analysis. *Journalism Studies*, 10(2), 238–252. <https://doi.org/10.1080/14616700802374050>
- Gariépy, G., Honkaniemi, H., & Quesnel-Vallée, A. (2016). Social support and protection from depression: Systematic review of current findings in Western countries. *British Journal of Psychiatry*, 209(4), 284–293. <https://doi.org/10.1192/bjp.bp.115.169094>
- Grimmer, J., & Stewart, B. M. (2013). Text as data: The promise and pitfalls of automatic content analysis methods for political texts. *Political Analysis*, 21(3), 267–297. <https://doi.org/10.1093/pan/mps028>
- Hahn, A., Peaslee, L., Lanspery, S., Aaron, P., & Hostetler, B. (2002). *Youth development policy: What foundations can do to promote policy in support of the emerging field of youth development*. Ewing Marion Kauffman Foundation. <https://scholarworks.brandeis.edu/esploro/outputs/report/Youth-development-policy-What-foundations-can/9924147464201921>
- Hasson, H., Blomberg, S., & Dunér, A. (2012). Fidelity and moderating factors in complex interventions: A case study of a continuum of care program for frail elderly people in health and social care. *Implementation Science*, 7, Article 23. <https://doi.org/10.1186/1748-5908-7-23>
- Holloway, I., & Biley, F. C. (2011). Being a qualitative researcher. *Qualitative Health Research*, 21(7), 968–975. <https://doi.org/10.1177/1049732310395607>
- Hufford, M. R., & Shiffman, S. (2003). Assessment methods for patient-reported outcomes. *Disease Management & Health Outcomes*, 11(2), 77–86. <https://doi.org/10.2165/00115677-200311020-00002>
- Jiang, S., Chen, Y., & Wang, L. (2024). Effectiveness of community-based programs on aggressive behavior among children and adolescents: A systematic review and meta-analysis. *Trauma, Violence, & Abuse*, 25(4), 2845–2861. <https://doi.org/10.1177/15248380241227986>
- Kaniušonytė, G., & Žukauskienė, R. (2017). Relationships with parents, identity styles, and positive youth development during the transition from adolescence to emerging adulthood. *Emerging Adulthood*, 6(1), 42–52. <https://doi.org/10.1177/2167696817690978>
- Kozina, A., Wiium, N., Gonzalez, J.-M., & Dimitrova, R. (2018). Positive youth development and academic achievement in Slovenia. *Child & Youth Care Forum*, 48(2), 223–240. <https://doi.org/10.1007/s10566-018-9457-y>
- Lai, F. H. Y., Siu, A. M. H., & Shek, D. T. L. (2015). Individual and social predictors of prosocial behavior among Chinese adolescents in Hong Kong. *Frontiers in Pediatrics*, 3, 39. <https://doi.org/10.3389/fped.2015.00039>
- LeCompte, M. D., & Goetz, J. P. (1982). Problems of reliability and validity in ethnographic research. *Review of Educational Research*, 52(1), 31–60. <https://doi.org/10.3102/00346543052001031>
- Lee, T. Y., & Lok, D. P. (2013). Bonding as a positive youth development construct: A conceptual review. In D. T. L. Shek, R. C. F. Sun, & J. Merrick (Eds.), *Positive youth development: Theory, research and application* (pp. 145–162). Nova Science Publishers.
- Lerner, R. M., Lerner, J. V., Almerigi, J. B., Theokas, C., Phelps, E., Gestsdottir, S., Naudeau, S., Jelicic, H., Alberts, A., Ma, L., Smith, L. M., Bobek, D. L., Richman-Raphael, D., Simpson, I., Christiansen, E. D., & von Eye, A. (2005). Positive youth development, participation in community youth development programs, and community contributions of fifth-grade adolescents: Findings from the first wave of the 4-H study of positive youth development. *The Journal of Early Adolescence*, 25(1), 17–71. <https://doi.org/10.1177/0272431604272461>
- Luo, X., Zhou, Y., Zheng, R., Li, X., Dai, Y., Narayan, A., Huang, X., Tian, X., Jin, X., Mei, L., Xie, X., Gu, H., Hou, F., Liu, L., Luo, X., Meng, H., Zhang, J., & Song, R. (2020). Association of health-risk behaviors and depressive symptoms and anxiety symptoms: A school-based sample of Chinese adolescents. *Journal of Public Health*, 42(3), e189–e198. <https://doi.org/10.1093/pubmed/fdz115>
- Martin, A. J., & Collie, R. J. (2019). Teacher–student relationships and students’ engagement in high school: Does the number of negative and positive relationships with teachers matter? *Journal of Educational Psychology*, 111(5), 861–876. <https://doi.org/10.1037/edu0000317>
- Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American Psychologist*, 56(3), 227–238. <https://doi.org/10.1037/0003-066X.56.3.227>
- Mohamed, N. H., Hamzah, S. R., & Ismail, I. A. (2017). Parental and peer attachment and its relationship with positive youth development. *International Journal of Academic Research in Business and Social Sciences*, 7(9), 352–362. <https://doi.org/10.6007/IJARBS/v7-i9/3331>
- Naeem, M., Ozuem, W., Howell, K., & Ranfagni, S. (2023). A step-by-step process of thematic analysis to develop a conceptual model in qualitative research. *International Journal of Qualitative Methods*, 22, 1–18. <https://doi.org/10.1177/16094069231205789>

- Nückles, M., Roelle, J., Glogger-Frey, I., Waldeyer, J., & Renkl, A. (2020). The self-regulation-view in writing-to-learn: Using journal writing to optimize cognitive load in self-regulated learning. *Educational Psychology Review*, 32(4), 1089–1126. <https://doi.org/10.1007/s10648-020-09541-1>
- Patton, M. Q. (2003). Utilization-focused evaluation. In T. Kellaghan & D. L. Stufflebeam (Eds.), *International handbook of educational evaluation* (pp. 223–242). Springer Dordrecht. [https://doi.org/10.1007/978-94-010-0309-4\\_15](https://doi.org/10.1007/978-94-010-0309-4_15)
- Pavlovich, K., Collins, E., & Jones, G. (2009). Developing students' skills in reflective practice: Design and assessment. *Journal of Management Education*, 33(1), 37–58. <https://doi.org/10.1177/1052562907307640>
- Portney, L. G. (2020). *Foundations of clinical research: Applications to evidence-based practice* (4th ed.). McGraw-Hill Education.
- Qu, D., Wen, X., Cheng, X., Zhu, A., Wu, Z., Che, L., & Chen, R. (2024). School mental health prevention and intervention strategies in China: A scoping review. *The Lancet Regional Health - Western Pacific*, 53, Article 101243. <https://doi.org/10.1016/j.lanwpc.2024.101243>
- Sanders, J., Munford, R., Thimasarn-Anwar, T., Liebenberg, L., & Ungar, M. (2015). The role of positive youth development practices in building resilience and enhancing wellbeing for at-risk youth. *Child Abuse & Neglect*, 42, 40–53. <https://doi.org/10.1016/j.chiabu.2015.02.006>
- Schmitz, B., & Wiese, B. S. (2006). New perspectives for the evaluation of training sessions in self-regulated learning: Time-series analyses of diary data. *Contemporary Educational Psychology*, 31(1), 64–96. <https://doi.org/10.1016/j.cedpsych.2005.02.002>
- Shadish, W. R., Cook, T. D., & Leviton, L. C. (1991). *Foundations of program evaluation: Theories of practice*. SAGE Publications.
- Shek, D. T. L. (2006a). Adolescent developmental issues in Hong Kong: Relevance to positive youth development programs in Hong Kong. *International Journal of Adolescent Medicine and Health*, 18(3), 341–354. <https://doi.org/10.1515/IJAMH.2006.18.3.341>
- Shek, D. T. L. (2006b). Conceptual framework underlying the development of a positive youth development program in Hong Kong. *International Journal of Adolescent Medicine and Health*, 18(3), 303–314. <https://doi.org/10.1515/IJAMH.2006.18.3.303>
- Shek, D. T. L. (2010). Using students' weekly diaries to evaluate positive youth development programs: Are findings based on multiple studies consistent? *Social Indicators Research*, 95(3), 475–487. <https://doi.org/10.1007/s11205-009-9532-8>
- Shek, D. T. L. (2013). Evaluation of the Project P.A.T.H.S. using multiple evaluation strategies. In D. T. L. Shek & R. C. F. Sun (Eds.), *Development and evaluation of positive adolescent training through holistic social programs (P.A.T.H.S.)* (pp. 53–67). Springer Singapore. [https://doi.org/10.1007/978-981-4451-54-3\\_4](https://doi.org/10.1007/978-981-4451-54-3_4)
- Shek, D. T. L. (2024). 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. *Applied Research in Quality of Life*, 19(5), 2727–2748. <https://doi.org/10.1007/s11482-024-10350-9>
- Shek, D. T. L., & Dou, D. (2024). The reach and impact of a positive youth development program (project P.A.T.H.S.) in China and beyond: Review and reflection. *Applied Research in Quality of Life*. <https://doi.org/10.1007/s11482-024-10364-3>
- Shek, D. T. L., Dou, D., Zhu, X., & Chai, W. (2019a). Positive youth development: Current perspectives. *Adolescent Health, Medicine and Therapeutics*, 10, 131–141. <https://doi.org/10.2147/AHMT.S179946>
- Shek, D. T. L., Zhu, X., Leung, J. T. Y., Lee, T. Y., & Wu, F. K. Y. (2019b). Evaluation of the project P.A.T.H.S. in Mainland China: Findings based on student diaries. *Research on Social Work Practice*, 29(4), 410–419. <https://doi.org/10.1177/1049731517745994>
- Shek, D. T. L., Lee, B. M., Sun, P. C. F., & Shek, E. Y. W. (2023a). Internet addiction amongst Chinese adolescents in Mainland China before and after the pandemic. *International Journal of Child & Adolescent Health*, 16(2), 125–134.
- Shek, D. T. L., Lee, T. Y., & Wu, J. (2017). Subjective outcome evaluation of a training program of Tin Ka Ping P.A.T.H.S. Project in China. *International Public Health Journal*, 9(3), 301–310.
- Shek, D. T. L., Leung, J. T. Y., & Tan, L. (2023b). Social policies and theories on quality of life under COVID-19: In search of the missing links. *Applied Research in Quality of Life*, 18(3), 1149–1165. <https://doi.org/10.1007/s11482-023-10147-2>

- Shek, D. T. L., & Siu, A. M. H. (2019). Adolescent mental health policy and services in Hong Kong: Seven unresolved problems waiting for solutions. *Journal of Adolescent Health, 64*(6), S5–S9. <https://doi.org/10.1016/j.jadohealth.2019.01.032>
- Shek, D. T. L., & Sun, R. C. F. (2012). Evaluation of the project P.A.T.H.S. based on students' weekly diaries: Findings from eight datasets. *The Scientific World Journal, 2012*, Article 354254. <https://doi.org/10.1100/2012/354254>
- Shek, D. T. L., Tang, V. M. Y., & Han, X. Y. (2005). Evaluation of evaluation studies using qualitative research methods in the social work literature (1990–2003): Evidence that constitutes a wake-up call. *Research on Social Work Practice, 15*(3), 180–194. <https://doi.org/10.1177/1049731504271603>
- Shek, D. T. L., Wu, J., & Law, M. Y. M. (2018). Subjective outcome evaluation of the Tin Ka Ping PATHS Project: Views of senior secondary school students. *International Journal of Child and Adolescent Health, 11*(1), 109–117.
- Shek, D. T. L., & Yu, L. (2011). A review of validated youth prevention and positive youth development programs in Asia. *International Journal of Adolescent Medicine and Health, 23*(4), 317–324. <https://doi.org/10.1515/IJAMH.2011.028>
- Shek, D. T. L., Yu, L., Sun, R. C. F., Lee, T. Y., Han, X. Y., Li, X. X., & Zhao, X. (2014). Objective outcome evaluation of a positive youth development program in China. *International Journal on Disability and Human Development, 13*(2), 255–265. <https://doi.org/10.1515/ijdh-2014-0311>
- Shek, D. T. L., & Zhu, X. (2020). Promotion of thriving among Hong Kong Chinese adolescents: Evidence from eight-wave data. *Research on Social Work Practice, 30*(8), 870–883. <https://doi.org/10.1177/1049731520947156>
- Sherrod, L. R. (1997). Promoting youth development through research-based policies. *Applied Developmental Science, 1*(1), 17–27. [https://doi.org/10.1207/s1532480xads0101\\_3](https://doi.org/10.1207/s1532480xads0101_3)
- Taylor, R. D., Oberle, E., Durlak, J. A., & Weissberg, R. P. (2017). Promoting positive youth development through school-based social and emotional learning interventions: A meta-analysis of follow-up effects. *Child Development, 88*(4), 1156–1171. <https://doi.org/10.1111/cdev.12864>
- Travers, C. (2011). Unveiling a reflective diary methodology for exploring the lived experiences of stress and coping. *Journal of Vocational Behavior, 79*(1), 204–216. <https://doi.org/10.1016/j.jvb.2010.11.007>
- Travers, C. J., Morisano, D., & Locke, E. A. (2015). Self-reflection, growth goals, and academic outcomes: A qualitative study. *British Journal of Educational Psychology, 85*(2), 224–241. <https://doi.org/10.1111/bjep.12059>
- U.S. Department of Health and Human Services. (1996). *Reconnecting youth and community: A youth development approach*. U.S. Department of Health and Human Services.
- USAID. (2013). *State of the field report: Holistic, cross-sectoral youth development*. U.S. Agency for International Development.
- Vinjamuri, M., Warde, B., & Kolb, P. (2017). The reflective diary: An experiential tool for enhancing social work students' research learning. *Social Work Education, 36*(8), 933–945. <https://doi.org/10.1080/02615479.2017.1362379>
- Walker, S. E. (2006). Journal writing as a teaching technique to promote reflection. *Journal of Athletic Training, 41*(2), 216–221.
- Wheeler, L., & Reis, H. T. (1991). Self-recording of everyday life events: Origins, types, and uses. *Journal of Personality, 59*(3), 339–354. <https://doi.org/10.1111/j.1467-6494.1991.tb00252.x>
- WHO. (2024). Mental health of adolescents. *World Health Organization*. <https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health>. Accessed 10 Oct 2024.
- WHO. (n.d.). *Achieving universal health coverage for the world's 1.2 billion adolescents*. Retrieved October 3, 2024, from <https://www.who.int/teams/maternal-newborn-child-adolescent-health-and-ageing/adolescent-and-young-adult-health/achieving-universal-coverage>
- Wolcott, H. F. (1994). *Transforming qualitative data: Description, analysis, and interpretation*. SAGE Publications.
- Wu, Z., Wang, B., Xiang, Z., Zou, Z., Liu, Z., Long, Y., & Chen, X. (2022). Increasing trends in mental health problems among urban Chinese adolescents: Results from repeated cross-sectional data in Changsha 2016–2020. *Frontiers in Public Health, 10*, Article 829674. <https://doi.org/10.3389/fpubh.2022.829674>
- Zareei Mahmoodabadi, Z. H., Ebrahimi, A., & Soreshjani, R. H. (2023). Effectiveness of the positive youth development (PYD) program on reducing aggression among high school female students. *BMC Women's Health, 23*(1), Article 340. <https://doi.org/10.1186/s12905-023-02487-w>

- Zhang, X., Yang, H., Zhang, J., Yang, M., Yuan, N., & Liu, J. (2021). Prevalence of and risk factors for depressive and anxiety symptoms in a large sample of Chinese adolescents in the post-COVID-19 era. *Child and Adolescent Psychiatry and Mental Health*, *15*(1), Article 80. <https://doi.org/10.1186/s13034-021-00429-8>
- Zhou, Z., Shek, D. T. L., Zhu, X., & Dou, D. (2020). Positive youth development and adolescent depression: A longitudinal study based on mainland Chinese high school students. *International Journal of Environmental Research and Public Health*, *17*(12), Article 4457. <https://doi.org/10.3390/ijerp17124457>
- Zhu, X., & Shek, D. T. L. (2020). Impact of a positive youth development program on junior high school students in Mainland China: A pioneer study. *Children and Youth Services Review*, *114*, Article 105022. <https://doi.org/10.1016/j.childyouth.2020.105022>
- Zhu, X., & Shek, D. T. L. (2021). Subjective outcome evaluation of a positive youth development program in Mainland China. *Research on Social Work Practice*, *31*(3), 285–297. <https://doi.org/10.1177/1049731520980802>

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